HALF – YEARLY

(For the period January 2021 to June 2021)

ENVIRONMENT CLEARANCE COMPLIANCE REPORT
GARE PALMA IV/8 COAL MINES
of M/s Ambuja Cement Ltd

11015/352/2006-IA. II (M) dated 22nd Dec'2008,

Corrigendum letter dtd 26th Nov'2010 & Transferred to ACL

Vide;J-11015/352/2006-IA-II(M) dtd 10/6/2015

Ambuja

UNDERTAKING

Information provided in the Half-yearly EC Compliance Report for the period Jan-2021 to June-2021 for Gare Palma IV/8 Coal Mines, of M/s Ambuja Cement Ltd, Raigarh is true to the best of my knowledge.

Sharanappa Kambalii
(Authorised Signatory)
Sr. Vice President-Coal Block
Ambuja Cements Ltd
Unit: Gare Palma IV/8 Coal Mines
Vill: Karwahi, PO: Saraitola, Teh: Tamnar,
Distt: Raigarh, CG-496107

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 reserve of 45.85 MT & approved Mixed (Both underground & opencast) Mine plan capacity of 1.2 MTPA was listed under schedule III of the Coal Mines (Special Provision) Act, 2015 earmarked for un-regulated sector. Subsequently Coal Mine Development & production agreement was signed between ACL and Nominated Authority on 16th March, 2015 followed by issuance of Vesting Order by Nominated Authority on 22nd April, 2015 & corrigendum no. 1 to the vesting order with co-ordinate dated 14th December, 2015. The mining lease execution and registration of the lease agreement has been completed for an area of 474.703 Ha on 31st December, 2015. We have got the **Bhu-Prabesh** on 06/06/2018

The development operations 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/ 2018from Chhattisgarh Environment Conservation Board. We have started the Coal Production from opencast mine from 22nd Oct' 2018. Renewed CTO for production of Coal from Underground mine on 30.03.2021 from CECB valid for a period of one year from **01.04.2021 to 31.03.2022.**

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 January to June, 2021 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 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 22nd June'2008 & corrigendum issued to EC dated 26th 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 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 Final clearance (stage-II) has been obtained. By MOEF vide letter no F.No.8-75-2007-FC dtd 1/1/2013..
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	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 CECB. CTO Renewed vide: 11474/TS/CECB/2021 for 1.2 MTPA (0.7 from OC & 0.5 from UG, on 30.03.2021 by CECB & valid till **31st March, 2022**
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.

Sl.no	Conditions	Remarks
	drains shall be provided so that no water from the surface enters the subsidence area and the shaft	OB soil is being used in preparation of protective bunds 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.**
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.	Agreed, however 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 & agreed
6.	Solid barriers shall be left below the village, roads falling within the blocks to avoid any damage to the roads	Noted & agreed
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.	Garland drain of 5550-m (Length) X width 2.15 M X Depth 2.0 M is made , around excavation & proposed excavation of OC Area & OB dump to navigate and catch the rainwater & runoff water of the dump in to 3 nos. Settling pond /sedimentation pond of Size 120 MX90 MX4.5 Mt , 30MX25X2 & 35 X25m X4.5 20 m x 10 m x 4.5m & combined capacity is 55912M^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 12 KL each. This water is also being used in mine operation.

Sl.no	Conditions	Remarks
10.	OB should be stacked at the area earmarked for external OB dump site within ML area. The maximum height of the dump is 60m with two benches of 30m each. The ultimate slope of the dump shall not exceed 28°. Monitoring and management of existing reclaimed dumpsites should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the Ministry of Environment & Forests and its Regional office located at Bhopal on a yearly basis. No external dumping of OB shall be undertaken after 10th year of mining operation	Agreed, OB is stacked at Earmarked place with ML Area Height is not more than 60 m All the slope of external dumps are being maintained at a maximum of 28 degrees. The ultimate slope of the dumps does not exceed 28 degree. Agreed not to take up external OB after 10th year **IIT BHU** was engaged for scientific study they have submitted the report & the recommendations are being implemented.
11.	Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected should be utilised for watering the mine area, roads, green belt development, etc. The drains should be 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 silting ponds are made with adequate capacity with safety of margin of more than 50% . Water is being used for Plantation, Dust suppression, green belt development
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.	Retaing wall of OB dumb is made on the external perimeter of the Garland drain which is made to arrest the rum of from the dumps & 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	Agreed & so for CHP has not been constructed.
14.	Drills should be wet operated only	Agreed, is being done in Open cast Mine
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. **IA/CG/CMIN/153935/2020** on 22nd May 2020 to the MoEF&CC, New Delhi &

