

File No.: IA-J-11015/39/2023-IA-II(NCM)

Government of India Ministry of Environment, Forest and Climate Change IA Division



Dated 08/02/2025



To,

Shri Pankaj Kejriwal

M/s STAR CEMENT LIMITED

Village Lumshnong, P.O. Khliehriat, East Jaintia Hills District, Meghalaya, Lumshnong, EAST

JAINTIA HILLS, MEGHALAYA, , 793210

delhi@starcement.co.in

Subject:

Daba Saitthad Limestone Deposit with production capacity of 2.51 MTPA of Limestone in the mine lease area of 25 Ha by M/s Star Cement Ltd located at Daba Saitthad (wahlareng), Village Lumshnong, District East Jaintia Hills, Meghalaya – For Environmental Clearance reg.

Sir/Madam,

This is in reference to your application submitted to MoEF&CC vide proposal number IA/ML/MIN/500897/2024 dated 09/11/2024 for grant of prior Environmental Clearance (EC) to the project under the provision of the EIA Notification 2006-and as amended thereof.

2. The particulars of the proposal are as below:

(i) EC Identification No. EC24B0000ML5363001N

(ii) File No. IA-J-11015/39/2023-IA-II(NCM)

(iii) Clearance Type Fresh EC

(iv) Category B1

(v) Project/Activity Included Schedule No. 1(a) Mining of minerals

(vi) Sector Non-Coal Mining

(vii) Name of Project "Daba Saitthad Limestone Deposit" having mining

lease area of 25 Ha by Star Cement Limited.

(ix) Location of Project (District, State) EAST JAINTIA HILLS, MEGHALAYA

(x) Issuing Authority MoEF&CC

(xii) Applicability of General Conditions No

^{3.} In view of the particulars given in the Para 1 above, the project proposal interalia including Form-2(Part A, B and C)/ EIA & EMP Reports were submitted to the MoEF&CC for an appraisal by the EAC under the provision of EIA

notification 2006 and its subsequent amendments.

- 4. The above-mentioned proposal has been considered by EAC in the meeting held on 21-22 November 2024. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed from the PARIVESH portal by scanning the QR Code above.
- 5. The EAC, in its meeting held on 21-22 November 2024, based on information submitted viz: Form 1 (Part A, B and C), EIA/EMP report etc & clarifications provided by the project proponent and after detailed deliberations on all technical aspects and public hearing issues and compliance thereto furnished by the Project Proponent, recommended the proposal for grant of Environment Clearance under the provision of EIA Notification, 2006 and as amended thereof subject to stipulation of Specific and Standard EC conditions. The project details and observation of EAC is given at Annexure (3).
- 6. The MoEF&CC has examined the proposal in accordance with the provisions contained in the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and based on the recommendations of the EAC hereby accords Environment Clearance for Daba Saitthad Limestone Deposit with production capacity of 2.51 MTPA of Limestone in the mine lease area of 25 Ha by M/s Star Cement Ltd located at Daba Saitthad (wahlareng), Village Lumshnong, District East Jaintia Hills, Meghalaya under the provisions of EIA Notification, 2006 and as amended thereof subject to compliance of the Specific conditions given at Annexure (1) and Standard EC conditions given at Annexure (2).
- 7. The Ministry reserves the right to stipulate additional conditions, if found necessary.
- 8. The Environmental Clearance to the aforementioned project is under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.
- 9. The PP is under obligation to implement commitments made in the Environment Management Plan, which forms part of this EC.

10. General Instructions:

- 1. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC website where it is displayed.
- 2. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn must display the same for 30 days from the date of receipt.
- 3. The project proponent shall have a well laid down environmental policy duly approved by the Board of Directors (in case of Company) or competent authority, duly prescribing standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions.
- 4. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the project proponent (during construction phase) and authorized entity mandated with compliance of conditions (during operational phase) shall be prepared. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Six monthly progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.
- 5. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- 6. The Regional Office of this MoEF&CCshall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

- 7. Any appeal against this EC 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.
- 11. This issue with an approval of the Competent Authority.

