F. No. J-11015/64/2017-IA. II (M)
Government of India
Ministry of Environment, Forest and Climate Change
Impact Assessment Division
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Dated: 15th May 2020

To,

M/s Shree Cement Limited
P.O.No.33, Bangur Nagar, Andheri Deori,
Beawar, District-Ajmer,
Rajasthan-305901.

Submitted: Proposed Captive Limestone Mine (Karhi-Chandi Limestone Deposit), ML Area 242.127 Ha, Limestone Production Capacity 1.5 Million TPA, 0.45 Million TPA Inter-Burden (Total Excavation: 1.95 Million TPA) with installation of Crusher of 1200 TPH at Villages- Karhi, Chandi and Khapradih, Tehsil –Simga, District- Balodabazar-Bhatapara, Chhattisgarh by M/s. Shree Cement Limited- (Proposal No. IA/CG/MIN/65291/2017)-Information regarding.

The proposal of M/s Shree Cement Limited is for production of 1.5 million TPA of limestone with Karhi-Chandi Limestone Deposit with production capacity of 1.5 Million TPA of limestone (ROM), 0.45 Million TPA Inter Burden (Total Excavation: 1.95 Million TPA) with installation of Crusher of 1200 TPH in the mine lease area of 242.127 ha. The mine is located at Villages- Karhi, Chandi and Khapradih, Tehsil– Simga, District- Balodabazar-Bhatapara, Chhattisgarh. The mine lease area falls between 21°36"12.247"N to 21°37"40.574"N and 82°01' 31. 413"E to 82°02' 34.111"E on Survey of India Topo-sheet No. 64 K/2. The Project is located in Seismic Zone II.

2. As per EIA Notification dated 14th September, 2006 as amended from time to time, the project falls under Category A or Activity 1(a) as the mining lease area is greater than 100 ha.

3. Project Proponent (PP) vide proposal No. IA/CG/MIN/65291/2017 applied for grant of Term of Reference (ToR) on 9.06.2017 and submitted Form-1 & PFR. The proposal for ToR was considered in EAC meeting held during July 24, 2017 wherein Committee recommended the proposal for grant of ToR for undertaking detailed EIA study. The TOR was issued by the Ministry vide letter no. J-11015/64/2017-IA. II (M) dated 5.09.2017. PP vide proposal No. IA/CG/MIN/65291/2017 dated 30.11.2017 applied for amendment in ToR for removal of beneficiation ToR. The amendment was granted vide letter No J-11015/64/2017-IA. II (M) dated 27.12.2017. PP then vide proposal No. IA/CG/MIN/65291/2017 dated 28.04.2018 applied for corrigendum

in ToR. The corrigendum in ToR was issued vide letter No J-11015/64/2017-IA. II (M) dated 3.01.2018.

4. PP after conducting public hearing applied for grant of EC vide proposal No IA/CG/MIN/65291/2017 dated 28.01.2019 and submitted EIA/EMP Report. The proposal was considered in EAC meeting held during **February 20-21, 2019** wherein the EAC deferred the proposal for want of requisite information. PP submitted the information vide its letter dated 24.06.2019 and the proposal was placed in EAC meeting held during **July 30-31, 2019** wherein the Committee deferred the proposal for want of requisite information. The PP submitted the information vide its letter dated 3.12.2019 and the proposal was considered in EAC meeting held during **January 30-31, 2020** wherein the Committee **recommended** the proposal for grant of EC subject to submission of certain information.

5. PP submitted that Letter of Intent (LOI) has been issued for Karhi Chandi Limestone Deposit [ML Area 242.127 Ha] in favour of M/s Shree Cement Limited vide letter no. F 3-03/16/12 dated March 28th, 2016 and amended vide letter no. F3-03/16/12 dated September 16th, 2016 which was valid up to 27.03.2019. PP submitted that the total mine lease area 242.127 Ha out of which 20.331 Ha is Government land, 119.428 ha is Private land and 102.368 ha land is owned by Shree Cement Limited. PP vide its letter dated 15.04.2020 submitted letter No 3-03/16/12 dated 27.03.2020 wherein the validity of LOI is extended till **27.03.2021**.

6. PP submitted that the **Mining Plan & Progressive Mine Closure Plan** has been approved by the Regional Controller of Mines Indian Bureau of Mines (IBM) vide letter no. Baloda bazar/ Chup/MP-53/2016 –Raipur/238 dated 8.06.2017. Project Proponent reported that the mining operations will be carried out by mechanized opencast mining method with drilling & blasting. Loading will be done by Hydraulic Excavators and transport of limestone and inter-burden will be done by dumper to crusher (1200 TPH to be installed within ML area). The crushed limestone will be transported from the mine site to cement plant by covered Conveyor belt. PP submitted that total minable reserves are 68.2 Million Tonnes and life of mine is estimated to be 49 years. At the end of life of mine, total 24.04 Million tonnes of waste will be generated out of which 18.9 Million Tonnes waste will be backfilled in the excavated area followed by plantation and remaining 5.1 Million Tonnes waste will be dumped in 17 ha area, which will be stabilized by plantation. PP reported that at the **conceptual stage**, the total excavated area will be 141 ha, plantation of waste dump 17.0 Ha, and 80.127 Ha areas remain un-disturbed. Out of 141 Ha excavated area 52 ha will be backfilled followed by plantation and remaining 89 ha area will be converted into water reservoir.

