F. No. J-11015/190/2016-IA. II (M)
Government of India
Ministry of Environment, Forest and Climate Change
Impact Assessment Division
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Indira Paryavaran Bhavan
Yavu Wing, 3rdFloor, Aliganj,
Jor Bagh Road, New Delhi-110 003

Dated: 31st August, 2020

To,

M/s Jaykaycem Central Limited
"ARYAN", E-5/160, Arera Colony,
Bhopal,Huzur,Bhopal,
Madhya Pradesh-462016.

Subject: Kakra-Panna Limestone Mine of M/s Jaykaycem Central Limited for production of 4.08 MTPA Lime stone; 1.61 MTPA OB/Top Soil/Waste; and 0.58 MTPA sub-grade mineral[Total excavation 6.27MTPA] in the mine lease area of 1594.34 ha, located at Villages Kakra, Kamtana, Saptai, Judi, DevriPurohit & Devra, Tehsil Amanganj, District Panna of State Madhya Pradesh-Consideration of EC.

This has reference to the proposal of M/s Jaykaycem Central Limited vide online proposal no. **IA/MP/MIN/130137/2016** for production of 4.08 MTPA Lime stone; 1.61 MTPA OB/Top Soil/Waste; and 0.58 MTPA sub-grade mineral[Total excavation 6.27MTPA] in the mine lease area of 1594.34 ha, located at Villages Kakra, Kamtana, Saptai, Judi, DevriPurohit&Devra, Tehsil Amanganj, District Panna of State Madhya Pradesh. The mine lease area falls in the Survey of India topo-sheet no. 45E/15 (G43B15) (mine area) and 45/15 (G43B15), 45E/16, 451/3 (G43C3), 451/4 (G43C4) (study area). The proposed site and study area is covered in parts of Survey of India Toposheet No. 54 P/15 & 63 D/3 within latitude 24°19'2.99"N-24°20'2.02"N and Longitude 79°57'30.02"E - 79°58'42.25"E, whereas mining lease area is covered in parts of Survey of India Toposheet No. 54 P/15 & 63 D/3 bordered by latitudes from: 24°19′ 46.6″ to 24°22′ 15.3″ N and longitude from 79^0 56′ 15.5″ to 79^0 59′ 38.2″ E. 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", Project or Activity 1(a) as the Mining lease area is more than 100 Ha.

3. Project Proponent (PP) applied online for grant of TOR (Terms of References) vide Proposal No. IA/MP/MIN/580538/2016 and submitted the information in the prescribed format in Form I along-with Pre-Feasibility Report. The proposal was initially considered in Expert Appraisal Committee (EAC) Meeting held during September 19th-20th, 2016, April 27-28 2017 and July 24th-25th, 2017 wherein the Committee **deferred** the proposal for want of site visit by a sub-committee. Thereafter the committee visited the visit during 17.04.2018 & 18.04.2018. The

Committee submitted its report to the Ministry and the proposal was reconsidered in the EAC meeting held during May 14th – 15th, 2018. The EAC, after detailed deliberations recommended the proposal for prescribing Term of Reference (ToR), Ministry issued the TOR vide No. J-11015/190/2016-IA.II (M) dated 06.07.2018. PP submitted the EIA/EMP online vide proposal no IA/MP/MIN/130137/2016 on 10 Dec 2019 the proposal was considered in the EAC in its meeting held on 'May 28, 2020 To May 28, 2020 wherein the Committee after deliberation and observations made above, recommended the proposal to **return in present form** and advised to make the application by addressing the ToRs prescribed inter alia including the observations made by the committee and the stage wise mine development plans at 5-year interval, clearly showing rivers, safety distances, villages, roads, mine lease, water bodies, embankments, OB dumps, plantations etc. showing critical distances for drawing the appropriate mitigation measures. Further PP resubmitted the proposal online vide proposal no IA/MP/MIN/58058/2016 on 04th July, 2020 along with the EIA/EMP report, the proposal considered in the EAC in its meeting held on 22-24 July, 2020 wherein the Committee **recommended** the proposal for grant of EC.