Sl.no	Conditions	Remarks
		obtained the same on 30.09.2020 with the validity for 3 years. Refer to **Annexure: A.**
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	No mineral processing unit shall be installed in ML Area without prior approval of Ministry	Agreed, MOEF &CC has granted Washer Permission for 1.8 MTPA as per No J-11015/76/2010-IA-II(M) dtd 30/9/2020. However construction not yet started
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 local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha	Agreed to undertake the progressive aforestation of 133.53 ha, Currently OB dumps not being reclaimed & Dumps have not reached the Maximum Height and Back filling also not started In FY20-21 Green belt has been developed with **5000** numbers local broad leaves species in the periphery of the mine lease area / premises. In FY 21-22 shall develop green belt with **4400** nos. of Saplings. Company shall carry out the plantation along ML boundary, barrier zone (6ha) along roads (4.5 ha) and infrastructure (4 ha) by maintaining the density of the trees around 1600 plants per ha.
18.	Backfilling shall start by the 4th year of operations and concurrent backfilling form the 8th year. Of the total excavated area of 84.33 ha, an area of 80 ha shall be backfilled and reclaimed with plantation/afforestation by planting native plant species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha. The balance area of 4 ha of the decoaled area left as void and being converted into a water reservoir shall be of a max. Depth of 35 m and shall be gently sloped and the upper benches of the reservoir shall be stabilised with plantation and the periphery of the reservoir fenced.	Agreed. Shall be complied with.

Sl.no	Conditions	Remarks
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 & 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.	CGWA permission is available, NOC valid upto 07.06.2020 and it is under deemed extension upto 31.03.2021 as per 17365/2021 of CGWA & deemed extension up to 31/3/2022 as per public notification dtd 17/6/2021 by CGWA & 24/9/2020 Those who have submitted their comprehensive water impact assessment before 30/06/2021
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) and winter (January) seasons and for quality in May. Data thus collected should be submitted to the Ministry of Environment & Forests and to the Central Pollution Control Board quarterly within one month of monitoring.	Regular monitoring of ground water level and quality is being carried out by establishing a network of existing wells. We have constructed a new bore well of depth 400 feet from 50meter 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**, 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. The copy of groundwater level & monitoring report for the year 2020 is also been submitted to the CGWA, New Delhi.
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	Agreed to complied

Sl.no	Conditions	Remarks
	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.	
23.	ETP should also be provided for treatment of effluents from workshop, CHP. There shall be zero discharge from the coal washery.	Installed an ETP in opencast area with capacity of 5 KLD for treatment of effluents from workshop.
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 is approved by Ministry of Coal vide letter no 34011/19/2016 CPAM dtd 15th May, 2017. The Amount deposited in the Escrow Account & the approval letter is **Attached as Annexure-B.**

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, 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,	We have engaged the M/s Gyan eviro 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,

Sl.no	General condition	Compliance
	topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board.	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 engaged the M/s Gyan eviro Ltd, Nagpur a NABL accredited company for regular environment monitoring on monthly basis and the data. on ambient air quality (PM_{10}, $PM_{2.5}$, SO_2, NO_x 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 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 19th May 1993 and 31st June 1993 or as amended from time to time before discharge. Oil and grease trap should be installed before discharge of workshop effluents	Mine water discharge is being treated properly in settling pond system & 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	All the Environmental parameters are being monitored by M/s Gyan eviro Ltd, Nagpur a NABL accredited company & reports are being

Sl.no	General condition	Compliance
	Board	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.
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.

Sl.no	General condition	Compliance
14.	A copy of the EC 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 10th 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	EC has been transferred from the Prior Allottee. Compliancestatus 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 atvillage-Khamaria, Dist.Raigarh(C.G.), **total five** numbers 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- 83°29'39" E Latitude- 22°10'14" N
2.	At Banjari Temple	AAQ-2	0.3 km	North	Longitude- 83°30'32" E Latitude- 22°10'43" N
3.	Khamaria village	AAQ-3	0.5 km	NW	Longitude- 83°29'51" E Latitude- 22°09'59" N
4.	Nr School, Rampura village	AAQ-4	0.4 km	East	Longitude- 83°30'16" E Latitude- 22°09'59" N
5.	At Durga House	AAQ-5	0.3 km	South	Longitude- 83°29'53" E Latitude- 22°09'42" 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 FOR PARTICULATE MATTER (<10 µm)