7. PP submitted that total 80 ha area will be covered under **Green belt and plantation** with 1, 20,000 saplings [52 Ha backfilled area, 17 Ha dump area and 11 Ha of green belt (4 Ha on 7.5 safety zone & 7 Ha on undisturbed area)] . The trees will be planted @ 1500 saplings per hectare of land and survival will be maintained more than 90%. Plantation will be developed in 7.5 meters width along the road , nallha, and habitation in first five years, total area to be covered 2 Ha, and the density of plantation to be maintained is 2000 saplings/ha .

8. PP reported that no Protected Forest, National Parks/Wildlife Sanctuaries/Biosphere Reserves/Wildlife Corridors/Tiger/Elephant Reserves are located within the 10 km study area of the mine lease. However, one Reserve Forest i.e. Dhabadih Reserved Forest is located at a distance of approx 4.0 Km in the NE direction of the Mine site. PP also submitted letter obtained from Forest Department vide S. No/व.त.अ./खनिज/1342 dated April 17th, 2018 wherein it has mentioned that there is no forest land falls within the lease area; there is no national park, Wild life sanctuary within 10 KM of the mining lease. PP also submitted letter no. S.No./WL/MGMT379/19/3414 dated on 20.06.2019 issued by Principle Chief Conservator of Forest (Wildlife Management & Biodiversity Conservator) cum Chief Wildlife Warden, Chhattisgarh for approval of wildlife conservation plan prepared for two schedule-1 species viz. Monitor Lizard & Indian Phthon with a budget of Rs 36.30 Lakh.

9. The PP submitted that the primary **baseline data** for specific micro – meteorology data, ambient air quality, water quality, noise level, soil quality and flora & fauna has been collected during Post Monsoon season i.e. October to December 2017. The concentrations of PM10 and PM2.5 for all the 15 AAQM stations are well within the NAASQ limits. PP submitted that the ambient noise levels were measured at 15 locations around the mine site which are within the limits. The surface water analysis for all the 6 sampling stations & ground water analysis for all the 10 sampling stations shows within the limits. PP also submitted the cumulative impact due to mining, cement plan, CPP and crusher and per which the concentration of various pollutants are well within the NAASQ limits. In addition to this PP also provided the mitigation measure for the protection of road, nallha and habitation.

10. PP submitted that the general ground level is 267 m AMSL. **Water table** level in Pre monsoon season is 262 to 257 m AMSL (5 to 10 mbgl) and in Post Monsoon is 264 to 262 m AMSL (3 to 5 mbgl) and Ultimate working depth of the mining operation will be 230 m AMSL (37 m bgl). **Water table will be intersected due to mining activities**. Prior permission for Ground water table intersection will be taken from the Concerned Authority. Detailed Hydro - Geological Study has been carried out for this project. No waste water will be generated during mining operations. Waste water generated from mine office will be disposed of into soak-pit via septic tank. Waste water generated from workshop will be treated with Oil/ grease/ Water separator. Waste water generated from washing of HEMM will be used in crusher for dust suppression after oil and grease separation. Total water requirement for proposed project will be 150 KLD [110 KLD for dust suppression, 10 KLD for drinking & sanitation, 20 KLD for workshop and 10 KLD for plantation], which will be sourced from ground water. However later on mine water will also be used which will be available due to intersection of mining with ground water table i.e de-watering and rainwater collected in mine pits and accordingly ground water will be reduced. PP submitted that they have rain water harvesting system in the Cement plant and Housing colonies the same will recharge the ground water around 1262324 cum per annum. The proposed expansion of existing cement plant and Bharuwadih-Semaradih limestone mine will have additional water requirement of 177025 cum per annum (485 KLD) which will be sourced from the rain water collected in the mine pits and earthen pond in plant area. The PP vide its letter dated 15.04.2020 submitted the copy of NOC No. CGWA/IND/Proj/2018-332-R dated 24.10.2018 granted for cement plant and Bharuwadih-Semaradih lime stone mine for abstraction of 3000

KLD (1095000 cum per annum). This NOC is valid from 8.04.2018 to 7.04.2023. PP also submitted NOC No. CGWA/NOC/MIN/ORIG/2019/4919 abstraction of 150 KLD of ground water (10 KLD Fresh & 140 KLD dewatering). This NOC is valid from 3.10.2019 to 02/10/2021

11. PP submitted that **Public Hearing** for the project was conducted by Chhattisgarh Environment Conservation Board (CECB) on 4th August 2018, under the Chairmanship of Shri Jogendra Naik, Additional District Magistrate, at project site, at Villages- Chandi , (Ground near Panchyat Bhawan), Tehsil –Simga, District-Balodabazar-Bhatapara, Chhattisgarh as per the Environmental Impact Assessment Notification dated 14th September, 2006. The advertisement for public hearing was published in *'Navbharat'* (1.07.2018) and *'Times of India'* (1.07.2018). PP also submitted that the detailed action plan with budgetary allocation of Rs. 85.3 Lakh for the period of 15 years against points raised in Public hearing i.e. socio-economic development of the area, employment, plantation, land, use of DMF fund, Environment, Pollution control & Monitoring, Blasting, Water level in the area and others etc. has been prepared. To address the issues raised during Public Hearing budget proposed under CER [Rs 250 Lakh], EMP [Rs 3.95 Cr (Capital) & Rs 0.22 Cr (recurring) including Occupation Heath Plan budget of ₹ 0.3 Cr (capital) and 0.01 Cr (recurring)]. In addition to this PP has proposed Budget for health check-up camp and distribution of medicines Rs. 3.9 Lakh, Contribution for various programs such as Mass Marriages etc. would be Rs. 12.2 Lakh, Budget for the necessary infrastructure would be Rs. 36.9 Lakh and Budget for Drinking Water as Rs. 10.3 Lakh. PP also proposed a budget of Rs 877 Lakh to be spent on various activities in the nearby area. PP also proposed a budget of Rs 1.34 Cr for plantation & green belt development.