4. PP reported that the total mine lease area is 1594.34 ha out of which 1518.586 ha is private agriculture land and 75.754 ha Government Land. PP reported that the Government of Madhya Pradesh granted a prospecting License over an area of 3513.75 Ha in Villages Kakra, Kamtana, Saptai, Judi, DevriPurohit & Devra, Tehsil Amanganj, District Panna, M.P. vide order no. F2-41/2010/12/1, Bhopal dated 15.03.2010 for a period of two years i.e. from 14.06.2010 to 13.06.2012. After subsequent scrutiny, the State Government under Rule 27(h) of MCR 1960 recommended the grant of ML over an area of 1594.34 hectares. As per the exemption under Section 6 (1) (b) of MMDR, 1957 by the Central Govt., the State Government, issued the letter on dated 17.03.2016 and 03.05.2016 for completing all the formalities including obtaining EC and execute the deed for a period of 50 years over an area of 1594.34 ha.

5. PP submitted that Mining plan and Progressive Mine Closure Plan for an area of 1594.34ha has been approved by the Regional Controller of Mines, Indian Bureau of Mines, Jabalpur, vide letter no. MP/Panna/Limestone/MPLN/G-16/14-15/4140 dated 03.08.2015 for the period of 5 years from the date of execution, as per the approved mine plan the mining shall be carried out by fully mechanized opencast method, utilizing Heavy Moving Earth Machinery (HEMM i.e. hydraulic excavators, rear dump trucks, hydraulic drills, bull dozers, etc.) in conjunction with deep hole and blasting. The quarried raw material will be transported to the crusher location by tippers and dumpers and from there to the cement plant, using belt conveyors. The oversize queried limestone will be crushed using rock breakers before transportation. A limestone crusher having the capacity of 1800TPH, with bag filters and dust suppression arrangement such as water sprinkling will also be installed for sizing of the mined limestone to be taken to the plant through conveyor belt. PP submitted that during the mining operation for the first five year period total 14,10,052 cum soil/alluvial will be generated and 2,78,516 cum of waste material will be generated. At the conceptual period total 4,98,03200 cumsoil/alluvium and 4,79,99,308 cum of waste rock is estimated to generate. PP also reported that dump shall be developed as to avoid any spillage towards adjacent field. Back filling is proposed on concurrent basis from 3rd year onward.

The soil will be used for afforestation purpose. Proper slope and system of benching with retaining wall for the dumps is suggested to prevent spillage of waste to adjacent land. Therefore total area covered at the conceptual stage will be 528.20 Ha, for which Rs 751.95 Lakhs will be incurred. No secondary blasting / Plaster shooting shall be done and rock breaker will be deployed to break the oversize boulders and bench toe.

6. The Proponent submitted that the top soil and the overburden will be temporarily stacked on surface at the designated places inside the mine lease area. Top soil is used for plantation and overburden in backfilling. Backfilling will be started after second year and the generated OB of approximately 4756104m3 will be used for backfilling the eastern part of the proposed five year working area in such a way that part of the area will be restored to original ground and at the end of five-year period, the average depth of backfilled area will be 25-26m. Water accumulated in the working mine will be treated and used for dust suppression and plantation to the maximum extent. The liquid waste generated from the office toilets will be treated in the prefabricated package sewage treatment plant. PP also submitted that the ultimate working will be done up to RL 279 below the ground water level. PP reported that the Hydrogeological study has been carried out as per it the ground water table is encountered at about 11-15 m below the surface and during the mining operations the ground water table will be intersected. PP submitted that the application for CGWA clearance has been applied and the same under process. No overburden and/or sub-grade material shall be stacked outside the Mine lease area. PP also submitted that at the conceptual stage out of total mine lease area 1445.082 Ha will be disturbed area, out of which 528.200 ha will be used for Plantation (437.33 Ha. backfilled area and 90.87 Ha. bench & peripheral afforestation area), 752.122 Ha area will be converted into water body and 164.760 Ha area will be used for stacking of Sub grade mineral.