Code	Stations	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	MIN	MAX	AVG	98 percentiles
AAQ-1	At Site Office	69.4	69.7	67.2	68.4	58.7	55.1	55.1	69.7	64.8	69.7
AAQ-2	At Banjari Temple	54.9	56.8	57.4	58.6	59	56.8	54.9	59	57.3	59.0
AAQ-3	Khamaria village	63.7	54	54.6	56.2	55.4	50.8	50.8	63.7	55.8	63.0
AAQ-4	Nr School, Rampura village	64.5	56.8	55.4	57.2	56	52.6	52.6	64.5	57.1	63.8
AAQ-5	At Durga House	49.7	52.3	54.2	57.4	54	50.2	49.7	57.4	53.0	57.1

*Values are in µg/m³

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

Code	Stations	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	MIN	MAX	AVG	98 percentiles
AAQ-1	At Site Office	28.4	28	26.2	24.6	22.4	20.8	20.8	28.4	25.1	28.4
AAQ-2	At Banjari Temple	23.4	23.4	22.8	23.4	20.8	20.2	20.2	23.4	22.3	23.4
AAQ-3	Khamaria village	24.1	23.5	22.6	23	20.7	19.5	19.5	24.1	22.2	24.0
AAQ-4	Nr School, Rampura village	24.1	23.5	22.8	22.6	21.2	20.3	20.3	24.1	22.4	24.0
AAQ-5	At Durga House	21.4	23,6	23.8	22.6	20.8	19.8	19.8	23.8	21.7	23.7

*Values are in µg/m³

TABLE – 3.4: RESULTS OF AMBIENT AIR QUALITY MONITORING FOR SULPHUR DIOXIDE (SO_2)

Code	Stations	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	MIN	MAX	AVG	98 percentiles
AAQ-1	At Site Office	18.6	17.1	16.8	14.4	14.2	12.4	12.4	18.6	15.6	18.5
AAQ-2	At Banjari Temple	16.2	14.8	14.4	16.6.	12.6	11	11	16.2	13.8	16.1
AAQ-3	Khamaria village	18.7	16.9	16.5	17.6	13.5	10.7	10.7	18.7	15.7	18.6
AAQ-4	Nr School, Rampura village	20.6	17.2	16.8	18.2	13	11.5	11.5	20.6	16.2	20.4
AAQ-5	At Durga House	15.7	14.6	16.2	16.2	12.5	10.4	10.4	16.2	14.3	16.2

*Values are in µg/m³

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

Code	Stations	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	MIN	MAX	AVG	98 percentile
AAQ-1	At Site Office	29.4	20.7	20.3	18.2	18.9	16.9	16.9	29.4	20.7	28.5
AAQ-2	At Banjari Temple	23.8	21.2	20.6	21.2	19	17.5	17.5	23.8	20.6	23.5
AAQ-3	Khamaria village	29.7	19.4	20.2	21.6	17.2	15.6	15.6	29.7	20.6	28.9
AAQ-4	Nr School, Rampura village	28.5	18.6	20	20.8	16.5	14.9	14.9	28.5	19.9	27.7
AAQ-5	At Durga House	23.9	21.4	20.8	21.4	18	16.1	16.1	23.9	20.3	23.7

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

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

Code	Stations	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	MIN	MAX	AVG	98 percentiles
AAQ-1	At Site Office	548	506	502	496	480	450	450	548	497.0	543.8
AAQ-2	At Banjari Temple	472	486	482	494	490	482	472	494	484.3	493.6
AAQ-3	Khamaria village	508	496	492	496	510	490	490	510	498.7	509.8
AAQ-4	Nr School, Rampura village	464	488	486	498	485	460	460	498	480.2	497.0
AAQ-5	At Durga House	405	457	462	474	467	455	405	474	453.3	473.3