12. PP in its reply dated 3.12.2019 w.r.t to R&R Plan submitted that there are total 89 families in the Chandi village having houses within the Mining Lease Area which will not be shifted as there will be no mining activities in that area. PP reported that the amount given against the purchased land is higher than the DLC and Market land i.e. for village Chandi [DLC rate (Non-Irrigated- Rs 1100000, Road side-1700000), Market Rate (Non-Irrigated- Rs 1235000, Road side-1800000) and SCL Rate (Rs 3706500 for Non-Irrigated & Road Side)], village Karhi [DLC rate (Non-Irrigated- Rs 1050000, Road side-1450000), Market Rate (Non-Irrigated- Rs 1150000, Road side-1800000) and SCL Rate (Rs 3706500 for Non-Irrigated & Road Side)], and village Karhi [DLC rate (Non-Irrigated- Rs 1200000, Road side-2150000), Market Rate (Non-Irrigated- Rs 1300000, Road side-1900000) and SCL Rate (Rs 3706500 for Non-Irrigated & Road Side)]. The total budget proposed under R&R Plan is 83.13 Cr. PP mentioned that the total amount of compensation for land will be divided in three parts such as one-time partial payment (40%), fixed deposit (30%) and annuity (30%) and also mentioned that option will be explored for alternative land to land owners. Apart from this PP also proposed that i) PP will bear the entire cost for school education for all girl child studying in Govt. School of Village Karhi, Chandi and Khapradih which will include fees, books, uniform, bag and stationary. Approx. Budget is Rs 1 Lakh/annum, ii) PP will Contribute Rs. 11,000 for each girl marriage, iii) PP also proposed to provide sanitary napkin to all the girl child in Govt. School of village Karhi, Chandi and Khapradih with a budget Rs 50,000 per annum, iv) Rs 1 Lakh/annum to each Registered Govt. Gaushala of village Karhi, Chandiand Khapradih. Total budget would be Rs 3 Lakh/annum, v) The proposed

mining will pay Rs.8/ tonne of limestone under the District Mineral Fund (DMF) and total amount would be Rs.1.2 Cr/ Annum at full capacity which will be utilized by the local Administration for the development of the mine affected area.

13. PP submitted that there is no Litigation is pending against this project. PP submitted an undertaking that prescribed term of reference have been complied with and the data submitted and information presented in the report is factually correct [P.166/c]. PP also submitted an undertaking by the way of an affidavit bearing No AR 726145 dated 24.07.2019 for compliance of Common Cause Judgment dated 2.08.2017 and other statutory requirements. PP submitted that the total cost of the project is Rs. 117.28 Crores (34.10 Cr for plant and machines + 83.18 Cr for land) and project will give employment to 43 persons.

14. Based on the discussion held and documents submitted by the PP, the Expert Appraisal Committee (EAC) recommended the proposal for Captive Limestone Mine of M/s. Shree Cement Limited (Karhi-Chandi Limestone Deposit) with Limestone Production Capacity of 1.5 Million TPA, 0.45 Million TPA Inter-Burden (Total Excavation: 1.95 Million TPA) with installation of Crusher of 1200 TPH in the mine lease area of 242.127 ha located at Villages- Karhi, Chandi and Khapradih, Tehsil – Simga, District-Balodabazar-Bhatapara, Chhattisgarh. In addition to Standard EC Conditions as per Ministry's O.M. No. 22-34/2018-IA.III dated 08.01.2019 & 16.01.2020 (Sl. No. 15 B) the Committee also prescribed the following specific conditions (Sl. No. 14 A (i)) for this project.

15. The Ministry of Environment, Forest & Climate Change has examined the proposal in accordance with the Environmental Impact Assessment Notification, 2006 and further amendments thereto and hereby **accords the Environmental Clearance** under the provisions thereof to the above mentioned proposal of M/s. Shree Cement Limited for production of production of 1.5 Million TPA of Limestone for captive purpose with total excavation of 1.95 Million TPA (1.5 Million TPA Limestone & 0.45 Million TPA of Inter-Burden) and installation of Crusher of 1200 TPH in the mine lease area of 242.127 ha located at Villages- Karhi, Chandi and Khapradih, Tehsil –Simga, District-Balodabazar-Bhatapara, Chhattisgarh subject to compliance of the terms & conditions and the environmental safeguards mentioned below: -

A. Specific Conditions:

1) PP should maintain a buffer zone of 300 mtrs wide as barrier along the lease area in vicinity of Household and shall not do any mining operations in such buffer zone. This buffer zone should be developed with thick vegetation.