7. PP also submitted that there are three village roads falling in lease area viz from Saptai village to SH-49 via Devra village; Kakra village to SH- 10 via Kamtana / SH-49 via Devra village; Devra village to SH-49. The area of these roads along with safety zone has already been deducted from our granted lease area. However PP also submitted that following Safety measures as excavation shall be done leaving the safety zone of 50 m. from roads and 300 m from the settlements. Mine working will be done after leaving the safety distance of about 45 m on either side of this Nallah. Plantation will be done after making bund all along the Nallah over the safety zone of 45 m by planting 2360 nos. of trees and Mining activity will be restricted up to 250 m distance from the Ken bank. Garland drain along with settling pits will be provided around the OB, subgrade dumps and all along the Haulage roads to control the spillage of silts in to Devra Nallah leading to Ken River. The flooding in the mine area is not anticipated because the HFL of Ken River is 296 m-297 m whereas the MSL range of Mine area is 308 m to 323 m. We will also construct an embankment of about 3 m height as per approved design along the river bank. Thus, the top of embankment will be approximately 15-16 m higher than HFL of Ken River. PP also fecilated budgetary provision for construction of embankment all along Devra Nallah and Ken River and plantation on the embankments is around Rs. 4-5 Crores. The design of embankment on River and Nallah duly approved by WRD Panna.

8. PP has submitted that they develop plantation about 992127 saplings over area of 528.20 ha (@1200 plants/ha) which will include 437.33 ha reclaimed by back filling. In addition to stabilize the slope of abandoned benches, about 90.87 ha will also be afforested. Plantation will be done along the 7.5mt barrier zone by considering 80% rate of survival. Trees like Karanj, Mango, Neem and other local varieties will be planted in consultation with forest department. Vegetation shall be removed only from the specific site on which extraction of mineral is to be taken up. Dump shall be so developed as to avoid any spillage towards adjacent field. Back filling is proposed on concurrent basis from 3rd year onward. The soil will be used for afforestation purpose. Proper slope and system of benching with retaining wall for the dumps is suggested to prevent spillage of waste to adjacent land. Therefore, total area covered at the conceptual stage will be 528.20 Ha, for which Rs 751.95 Lakhs will be incurred.

9. PP submitted that there is no forest land involved in the mining lease area. Major portion of the land belongs to individual private land owners sustaining low yield agricultural pattern (1518.586 ha). Partly the land is waste land (75.754 ha) belonging to the state Government. PP has reported that no National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/Elephant Reserves/ (existing as well as proposed), is identified within 10km radius. Letter for the same has been obtained from DFO, South Forest Division, Panna vide its letter No. Ma.Chi./2016/4717 dated 10.08.2016 which states that there is no national park/ sanctuary is present within 10 km radius of the site. Also, there is no forest present in 250 m radius. However, Panna Biosphere Reserve is present at a distance of 5.50 km. DFO, South Forest Division, Panna vide its letter no. Ma.Chi./2019/2433 dated 25.05.2019 certified that w.r.t. Mining lease area there is no involvement of Forest Land. The land is also not a part of Tiger and Elephant Corridor. The same has been certified by Addl. PCCF cum Nodal Officer vide letter No. F-1/Parya./R.-3451/10-11/2019/3454 dated 25.10.2019. Further PP also submitted the letter from the Additional Principal Chief Conservator of Forest, Govt. of MP stating that the Panna Tiger Reserve is located at the distance of 12.94 km and letter No. F-1/ Parya/ R-3451/ 10-11/ 2019/ 3921, dated 17.12.2019 certifying that Mining Lease area is not a part of Tiger Corridor.

10. PP submitted the list of Schedule-I Species authenticated by the Chief Wild Life Warden, Govt. of MP letter no. Vpra/Machi/Mine-78/3415, dated 15.06.2020 existing in the 10km radius study area as per the list of Species submitted by PP the following Schedule-I species found in Amanganj Range is Mouse Deer, Black Buck, Indian Gazelle, Sloth Bear, Panther or Leopard, Jungle Cat & Indian Pangolin and the wild life conservation plan with cost implication has been prepared and approved by the Chief wild life warden, Government of Madhya Pradesh vide Letter No. V.Pra/Ma.Chi./8848 dated 13.12.2019. The cost of conservation is earmarked to be Rs. 289.9 lakhs and period of implementation will be 10 years.