*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)	$\mu g/m^3$	Industrial	50.0	80.0
2.	Nitrogen Dioxide (NO_x)	$\mu g/m^3$	Industrial	40.0	80.0
3.	Particulate Matter PM_{10}	$\mu g/m^3$	Industrial	60.0	100.0
4.	Particulate Matter $PM_{2.5}$	$\mu g/m^3$	Industrial	40.0	60.0
5.	Ozone (O_3)	$\mu g/m^3$	Industrial	100.0	180.0
6.	Lead (Pb)	$\mu g/m^3$	Industrial	0.50	1.0
7.	Carbon Monoxide(CO) mg/m^3	mg/m^3	Industrial	2.0	4.0
8.	Ammonia (NH_3)	$\mu g/m^3$	Industrial	100.0	400.0
9.	Benzene (C_6H_6) $\mu g/m^3$	$\mu g/m^3$	Industrial	05.0	05.0
10.	Benzo(α) Pyrene,	$\mu g/m^3$	Industrial	01.0	01.0
11.	Arsenic (As) $\mu g/m^3$	$\mu g/m^3$	Industrial	6.0	6.0
12.	Nickel (Ni) $\mu g/m^3$	$\mu g/m^3$	Industrial	20.0	20.0

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

3.3 RESULTS AND DISCUSSION

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

3.3.1 PARTICULATE MATTER<10 μ (PM_{10})

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 64.8, 57.3, 55.8, 57.1 and 53.0 $\mu g/m^3$ respectively. All monitored stations have PM_{10} concentrations well within stipulated 24hours limit, 100 $\mu g/m^3$ 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 **69.7 $\mu g/m^3$** during the month of **Feb-2021** at AAQ-1 [At Site Office].

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

The average $PM_{2.5}$ concentration at all fiveambient air quality monitoring stations AAQ-1, AAQ-2, AAQ-3,AAQ-4 and AAQ-5 are 25.1, 22.3, 22.2, 22.4 and 21.7 μg/m³respectively. All monitored stations have $PM_{2.5}$ concentrations well within stipulated 24 hours limit, 60μg/m³ prescribed for industrial, residential, rural and other areas in revised NAAQ Standards from CPCB. Maximum concentration of $PM_{2.5}$ was found **28.4 μg/m³**during the month of **Feb-2021** at AAQ-1 [At Site Office].

3.3.3 SULPHUR DIOXIDE (SO_2)

Average Sulphur Dioxide (SO_2) concentrations at all fivesampling stations AAQ-1, AAQ-2, AAQ-3, AAQ-4 and AAQ-5are 15.6, 13.8,15.7, 16.2 and 14.3 μg/m³ respectively and well within the stipulated 24 hours limit, 80μg/m³ recommended for industrial, residential, rural and other areas in revised NAAQ Standards of CPCB. Maximum concentration of SO_2 was found 20.6 **μg/m³**during the month of **January 2021** at AAQ-4 [Near School, Rampura Village].

3.3.4 OXIDES OF NITROGEN (NO_x)

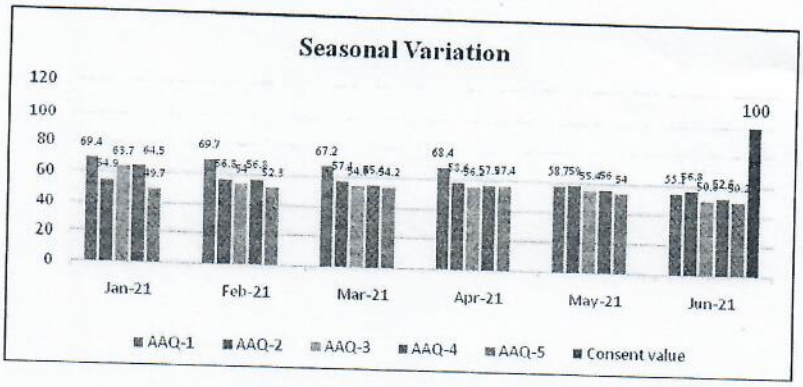
Average Oxides of Nitrogen (NO_x) concentrations at all sampling stations AAQ-1, AAQ-2, AAQ-3,AAQ-4 and AAQ-5 are 20.7, 20.6, 20.6, 19.9 and 20.3 μg/m³ respectively and these are also well within the stipulated 24-hour limit, 80 μg/m³ recommended for industrial, residential, rural and other areas in revised NAAQ Standards of CPCB. Maximum concentration of Oxides of Nitrogenwas found **29.4 μg/m³**during the month of **January -2021** at AAQ-1 [At Mine Site].