2) Total 80 ha area shall be covered under **Green belt and plantation** [52 Ha backfilled area, 17 Ha dump area and 11 Ha of green belt (4 Ha on 7.5 safety zone & 7 Ha on undisturbed area)]. The trees will be planted @ 1500 saplings per hectare of land and survival will be maintained more than 90%. Plant such as Babul (Acacia Arabica), Safed siris (Albizzia procers), Sisam (Dalbergia latifolia), Neem (Azadirachta indica), Gulmohar (Delonix regia), Subabul (Laucaena leucocephala), Cassia semiya, Copperpod (Peltaphorum), Karanj

(Derris indica), Mahaneem (Malia azedarachta), Bamboo plant (Bambusa dendrocalmus), Humata Grass. The saplings suitable for the existing soil and site conditions should be considered. Preference will be given for fast growing local plant species, which can adapt to the local climate may be planted in consultation with local forest department.

3) **Plantation** on 11 Ha (4 Ha on 7.5 safety zone & 7 Ha on undisturbed area)] shall be competed with 5 years. Plantation will be developed in 7.5 meters width along the road (budget Rs 8 Lakh), nallha, and habitation in first five years, total area to be covered 2 Ha, and density of plantation to be maintained is 2000 saplings/ha and budget for the same is Rs 26 Lakh. In addition to this year wise plantation backfilled and dump area shall be 11th to 15th year [4500 saplings on 3.0 Ha (backfilled area)], 16th to 20th year [4500 saplings on 3.0 Ha (backfilled area) and 3000 saplings on 2 Ha (dump area)], 21st to 25th year [4500 saplings on 3.0 Ha (backfilled area) and 3000 saplings on 2 Ha (dump area)], 26th to 30th year [4500 saplings on 3.0 Ha (backfilled area) and 3000 saplings on 2 Ha (dump area)], 31st to 35th year [4500 saplings on 3.0 Ha (backfilled area) and 3000 saplings on 2 Ha (dump area)], 36th to 40th year [18000 saplings on 12.0 Ha (backfilled area) and 4500 saplings on 3 Ha (dump area)], 41st to 45th year [18000 saplings on 12.0 Ha (backfilled area) and 4500 saplings on 3 Ha (dump area)], 46th to end [19500 saplings on 13.0 Ha (backfilled area) and 4500 saplings on 3 Ha (dump area)]. Budget of Rs 1.34 Cr earmarked for green belt and planation shall be kept in separate bank account and should be audited annually. The PP should annually submit the audited statement along with proof of activities viz. photographs (before & after with geo-location date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

4) PP shall implement the **wildlife conservation plan** prepared for schedule-1 species viz. Monitor Lizard & Indian Phthon and approved amount Rs 36.30 Lakh (1st year 14.075 Lakh, 2nd Year 14.075 Lakh and 3rd Year 8.150 Lakh) or as define by the CWLW may be deposited in the government account.

5) PP has proposed a budget of Rs 877 Lakh to be spent on various a**ctivities in the nearby area** which includes i) Rs 80 Lakh for renovation of Govt. School of village Khapradih, Semradih, Bharuwadih, Chandi and Karchi [a) construction/renovation of 23 rooms, b) construction/renovation of 30 Nos male/female toilets, c) providing 5 nos of water coolers, d) providing 5 computer labs, and e) providing furniture], ii) Rs 200 Lakhs for providing school up to 12th standard at SCL colony in village Bharuwadih for all, iii) Rs 24 Lakh for Sport complex in village Khapradih and Bharuwadih [a) construction of 2 rooms, b) construction of male and female toilet : 1 each, c) providing 2 water coolers, d) preparation of 2 playground, and e) sports items], iv) Rs 175 Lakh for construction of roads [2 KM in village Bharuwadih and 3kM in village Chandi], v) Rs 54 Lakh for construction of community centre (total 5 one in each village) in villages Khapradih, Semradih, Bharuwadih, Chandi and Karchi, vi) Rs 30 Lakh for Drinking water tank at village Lohari and Paunsarl, vii) Rs 29 Lakh for Subsidy on drip Irrigation

system, seeds and agro-forestry in 100 Ha agriculture land in nearby villages Khapradih, Semradih, Bharuwadlh, Chandi and Karhi, viii) Rs 25 Lakh for Installation of Solar street lights at community center, common area, dispensary, bus stand and school at village Khapradih, Semradih, Bharuwadih, Chandi and Karhi, ix) Rs 150 Lakh for Health management center with full edged medical check-up, doctors and nursing staff, free medicines and 10 beds for male and female ward for primary health treatment and availability of 24x7 ambulance at village Bharuwadih and x) Rs 80 lakh for renovation of Public Health Center of village Khapradlh, Semradih, Bharuwadih, Chandi and Karhl: 1. Construction of Male, Female and Child wards~15 . nos. 2 construction of Male and Female toilets- 20 nos. 3. Water coolers-5 nos. 4. Ambulance: 5 nos. The amount proposed under this head shall be shall be kept in separate bank account and should be audited annually. The PP should annually submit the audited statement along with proof of activities viz. photographs (before & after with geo-location date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