11. PP has submitted that one season primary baseline data for ambient air quality, (as per CPCB quality Notification, 2009), water quality, noise level, soil and flora & fauna has been collected for one Season (March, 17 to May, 17). Baseline data in the study area was collected by conducting field study/primary sampling during the study period with respect to the different environmental attributes. The air qualities of different locations were compared with the respective NAAQS. It has

been observed that the Exceedence Factor for PM2.5, SO2 and NO2 for mostly location is less than 0.5 which indicates the overall ambient air quality of study area is low polluted category. However, PM10 at all locations falling into the third category are meeting the standards as of now but likely to exceed the standards in future if pollution continues to increase and is not controlled. However, the location in Low pollution category have a rather clean air quality and such areas are to be maintained at low pollution level by way of adopting preventive and control measures of air pollution. Dust fall was measured using dust fall jars. The Dust fall jar was installed at one AAQ locations and monitoring was carried out for one month during AAQ monitoring period. The Dust fall rates at the sampling stations, D-1, were recorded as 7.7ton/km2/month. These values are closer to the lowest limit for dust fall (51,350 ton/km2/month) reported in the literature. It has found that in the Proposed Cement plant and mining lease area and buffer zone, noise levels are in the range of 37.9 – 52.9 dB(A) at all sixteen stations. Maximum levels of noise have recorded in day hours which are natural as our most of activities have done in day hours. Overall quality of water samples shows that the water sources of the area are not polluted except the surface water samples getting contamination from surface run-off. The coliforms values are exception otherwise all the water samples are indicating its characteristics within limit as given in relevant Indian Standards. Characteristic of waste land and forest land soil is a little deficient in nutrients concentration. Whereas, all three agricultural land soils are moderately suitable for cultivation of climatic crops and have good fertility. The field survey in the plant area shows that there are no endangered, endemic, rare plant species present within the boundary i.e. core area. However, a species i.e. Trubulus terrestris is encountered in the Impact area with low abundance. The study area has been found under heavy biotic pressure and devoid of vegetation due to felling of trees and over grazing by village animals. There are no endangered, endemic and rare species of Fauna, found around 10 km of study area. The domestic animals observed in the study area are mainly mammals. However according to DFO's census report (secondary Data), the Schedule I animals listed in Amanganj Range are the Mouse Deer, Black Buck, Indian Gazelle, Sloth Bear, Panther or Leopard, Jungle Cat & Indian Pangolin, for which conservation plan is prepared. Thus PP has submitted that it is pertinent to state that the project is not likely to cause significant impact on the environment of the area, as adequate preventive measures are proposed which will be adopted to restrict the various pollutants within permissible limits. Green belt development around the area will be taken up extensively which will act as an effective pollution mitigating technique. Community impacts are found beneficial, as the project will generate significant economic benefits for the region. With the effective implementation of the Environment Management Plan (EMP) during the plant activities, the proposed project can proceed without significant negative impact on environment.

12. The Project Proponent reported that Public hearing/consultation for the project was conducted by Madhya Pradesh State Pollution Control Board (MPSPCB) on 17th July 2019 under the Chairmanship of Shri. J.P. Dhurve, Additional Collector Nagaur, at 11:00 AM at Panchayat Bhawan of Village Devra, Tehsil Amanganj, Dist Panna (MP) as per the Environmental Impact Assessment Notification dated 14th September, 2006. The advertisement for public hearing was published in Times of India and DainikBhaskar on 14.06.2019. The Committee deliberated on the issues raised during the public hearing and the major issued raised by the local people

were related to, employment, compensation to villagers for damage, damage to road & houses near the mining lease, control blasting, top soil utilization, overloading of tippers, use of CSR fund for lying of roads and drinking water facility, skill development program. The Commitment made by PP during the PH includes control blasting, water spraying, transportation by covered trucks, baseline data of crop yield will be taken into consideration before starting mining operations, crop compensation, no agricultural will be purchased, initial and periodical medical examination of workers, rainwater storage in excavated pits to recharge ground water, green belt development, implementation of pollution control measures, mining within the lease area, employment to 1200(Direct) and 10000-12000(indirect) persons, strengthening of village road, over loading of truck will be avoided etc.