3.3.5 CARBON MONOXIDE (CO)

Average Carbon Monoxide (CO) concentrations at all sampling stations AAQ-1, AAQ-2, AAQ-3, AAQ-4 and AAQ-5 are 497, 484, 499, 480 and 453 μg/m³ respectively and these values are well within stipulated 8 hours limit, 2000 μg/m³ recommended for industrial, residential, rural and other areas in revised NAAQ Standards. Maximum concentration of Oxides of Nitrogenwas found **548 μg/m³**during the month of **January -2021**at AAQ-1 [At Site Office].

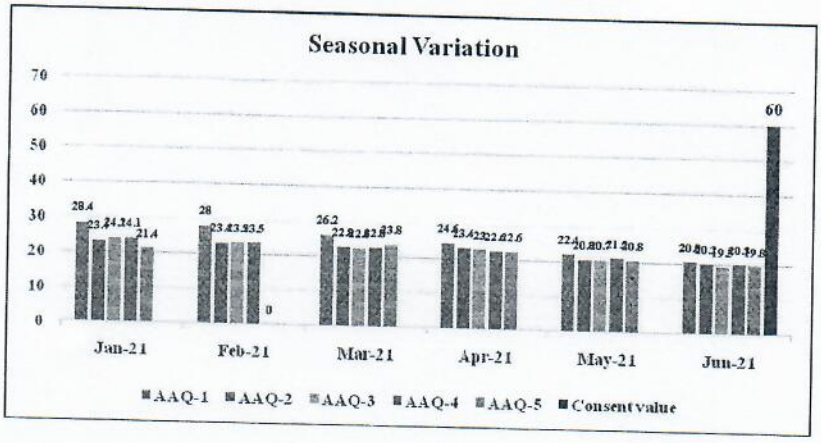
All observed values meet the prescribed standards.