6) PP shall implement the **R&R Plan** proposed during before Expert Appraisal Committee in its meeting held on 30-31 January, 2020. In addition to this other commitment may be fulfilled viz. i) Company will bear the entire cost for school education for all girl child studying in Govt. School of Village Karhi, Chandi and Khapradih which will include fees, books, uniform, bag and stationary. Approx. Budget is Rupees one lacs per annum, ii) will Contribute Rs. 11,000 for each girl marriage, iii) PP also proposed to provide sanitary napkin to all the girl child in Govt. School of village Karhi, Chandi and Khapradih with a budget 50,000 per annum, and iv) One lacs per annum to each Registered Govt. Gaushala of village Karhi, Chandiand Khapradih. Total budget would be three lacs per annum. PP shall fulfil the Commitment made above and during the Public Hearing. The amount proposed under this head should be kept in a separate bank account and should be audited annually. The PP should annually submit the audited statement and detailed report along with proof of activities taken, land compensation paid etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

7) Budget earmarked for **Corporate Environment Responsibility** is **Rs 250 Lakh** proposed by PP which includes i) **Activity-1**: Public Health Program[construction of 30X50 Feet ward for female in Chandi and Karhi Village (Rs 22.50 Lakh, timeline 1st year), construction of 30X50 Feet ward for male in Chandi and Karhi Village (Rs 22.50 Lakh, timeline 2nd year), Providing the 2 water coolers in Chandi and Karhi Village (Rs 2 Lakh, timeline 3rd year), ii) **Activity-2**: Education & Sports [i) provision for construction of 5 rooms in School at Chandi village (Rs 18.0 Lakh, timeline 1st year), provision for construction of 5 rooms in School at Karhi village (Rs 18.0 Lakh, timeline 2nd year), (providing the 2 water coolers(Rs 1 Lakh each), Providing the 2 Computer labs(Rs 5 Lakh per lab) and Smart Board (Rs 1 Lakh each)- Rs 14 Lakh, timeline 3 year)] iii) **Activity 3:** Training for Employment generation and livelihood for 600 people [i) Construction of Common training Centre for

various employment generation training program in village Karhi (Rs 20.0 Lakh, timeline 1st year), ii) Conducing the Household wiring and home appliance repairing duration 30 days @ Rs 1.25 Lakhs per batch of 20 persons, total 5 batches (Rs 1.25 Lakh for 1st Year, 2.70 Lakh for 2nd year, 2.80 Lakh for 3rd year-total Rs 6.75 Lakh), iii) Mobile repair training duration 30 days @ Rs 1.25 Lakh per batch of 25 persons, total 5 batches (Rs 1.25 Lakh for 1st Year, Rs 2.70 Lakh for 2nd year, Rs 2.80 Lakh for 3rd year-total Rs 6.75 Lakh), iii) Bike repair training duration 45 days @ Rs 1.40 Lakh per batch of 25 persons, total 5 batches (Rs 1.40 Lakh for 1st Year, Rs 3.0 Lakh for 2nd year, Rs 3.0 Lakh for 3rd year-total Rs 7.40 Lakh), vi) Plumber training duration 45 days @ Rs 1.70 Lakh per batch of 20 persons, total 5 batches (Rs 1.70 Lakh for 1st Year, Rs 3.60 Lakh for 2nd year, Rs 3.60 Lakhs for 3rd year-total Rs 8.90 Lakh), iii) Sewing training duration 60 days @ Rs 0.35 Lakh per batch of 20 persons, total 5 batches (Rs 0.35 Lakh for 1st Year, 0.80 Lakh for 2nd year, 0.80 Lakh for 3rd year-total Rs 1.95 Lakh), iii) Beauty Parlour Training duration 45 days @ Rs 0.40 Lakh per batch of 20 persons, total 5 batches (Rs 0.40 Lakh for 1st Year, 1.0 Lakh for 2nd year, Rs 1.40 Lakh for 3rd year-total Rs 2.80 Lakh), iii) Pickle & Spices making training duration 90 days @ Rs 1.30 Lakh per batch of 20 persons, total 5 batches (Rs 1.30 Lakh for 1st Year, Rs 2.60 Lakh for 2nd year, Rs 2.60 Lakh for 3rd year-total Rs 6.50 Lakh), Activity-3 Activities for Livestock: construction of Biogas plants for each family having minimum four cattle's in Villages Chandi & Karhi (Rs 20.0 Lakh, timeline 1st year, Rs 20.0 Lakh, timeline 2nd year, Rs 20.0 Lakh, timeline 3rd year –total Rs 60 lacks), Animal nutrition Programme in Villages Chandi & Karhi (Rs 10.0 Lakh, timeline 1st year, Rs 10.0 Lakh, timeline 2nd year, Rs 12.0 Lakh, timeline 3rd year –total Rs 32 Lakh). The amount proposed under this head should be kept in a separate bank account and should be audited annually. The PP should annually submit the audited statement and detailed report along with proof of activities viz. photographs (before & after with geo-location date & time), purchase documents, etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

8) Budget earmarked for **Occupational Health and Safety** shall be ₹ 0.3 Cr capital and 0.01 Cr recurring cost shall be used for Measures to Prevent Accidents during mineral Loading, Prevent Accidents during minerals Transportation, Accidents due to Trucks/ Dumpers etc., Dangerous Incidents during Inundation/Flooding, education awareness and first aid kit, and for medical Examination Schedule. Amount proposed under this head should be kept in a separate bank account and should be audited annually. If required PP shall enhance the budget under this head. PP should annually submit the audited statement and detailed report along with proof of activities viz. photographs (before & after with geo-location date & time), purchase documents, test reports, photographs & Geo-location of the infrastructures/facilities developed, record of distribution of PPEs etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