13. PP has submitted that as per MoEF&CC's OM no. F. No. 22-65/2017-IA.II dated 01.05.2018, following provision has been proposed towards the CER which is altogether does not include the cost of implementation of EMP, conservation plan, etc. [Project cost: Rs 5586.95 Crore for Cement Plant + Rs 572.58 Crore for Mining Project Total Cost = 6159.53 Crore (CER 0.5% of total cost) = 30.80 Crore]. This amount Rs. 3880 lakhs will be spent over a period of 3 years and the amount of CER will be spent to develop the Health infrastructure, Development of educational infrastructure for the villages, proving the drinking water facilities, infrastructure development of villages, Centre for SHGs and other local social needs of the villages). The Project Proponent submitted that budgetary provision for Environmental Management Plan (EMP) has been made in two phases–a total of ₹ 233 Crores (Capital) &₹ 11.92 Crores (recurring/annum). This will include (in 2 phases) as under each category 1) Air Pollution (Capital– Rs. 198 Crores & Recurring/annum – Rs.8.90 Crores in two phases), 2) Waste Water Management (Capital– Rs. 10 Crores& Recurring/annum– Rs. 0.5 Crores in two phase), 3) Solid/Hazardous (Capital–Rs. 2 Crores & Recurring/annum– Rs. 0.5 Crores in two phases), 4) Green Belt development & plantation (Capital–Rs.8.46 Crores & Recurring/annum–Rs. 0.42 Crores in two phases), 5) Wild Life Conservation Plan (Capital– Rs. 3.0 Crores), 6) Rainwater Harvesting Structure (Capital – Rs. 2 Crores & Recurring/annum– Rs. 0.1 Crores in two phases) and 7) Environmental Monitoring (Capital– Rs. 9.5 Crores & Recurring/annum– Rs. 1.5 Crores in two phases).

14. PP reported that though no displacement is proposed, however provision has been made for the PAF of the area (764 in total) whose land will be purchased. The proposed budget for Land procurement, R&R elements and Skill Development Training cost as per the First, Second and Third Schedule of LARR Act, 2013 is as follows: 1) First Schedule– Rs. 297.87 Lakhs, 2) Second Schedule–Rs. 81.00 Lakhs, 3) Third Schedule– Rs. 89.80 Lakhs and 4) Skill Development– Rs. 2.25 Lakhs. Thus, a total of Rs. 470.92 Lakhs has been budgeted.

15. PP has submitted that Occupation safety and health is very closely related to productivity and good employer-employee relationship. Occupational health of workers may be affected by fugitive emission, dust and noise. Safety of employee during operation and maintenance of equipment and handling of materials are proposed to be taken care as per regulations. To avoid any adverse affects on the health of workers due to dust, heat, and noise sufficient measures shall be

provided as per requirement. Provisions of pure and clean drinking water, safety provisions, training of all personnel to deal with accidents are required for an effective environmental management. A Dispensary will be established within the premises and services of the qualified doctor shall be hired on regular basis. It is also to mention here that monitoring at work place will be done regularly. To adhere to safety measures safety helmets, safety boots, safety goggles will be provided to the workers. The Project Proponent submitted that budgetary provision for Occupational Health and Safety has been made in two phases–a total of ₹ 1 Crores (Capital) &₹ 2.24 Crores (recurring/annum) for the two phases which include PPE (Mask, Gloves, Goggles), Medical Checkup facility, first aid and other welfare activities. A separate budgetary provision for safety aspect w.r.t. Blasting proposal has been planned for an amount of Rs. 5.60 Lakhs/annum as recurring cost.

16. The Consultant in the EIA report has given an undertaking stating that "I, Umesh C. Mishra, hereby, confirm that the above mentioned experts prepared the EIA of Jaykaycem (Central) Limited. I also confirm that the consultant organization shall be fully accountable for any mis-leading information mentioned in this statement." Further, PP has given undertaking in Form-2 that hereby give undertaking that the data and information given in the application and enclosures are true to be best of his knowledge and belief. And he is aware that if any part of the data and information found to be false or misleading at any stage, the project will be rejected and clearance given, if any to the project will be revoked at their risk and cost. In addition to above, they hereby give undertaking that no activity/ construction/ expansion has since been taken up.