FIGURE 6: GRAPHICAL REPRESENTATION FOR PM10



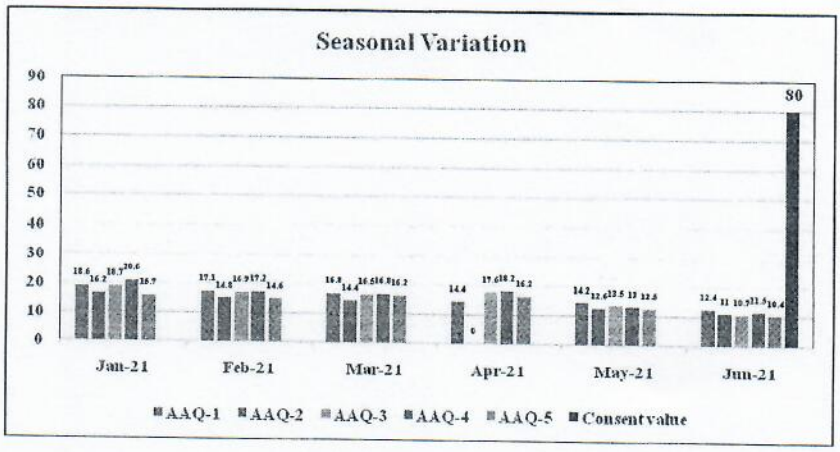
Values are in µg/m³

Figure 7: Graphical Representation for PM2.5



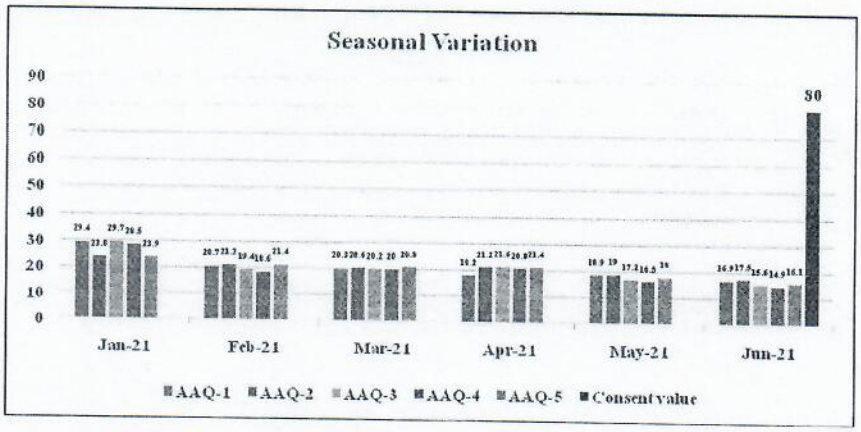
*Values are in µg/m³

Figure 8: Graphical Representation for SO_2



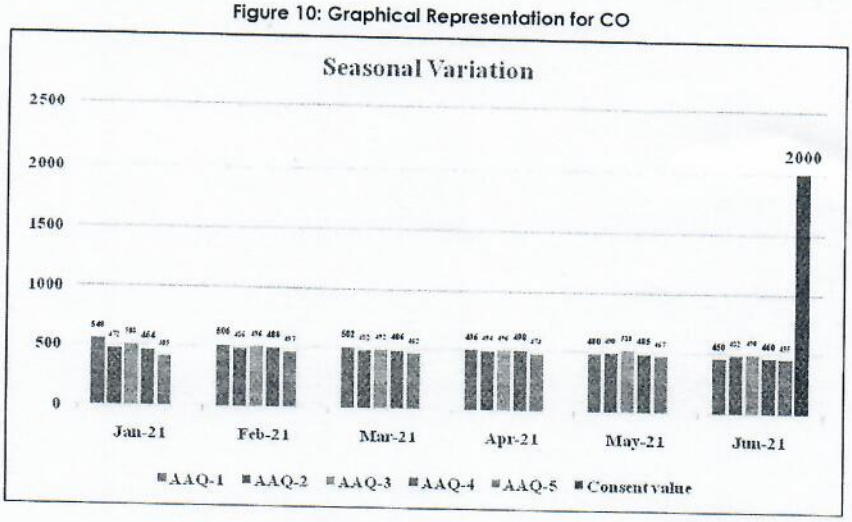
*Values are in µg/m³

Figure 9: Graphical Representation for NOx



*Values are in µg/m³

Figure 10: Graphical Representation for CO



*Values are in µg/m³

4.0 AMBIENT NOISE LEVEL

4.1 LOCATIONS OF NOISE LEVEL MEASUREMENT

Noise Levels have measured atfollowing**EightStations**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.	NrWeigh Bridge	NL – 3	Core zone	Ambient
4.	Nr Parking	NL – 4	Core zone	Ambient
5.	NrKhamaria 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 takenrandomly 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-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	MIN	MAX	AVG
NL-1	Nr Main Gate	dB(A)	56.4	57.9	58.4	57.5	55.7	57.8	55.7	58.4	57.3
NL-2	At Site Office		57.4	60.8	62.2	61.3	59.7	58	57.4	62.2	59.9
NL-3	Nr Weigh Bridge		65.2	66.5	65.6	64.7	64.3	61.9	61.9	66.5	64.7
NL-4	Nr Parking		50.3	55.4	54.8	53.6	56.7	57.8	50.3	57.8	54.8
NL-5	Nr Khamaria village		54.1	52.6	53.4	54.5	53.4	55.2	52.6	55.2	53.9
NL-6	Nr School, Rampura village		47.9	50.2	52.1	53.2	51	53.6	47.9	53.6	51.3
NL-7	At Durga House		52.3	52.6	53.7	54.3	53.1	55.6	52.3	55.6	53.6
NL-8	At Banjari Temple		54.3	54.8	55.2	54.8	56.7	58.2	54.3	58.2	55.7

NOISE LEVEL (NIGHT HOURS)

Code	Stations	Unit	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	MIN	MAX	AVG
NL-1	Nr Main Gate	dB(A)	46.2	48.7	47.5	46.3	42	41.4	41.4	48.7	45.4
NL-2	At Site Office		48.1	52.1	50.3	51.2	44.1	43.2	43.2	52.1	48.2
NL-3	Nr Weigh Bridge		55.9	57.2	55.8	54.4	49.8	47.6	47.6	57.2	53.5
NL-4	Nr Parking		45.3	43.9	44.2	45.1	44.6	40.7	40.7	45.3	44.0
NL-5	Nr Khamaria village		44.5	43.1	44.1	44.8	42.6	40.4	40.4	44.8	43.3
NL-6	Nr School, Rampura village		43.8	43.5	43.7	44.6	40.8	41.1	40.8	44.6	42.9
NL-7	At Durga House		43.5	43.7	44.5	44.8	43	39.8	39.8	44.8	43.2
NL-8	At Banjari Temple		42.7	34.3	37.6	39.4	44.8	41.3	34.3	44.8	40.0

Note: All values are in dB(A)

4.4 AMBIENT NOISE LEVEL STANDARDS

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

TABLE –4.3: NATIONAL AMBIENT NOISE LEVEL STANDARDS

Area Code	Category of Area	Limits in dB(A) Leq	
		Day time	Night time
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 proposed mine lease, are in the **range of 51.3 to 64.7 dB (A)**during day time and in the **range of42.9 to 53.5dB (A)**during night time 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.**