9) Budget earmarked for **Environment Management Plan** is Rs 3.95 Cr (Capital) & Rs 0.22 Cr (recurring) which includes i) Pollution Control [Rs 1.5

Cr (Capital) & Rs 0.04 (Recurring)], ii) Pollution Monitoring [Rs 0.8 Cr (Capital) and Rs 0.05 Cr(recurring)], iii) Occupational Health [Rs 0.3 Cr (Capital) and 0.01 Cr (Recurring)], iv) Green Belt/Mine/Township [Rs 1.0Cr(Capital and 0.10Cr(Recurring)], and v) Reclamation / Rehabilitation of mined out area [Rs 0.35cr (Capital) and Rs 0.02cr(recurring)] . In addition to this, PP also proposes to setup an Environmental Management Cell which is responsible for i) Procurement and commissioning of Pollution Control and Monitoring Equipment, ii) Specification and regulation of maintenance schedules for pollution control equipment, iii) Ensuring that prescribed standards are maintained, iv) Ensuring optimum water usage, v) Implementation of the mitigation measures suggested in EIA/EMP Report, vi) Ensuring development of greenbelt development and plantation & its maintenance. PP also submitted the Monitoring Schedule which includes i) Ambient Air Quality (twice a week), ii) Noise Level Monitoring (Quarterly), Water Quality & Level (Quarterly), Stack Monitoring (Regular) and Vibration Monitoring (on every blast). The amount proposed under this head (except occupational health) should be kept in a separate bank account and should be audited annually. The PP should annually submit the audited statement and detailed report along with proof of activities viz. photographs (before & after with geo-location date & time), purchase documents, sampling reports, photographs & Geo-location of the infrastructures/facilities developed, compositing & details of persons engaged in Environment Management Cell etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

10) Mitigation measures proposed for Roads & Nallha shall be implemented which includes A) **For Roads**: i) No mining operation is planned within 50 meter on either side of roads, ii) Fencing along excavated area for safety purpose with a budget of Rs 10 lakhs, iii) Plantation will be developed both side of roads. It will be completed within 5 years with a budget of Rs. 8 lakhs, iv) Mining will be done towards the roads after 25 years of the mining lease period, v) Worked out area beyond 50 meter safety zone on either side of road will be developed as water reservoir with proper fencing at conceptual stage with a budget of Rs 20 Lakh. B) **For Nallah**: There is a seasonal Nallah inside the mining lease area and i) No mining operation has been planned around the Nallha in the first 25 years of mining lease period, ii) However, mining operation is planned around nallah after 25 years from mining lease period at that time Nallah will be diverted outside the mining lease area before carrying out any mining operations. Further the mitigation measures proposed is i) 50m safety barrier will be left along the both side of the Nallah and ii) Earthen bund will be constructed along both side of Nallah and iii) Plantation will be done all along the Nallah in the safety barrier. PP shall submit to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year. Further, after 25 years permission of MoEF&CC may be obtained for diversion of nallha and mining near road.

11) In pursuant to Ministry's O.M No 21-103/2015-IA.III dated 2.11.2018 Approval/permission of CGWA/SGWA shall be obtained before drawing ground water for the project activities. State Pollution Control Board (SPCB)

concerned shall not issue Consent to Operate (CTO) till the project proponent obtains such permission.

B: Standard Conditions: (As Ministry's O.M No 22-34/2018-IA.III dated 8.01.2019 &16.01.2020)

I. Statutory compliance

1) This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.

2) The Project Proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August,2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India &Ors before commencing the mining operations.

3) The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India &Ors.

4) This Environmental Clearance shall become operational only after receiving formal NBWL Clearance from MoEF&CC subsequent to the recommendations of the Standing Committee of National Board for Wildlife, if applicable to the Project.

5) This Environmental Clearance shall become operational only after receiving formal Forest Clearance (FC) under the provision of Forest Conservation Act, 1980, if applicable to the Project.

6) Project Proponent (PP) shall obtain Consent to Operate after grant of EC and effectively implement all the conditions stipulated therein. The mining activity shall not commence prior to obtaining Consent to Establish / Consent to Operate from the concerned State Pollution Control Board/Committee.

7) The PP shall adhere to the provision of the Mines Act, 1952, Mines and Mineral (Development & Regulation), Act, 2015 and rules & regulations made there under. PP shall adhere to various circulars issued by Directorate General Mines Safety (DGMS) and Indian Bureau of Mines from time to time.

8) The Project Proponent shall obtain consents from all the concerned land owners, before start of mining operations, as per the provisions of MMDR Act, 1957 and rules made there under in respect of lands which are not owned by it.

9) The Project Proponent shall follow the mitigation measures provided in MoEFCC's Office Memorandum No. Z-11013/57/2014-IA. II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".

10) The Project Proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and from CGWA for withdrawal of ground water for the project.

11) A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.

12) State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.

13) The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www.parivesh.nic.in). A copy of the advertisement may be forwarded to the concerned MoEFCC Regional Office for compliance and record.