17. The PP submitted the NABET Accreditation Certificate of the consultant for the period 21.02.2014 to 14.11.2016, 16.11.2016 to Sep 2017, 18.09.2017 to 22.06.2018, and 22.06.2018 to 12.11.2019. PP also submitted the accreditation certificate of laboratory for the period 14.11.2014 to 13.11.2016 & 14.11.2016 to 13.11.2018, where sample were analyzed.

18. PP, submitted that, Shri Nikhil Chandra Mishra has applied for Grant of Environmental Clearance on behalf of the Company. However, since he has attained superannuation from the services of the Company, therefore, his assignments has now been looked after by Shri Aditya Pratap Singh, S/o. Shri Raghvendra Singh, Aged about 48 Years, Resident of House No. 253, "Shashikunj", Peptech City, Sohawal Road, District Satna, M.P., General Manager of Company i.e. M/s. Jaykaycem (Central) Limited (hereby called the "Authorized Representative") who has been appointed/empowered by Shri Anil Kumar Agrawal, Director of the Company vide Board Resolution dated 28.02.2018, to represent the Company before any Government Authority, Departments, Ministries including Ministry of Environment, Forest And Climate Change, Statutory Authorities, etc. and to act, appear, sign and execute all documents including application, petition before the concerned Authorities. Letter of clarification issued by Shri Anil Kumar Agrawal, Director of the Company, and - Copy of Board Resolution dated 28.02.2018 in favour of Shri Aditya Pratap Singh duly issued by Shri Prabhat Srivastava, Company Secretary of the Company.

19. PP submitted that there are following court cases.

Sl	Court case details	Status
1	The Original Application 3/2020 in the matter of Brij Kishore Pathak V/s Ministry of Environment, Forest & Climate Change and Others has been filed before National Green Tribunal, Bhopal with a prayer to conduct fresh Public hearing	PP reported that In this matter, on 08.05.2020, the Hon'ble NGT, Bhopal has conducted a hearing by way of Video Conferencing and dismissed the Original Application and Interim Application at the initial stage as the bench did not find any merit in the original application. The project proponent through e-mail dated 20th May, 2020 informed that the NGT vide its order dated 8th May, 2020 dismissed the plea stating that 'Taking note of the consideration the overall facts and circumstances and for the aforesaid reasons we do not find any merit in this original application.
2	One Litigation is pending towards the proposed project and land at Lok AdalatPanna (MP) vide Case No. 12/2019 under Conciliation Proceeding U/s 22 of The Legal Service	A Mediation Proceeding has been initiated by Advocate Chandrabadan Tiwari of Village Devra, Tehsil Amanganj, District Panna (MP) before the Permanent Lok Adalat, Panna against (i) the District Collector, Panna, (ii) R.O., MPPCB, Sagar, (iii) The Member Secretary, MPPCB and (iv) Project Proponent. The Petitioner alleged that Proper procedure was not followed by the Member Secretary and RO of MPPCB while conducting Public Hearing. He alleged that no intimation was given for the Public hearing and coercion was used during the public hearing, as well as there is a differentiation in the land rate. **Current Status: The Mediation Proceeding is pending before the Permanent Lok Adalat, Panna presided by the Additional District Judge (Chairperson), Panna and lastly the matter was listed/fixed for Mediation on 28.03.2020. However, the proceedings could not be taken up till date due to COVID-19 pandemic precautions being followed by the Courts/Permanent Lok Adalat. The next date of hearing has not been fixed as yet and will be notified once the Lok Adalat resumes its functioning.** PP states

		that they are confident that this case will be decided in their favor during next hearing as this matter is devoid of any merit.
3	WP No.10312/2020 at Hon'ble High Court of Madhya Pradesh, Jabalpur in the matter of Chandrabadan Tiwari Vs. Government of India and others	PP email dated 06.08.2020 ha informed that the Writ Petition came up for hearing before the Hon'ble Jabalpur High Court for Admission and after completion of arguments, the matter has been "Dismissed as withdrawn" by the Hon'ble High Court on 04.08.2020 as "At the outset, when it was pointed out to the learned counsel for the petitioner as to how the present Pubic Interest Litigation was maintainable and the Court was inclined to dismiss the petition with cost, learned counsel for the petitioner prayed that he may be allowed to withdraw the petition. **Dismissed as withdrawn".**