TABLE – 5 .2: RESULTS OF FUGITIVE EMISSION MONITORING

Code	Sampling Stations	Unit	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21
FE- 1	PM_{10}	$\mu g/m^3$	71.3	80.9	82.6	80.4	76.5	68.9
	$PM_{2.5}$		30.7	42.6	42.8	40.6	32.8	30.4
FE- 2	PM_{10}		84.7	92.8	90.6	88.4	90.1	81.4
	$PM_{2.5}$		40.3	44.1	43.8	42.6	39	30

*Values are in µg/m3

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.

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									
S. N	Parameters	Unit	Ref. Method	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21
1	pH at 25°C	-	IS:3025 (part 11)-1983	7.08	7.36	7.32	7.28	7.28	7.31
2	Total Dissolved Solids	mg/l	IS:3025 (part 16)-1984	164	235	238	242	249	252
3	Total Suspended Solids	mg/l	IS:3025 (part 16)-1984	12	12	14	16	14	16
4	Chloride as Cl	mg/l	IS:3025 (part 32)-1988	22.1	21	24.2	26	26	29
5	Sulphate as SO_4	mg/l	IS:3025 (part 24)-1986	64.2	55.3	56.4	56.8	54	51
6	Chemical Oxygen Demand (COD)	mg/l	IS:3025 (part 58)-2006	112	98	96	94	76	68
7	Biological Oxygen demand (BOD) 3days @27°C	mg/l	IS:3025 (part 44)-1993	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
8	Oil & Grease	mg/l	IS:3025 (part 39)-1991	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

6.2 Mine Discharge Water

6.2 OBSERVATIONS

Mine-Discharge Water									
S.N	Parameters	Unit	Ref. Method	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21
1	pH at 25°C	-	IS:3025 (part 11)-1983	**	**	**	**	7.2	7.18
2	Total Dissolved Solids	mg/l	IS:3025 (part 16)-1984	**	**	**	**	208	201
3	Total Suspended Solids	mg/l	IS:3025 (part 16)-1984	**	**	**	**	12	14
4	Chloride as Cl	mg/l	IS:3025 (part 32)-1988	**	**	**	**	12.8	10.4
5	Sulphate as SO_4	mg/l	IS:3025 (part 24)-1986	**	**	**	**	34.7	31.6
6	Chemical Oxygen Demand (COD)	mg/l	IS:3025 (part 58)-2006	**	**	**	**	48	42
7	Biological Oxygen demand (BOD) 3days @27°C	mg/l	IS:3025 (part 44)-1993	**	**	**	**	<3.0	<3.0
8	Oil & Grease	mg/l	IS:3025 (part 39)-1991	**	**	**	**	<1.0	<1.0

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

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	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21
At Site Office	ton/km^2/month	4.1	4.6	4.4	4.6	4.8	4.2

7.2 OBSERVATIONS

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

9.0 Hazardous Waste

9.1 GENERAL

Total quantities of hazardous waste generated Monthly observations are given in Table –9.1.

TABLE – 9.1: HAZARDOUS WASTE

Sampling Station	Unit	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20
Workshop Area	litre	219	0	109	349	115	290

****

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 Pelma-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. IA/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 Pelma-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. I 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 Pelma-IV/8 Coal Mine in Tehsil Garghora, District Raigarh (Chhattisgarh) in favour of M/S Ambuja Cements Limited.

3. In view of the Addendum No.l 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 Pelma-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, Gharghoda (Raigarh) till 1st July, 2019.

5. The proposal was considered by the sectoral Expert Appraisal Committee in its I st meeting held on 17-18 August, 2020 through video conferencing wherein the Committee recommended to grant of extension/amendment of Environment Clearance dated 1 0th 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:-

(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
irector 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

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-B

Ambuja Cements Limited
Unit-Gare Palma Coal Block

Details of Mine Closure Amount Deposited In Escrow A/C

Escrow Account No 57500000161915
Bank Name HDFC Bank-Mumbai

SN	Year	Amount(INR)	Date of Payment
1	2017-18	16323730	11/4/2018
2	2018-19	8778982	26/03/2019
3	2019-20	9217931	7/10/2020
4	2020-21	9678828	26/03/2021
	Total	43999471	

10/7/21