14) The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred than mining operation shall only be carried out after transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.

II. Air quality monitoring and preservation

15) The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, NO2, CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.

16) Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEFCC/ Central Pollution Control Board.

III. Water quality monitoring and preservation

17) In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEFCC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.

18) Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintain. The natural water bodies and or streams which are flowing in an around the village, should not be disturbed. The Water Table should be nurtured so as not to go down below the pre-mining period. In case of any water scarcity in the area, the Project Proponent has to provide water to the villagers for their use. A provision for regular monitoring of water table in open dug wall located in village should be incorporated to ascertain the impact of mining over ground water table. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.

19) Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.

20) The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease and maintain its records. The project proponent shall undertake regular monitoring of water quality upstream and downstream of water bodies passing within and nearby/ adjacent to the mine lease and maintain its records. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. PP shall

carryout regular monitoring w.r.t. pH and included the same in monitoring plan. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEFCC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.

21) Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J-20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.

22) Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEFCC annually.

23) Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.

24) The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board/Committee.

IV. Noise and vibration monitoring and prevention

25) The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.

26) The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders

and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day /night hours.

27) The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.

V. Mining plan

28) The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation i.e. quantum of mineral, waste, over burden, inter burden and top soil etc.. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management , O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form to Short Term Permit (STP), Query license or any other name.

29) The Project Proponent shall get the Final Mine Closure Plan along with Financial Assurance approved from Indian Bureau of Mines/Department of Mining & Geology as required under the Provision of the MMDR Act, 1957 and Rules/ Guidelines made there under. A copy of approved final mine closure plan shall be submitted within 2 months of the approval of the same from the competent authority to the concerned Regional Office of the Ministry of Environment, Forest and Climate Change for record and verification.

30) The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-à-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEFCC and its concerned Regional Office.

VI. Land reclamation

31) The Overburden (O.B.) generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by D.G.M.S w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of top soil/OB dumps. The topsoil shall be used for land reclamation and plantation.

32) The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.

33) The reclamation of waste dump sites shall be done in scientific manner as per the Approved Mining Plan cum Progressive Mine Closure Plan.

34) The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/ geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.

35) The Project Proponent shall carry out slope stability study in case the dump height is more than 30 meters. The slope stability report shall be submitted to concerned regional office of MoEF&CC.

36) Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.

37) Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.

38) The top soil, if any, shall temporarily be stored at earmarked site(s) within the mine lease only and should not be kept unutilized for long. The physical parameters of the top soil dumps like height, width and angle of slope shall be governed as per the approved Mining Plan and as per the guidelines framed by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of dumps. The topsoil shall be used for land reclamation and plantation purpose.

VII. Transportation

39) No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers.

40) The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.

VIII. Green Belt

41) The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan.

42) The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in

community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.

43) The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.

44) The Project Proponent shall undertake all precautionary measures for conservation and protection of endangered flora and fauna and Schedule-I species during mining operation. A Wildlife Conservation Plan shall be prepared for the same clearly delineating action to be taken for conservation of flora and fauna. The Plan shall be approved by Chief Wild Life Warden of the State Govt.

45) And implemented in consultation with the State Forest and Wildlife Department. A copy of Wildlife Conservation Plan and its implementation status (annual) shall be submitted to the Regional Office of the Ministry.

IX. Public hearing and human health issues

46) The Project Proponent shall appoint an Occupational Health Specialist for Regular as well as Periodical medical examination of the workers engaged in the mining activities, as per the DGMS guidelines. The records shall be maintained properly. PP shall also carryout Occupational health check-ups in respect of workers which are having ailments like BP, diabetes, habitual smoking, etc. The check-ups shall be undertaken once in six months and necessary remedial/ preventive measures be taken. A status report on the same may be sent to MoEFCC Regional Office and DGMS on half-yearly basis.

47) The Project Proponent must demonstrate commitment to work towards 'Zero Harm' from their mining activities and carry out Health Risk Assessment (HRA) for identification workplace hazards and assess their potential risks to health and determine appropriate control measures to protect the health and wellbeing of workers and nearby community. The proponent shall maintain accurate and systematic records of the HRA. The HRA for neighborhood has to focus on Public Health Problems like Malaria, Tuberculosis, HIV, Anaemia, Diarrhoea in children under five, respiratory infections due to bio mass cooking. The proponent shall also create awareness and educate the nearby

community and workers for Sanitation, Personal Hygiene, Hand washing, not to defecate in open, Women Health and Hygiene (Providing Sanitary Napkins), hazard of tobacco and alcohol use. The Proponent shall carryout base line HRA for all the category of workers and thereafter every five years.

48) The Proponent shall carry out Occupational health surveillance which be a part of HRA and include Biological Monitoring where practical and feasible, and the tests and investigations relevant to the exposure (e.g. for Dust a X-Ray chest; For Noise Audiometric; for Lead Exposure Blood Lead, For Welders Full Ophthalmologic Assessment; for Manganese Miners a complete Neurological Assessment by a Certified Neurologist, and Manganese (Mn) Estimation in Blood; For Inorganic Chromium- Fortnightly skin inspection of hands and forearms by a responsible person. Except routine tests all tests would be carried out in a Lab accredited by NABH. Records of Health Surveillance must be kept for 30 years, including the results of and the records of Physical examination and tests. The record of exposure due to materials like Asbestos, Hard Rock Mining, Silica, Gold, Kaolin, Aluminium, Iron, Manganese, Chromium, Lead, Uranium need to be handed over to the Mining Department of the State in case the life of the mine is less than 30 years. It would be obligatory for the State Mines Departments to make arrangements for the safe and secure storage of the records including X-Ray. Only conventional X-Ray will be accepted for record purposes and not the digital one). X-Ray must meet ILO criteria (17 x14 inches and of good quality).