20. PP submitted that the total water requirement for operation of crusher, suppression of dust, domestic consumption, plantation and green belt development will be 230 KLD (crusher operation 100 KLD, Dust Suppression 70 KLD, Plantation 40 KLD and Domestic Use 20KLD) through initially from ground water and subsequently accumulated mine water & water reservoir proposed at cement plant area and in mining lease area. PP has submitted that they have obtained NOC from CGWA vide letter CGWA/NOC/MIN/ORIG/2020/7359 dated 03.02.2020 for abstracting ground water of 3933.69 m^3/day (1435797 m^3/year) for a period of two years i.e. from 03.02.2020 to 02.02.2022.

21. The Proponent submitted that total project cost will be Rs. 572.58 Crore and will provide permanent employment to 50 persons and temporary employment to 250 persons during operation.

22. The Project proponent vides his letter No. PN/EMD/MoEF/F01/011 dated 04.07.2020 has submitted additional information in respect of observations made by the committee during 17th EAC Meeting held during 28-29, May and 1st June, 2020, along with Annexure i.e. the stage wise mine development plans at 5-year interval/clearly showing rivers, safety distances with villages, roads, mine lease, water bodies, embankments, OB dumps, plantations, conservation plan for fauna in buffer zone, noise level impact and measures, measures pertaining to blasting vis habitation etc. for your kind and needful consideration. The pointwise submission of the PP is as follows:

23. Based on the deliberations held during July 22-24, 2020 the Committee recommended the proposal of **M/s Jaykaycem Central Limited** is for Mining of Limestone to produce - Normative Capacity: 4.00 MTPA, Maximum Achievable

Capacity: 4.08 MTPA from Kakra-Panna Limestone Mine in ML area of 1599.34 Ha located at Villages Kakra, Kamtana, Saptai, Judi, Devri Purohit & Devra, Tehsil Amanganj, District Panna of State Madhya Pradesh subject to the specific conditions in addition to the standard conditions applicable for non-coal mining projects.

24. 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 Jaykaycem Central Limited is for Mining of Limestone to produce - Normative Capacity: 4.00 MTPA, Maximum Achievable Capacity: 4.08 MTPA from Kakra-Panna Limestone Mine in ML area of 1599.34 Ha located at Villages Kakra, Kamtana, Saptai, Judi, Devri Purohit & Devra, Tehsil Amanganj, District Panna of State Madhya Pradesh subject to compliance of the terms & conditions and the environmental safeguards mentioned below:-

A. Specific Conditions:

I. Mining shall be restricted to the land already acquired near the Judi Village (about 235 ha). Meanwhile the PP may aquire the land, modify the ming sequence to avoid the void in west side of Dewra Village and approach the Ministry for re-validation or amendment in environmental clearance for permission for the entire area proposed for mining within the ML area.

II. The saftety barrier of 100 m against the village / Habitation; 45 m on either side of the Nallah; 50 m on either side of the village raods shall be left as non-mining zone and thick green belt shall be developed with native species before commencement of mining operations in the area.

III. No mining shall be carried up to 250 m distance from the bank of Ken River and an embankment of not less that 3 m height above the HFL shall be constructed and thick green belt shall be developed with native species before commencement of mining operations in the area

IV. The PP shall adopt control basting with necessary permission from the Director General of Mines Safety within 300 m from the village / Habitation boundary and non-conventional mining with ripper dozer or other mechanical means by avoiding the blasting within 100 m from the village / Habitation boundary. Thick plantation with native and broad leaved species shall be developed in the safety barrier left against the Habitations before commencement of mining operations in the area.

V. The ground induced blasting vibrations shall be monitoed regularly for every blast performed and the values of "Peak Particle Velocity" and "Air Over Pressure" shall be maintained below the permissible values prescribed by the DGMS, from time to time.

VI. No external dumping of overburden and/or sub-grade material shall be made outside the mining lease area.

VII. Site specific conservation plan for all the Schedule-I species reported in the study area shall be implemented in consultation with State Forest Department as per the recommendations of Chief Wildlife Warden.