49) The Proponent shall maintained a record of performance indicators for workers which includes (a) there should not be a significant decline in their Body Mass Index and it should stay between 18.5 -24.9, (b) the Final Chest X-Ray compared with the base line X-Ray should not show any capacities ,(c) At the end of their leaving job there should be no Diminution in their Lung Functions Forced Expiratory Volume in one second (FEV1),Forced Vital Capacity (FVC), and the ratio) unless they are smokers which has to be adjusted, and the effect of age, (d) their hearing should not be affected. As a proof an Audiogram (first and last need to be presented), (e) they should not have developed any Persistent Back Pain, Neck Pain, and the movement of their Hip, Knee and other joints should have normal range of movement, (f) they should not have suffered loss of any body part. The record of the same should be submitted to the Regional Office, MoEFCC annually along with details of the relief and compensation paid to workers having above indications.

50) The Project Proponent shall ensure that 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.

51) Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The

domestic waste water should be treated with STP in order to avoid contamination of underground water.

52) The activities proposed in Action plan prepared for addressing the issues raised during the Public Hearing shall be completed as per the budgetary provisions mentioned in the Action Plan and within the stipulated time frame. The Status Report on implementation of Action Plan shall be submitted to the concerned Regional Office of the Ministry along with District Administration.

X. Corporate Environment Responsibility (CER)

53) The activities and budget earmarked for Corporate Environmental Responsibility (CER) as per Ministry's O.M No 22-65/2017-IA. II (M) dated 01.05.2018 or as proposed by EAC should be kept in a separate bank account. The activities proposed for CER shall be implemented in a time bound manner and annual report of implementation of the same along with documentary proof viz. photographs, purchase documents, latitude & longitude of infrastructure developed & road constructed needs to be submitted to Regional Office MoEF&CC annually along with audited statement.

54) Project Proponent shall keep the funds earmarked for environmental protection measures in a separate account and refrain from diverting the same for other purposes. The Year wise expenditure of such funds should be reported to the MoEFCC and its concerned Regional Office.

XI. Miscellaneous

55) The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEFCC.

56) The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.

57) The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEFCC &its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.

58) A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEFCC.

59) The concerned Regional Office of the MoEFCC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend

full cooperation to the MoEFCC officer(s) by furnishing the requisite data / information / monitoring reports.

60) In pursuant to Ministry's O.M No 22-34/2018-IA.III dated 16.01.2020 to comply with the direction made by Hon'ble Supreme Court on 8.01.2020 in W.P. (Civil) No 114/2014 in the matter Common Cause vs Union of India, the mining lease holder shall after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to other mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.

16. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

17. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

18. The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/ High Court and any other Court of Law relating to the subject matter.

19. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Yours faithfully,

15/5/2020

(Sharath Kumar Pallerla)
Director/Scientist 'F'
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Copy to:

1). **The Secretary**, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi

2). **The Secretary**, Mineral Resource Department, Govt. of Chhattisgarh Indravati Bhavan, Block-4 , Second Floor, Nawa Raipur Atal Nagar, Chhattisgarh; Phone:- +91-771-2221840, FAX: +91-771-2221841 E-mail Address: dgm.cg@nic.in

3). **The Prl. Chief Conservator of Forests (HoFF)**, Chhattisgarh Forest

Department, Jai Raod, Aranya Bhawan Raipur (C.G.)- 492 007
Email:apccfadmi365@gmail.com

4). **The Prl. Chief Conservator of Forests (WL)**, Sector-19, North Block, Aranya Bhavan, 1st Floor (F.R.) Atal Nagar, Raipur, Chhattisgarh
Email:cwlwcg@gmail.com

5). **The Additional Principal Chief Conservator of Forests**, Ministry of Environment, Forest and Climate Change, Regional Office(WCZ), Ground Floor East Wing, New Secretariat Building, Civil Lines, Nagpur-440001
Email: apccfcentral-ngp-mef@gov.in

6). **The Chairman**, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.

7). **The Chairman**, Chhattisgarh Environment Conservation Board ,Paryavas Bhavan, North Block Sector-19,Naya Raipur(C.G.)
New Delhi -110003 India ;Phone : **0771-2512220** ;Fax : **0771-2970074**
Email : hocecb@gmail.com

8). **The Member Secretary**, Central Ground Water Authority, A-2, W3, Curzon Road Barracks, K.G. Marg, New Delhi-110001.

9). **The Controller General**, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440 001.

10). **The Director General of Mines Safety**, DGMS Head Office, Sardar Patel Nagar, Dhanbad, Jharkhand 826001

11). **The District Collector**, District Balodabazar-Bhatapara, State of **Chhattisgarh.**

12). **Guard File**

13). **MoEFCC website (Parivesh Portal)**

15/5/2020

(Sharath Kumar Pallerla)
Director/Scientist 'F'