VIII. Total Excavation shann not be exceeded to 7.61 which includes 4.08 MTPA Lime Stone, 0.58 MTPA sub-grade limestone, 1.51 MTPA Inter burden, Soil/Alluvium 1.26 MTPA, Mine Waste 0.18 MTPA.

IX. Plantation shall be carried out as per the mining plan both concurrent and closer phase reclamation, inter alia, including plantation all along the boundary of the mining lease shall be completed within 2 years of commencement of mining operations, with a saplings of native and broad leaved species of not less than 12 feet and shall maintain the record of the same, gap plantation and grassing as per the directions of the Hon'ble Supreme Court.

X. The project proponent shall implement the commitments made on the issues raised in PH and activities proposed under CER, in a period of three years and record for the same shall be maintained and audited and reported to the Regional Office of the Ministry along with the compliance reports.

XI. All the mitigation measures committed / envisaged in the EIA/EMP report and subsequent submission shall be implemented.

XII. In pursuant to Ministry's O.M No 22-34/2018-IA.III dated 16.01.2020to 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.

B. Standard EC Conditions:

<u>I. Statutory compliance</u>

1) The EC granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc. required to be obtained or standards / conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project.

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) 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".

5) 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.

6) 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.

7) 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.

8) 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

9) 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 dated18.11.2009 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.

10) 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

11) 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.

12) 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.

13) 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 including upstream and downstream. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. 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.

14) 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.

15) 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.

16) 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.

17) 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

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

19) 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.

20) 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

21) The Project Proponent shall adhere to approved mining plan, inter alia, including, total excavation (quantum of mineral, waste, over burden, inter burden and top soil etc.); mining technology; lease area; scope of working (method of mining, overburden & dump management, O.B& dump mining, mineral transportation mode, ultimate depth of mining, concurrent reclamation and reclamation at mine closure; land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life; etc.).

22) The 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

23) The Overburden (O.B.), waste and topsoil 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 / waste dumps / topsoil dump like height, width and angle of slope shall be governed as per the approved Mining Plan and the guidelines/circulars issued by D.G.M.S. The topsoil shall be used for land reclamation and plantation.

24) 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.

25) 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.

26) 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.

VII. Transportation

27) 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. [If applicable in case of road transport]

28) 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

29) 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.

30) 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.

31) 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.

IX. Public hearing and human health issues

32) 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.

X. Corporate Environment Responsibility (CER)

33) 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.

XI. Miscellaneous

34) 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 MoEF&CC.

35) 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.

36) 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.

37) 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.

38) 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.

39) In pursuant to Ministry's O.M No 22-34/2018-IA.III dated 16.01.2020to comply withthe 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.

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

26. 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.

27. 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.

28. 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,

31/8/2020

(Sharath Kumar Pallerla)
Director/Scientist 'F'
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Phone/Fax: 011-24695325

Copy to:

1. The Secretary, Ministry of Mines, Government of India, Shastri Bhavan, New Delhi.
2. The Secretary, Department of Mines & Geology, Government of Madhya Pradesh, Secretariat, Bhopal.
3. The Secretary, Department of Environment, Government of Madhya Pradesh, Secretariat, Bhopal.
4. The Secretary, Department of Forests, Government of Madhya Pradesh, Secretariat, Bhopal.
5. The Chief Wildlife Warden, Government of Madhya Pradesh, Van Bhavan, 1st Floor, Tulsi Nagar, Bhopal - 462 003.
6. The Addl. Principal Chief Conservator of Forests, Regional Office (WZ), Regional Office (WZ), E-5, Kendriya Paryavaran Bhawan, E-5 Arera Colony, Link Road No.3, Ravishankar Nagar, Bhopal –462 016.
7. The Member Secretary, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office complex, East Arjun Nagar, New Delhi-1100032.
8. The Member Secretary, Central Ground Water Authority, 18/11, Jam Nagar House, Man Singh Road, New Delhi-110011.
9. The Member Secretary, Madhya Pradesh State Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony, Bhopal – 462016.
10. The Controller General, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440 001.
11. The District Collector, District Panna, Madhya Pradesh.
12. Guard File.
13. PARIVESH Web portal.

31/5/2020

(Sharath Kumar Pallerla)
Director/Scientist 'F'