Copy To

- 1. The Secretary, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi-110 001.
- 2. The Principal Secretary, Department of Mines & Geology, Government of Meghalaya, Shillong.
- 3. The Secretary, Department of Environment, Government of Meghalaya, Shillong.
- 4. The Secretary, Department of Forests, Government of Meghalaya, Shillong.
- 5. The Chief Wildlife Warden, Government of Meghalaya, Sylvan House, Lower lachumiere, Shillong-793001.
- 6. The Deputy Director General of Forests(C), Ministry of Environment, Forest and Climate Change, Regional Office, Law-U-Sib, Lumbatngen, Near MTC Workshop, Shillong.
- 7. The Chairman, Central Pollution Control Board, PariveshBhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
- 8. The Member Secretary, Central Ground Water Authority, 18/11, Jam Nagar House, Man Singh Road, New Delhi110011.
- 9. The Chairman, Meghalaya State Pollution Control Board, "ARDEN", Lumpyngngad, Shillong 793 014, Meghalaya.
- 10. The Controller General, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440 001.
- 11. Director General, Directorate General of Mines Safety, Hirapur, Dhanbad, Jharkhand, 826001
- 12. The District Collector, East Jaintia Hills District, Government of Meghalaya.
- 13. Guard File.
- 14. PARIVESH Portal

Annexure 1

Specific EC Conditions for (Mining Of Minerals)

1. Specific Condition

S. No	EC Conditions
1.1	In addition to the Site-Specific Wildlife Conservation Plan, PP shall also intimate the status of the proposed Regional Conservation Plan to Ministry's Regional Office at Shillong on half yearly basis.
1.2	PP shall make the proposed private road of 1.4 km into a pucca road before starting transportation of mined out mineral from the ML area to the NH-6 and the existing crusher at the Cement Plant located at a distance of 4.6 km from the ML area. The width of the private road should be atleast 10 m.
1.3	PP needs to construct the double retaining wall to avoid any type of land sliding during the rainy season Before starting the working, the PP shall ensure that the mine, including its method of working, ultimate pit slope, dump slope and monitoring of slope stability, has been planned, designed and worked as determined by a scientific study conducted by an Institues/organisation of national repute to ensure long term stability of the opencast workings and dumps etc. The Scientific study and the scheme of mining shall be reviewed time to time or whenever there is any significant change in the mine. Before reaching the final stage of mining as designed, the ultimate pit slope shall be again assessed by a fresh scientific study conducted based on experience gained, additionally required input, geological disturbances encountered, hydrogeological conditions etc, till

S. No EC Conditions				
	then.			
1.4	PP shall ensure that there will be no dust generation during transportation of limestone to cement plant. Wind screens can also be provided to prevent adjacent population from adverse effects of mineral transportation. PP shall use tarpaulin to cover the trucks during transportation and ensure that there is no spillage on road.			
1.5	The Project Proponent needs to reduce the dependency upon the ground water, surface water (wat from rivers, etc.) and it shall construct a water reservoir within the lease area for meeting its day-to day water needs. An implementation report in this regard needs to submitted to Ministry's Region Office.			
1.6	The mobile water tankers should be used in the ML area for dust suppression and control mitigation. A logbook of water tankers should be maintained mentioning running hours, kilometre reading, maintenance hours of water tankers for each shift.			
1.7	The Project Proponent should take adequate measures to prevent the fly rock falling onto the nearby habitations and also the Project Proponent needs to set up a permanent monitoring in the nearby village to monitor the blast induced ground vibration and air over pressure.			
1.8	The Project Proponent shall carryout the blasting in such a way that the direction of the blasting should be perpendicular to the village and take guidance from DGMS in this respect. Guidelines of DGMS and safeguards provided in Metalliferous Mining regulations 1961, regarding blasting should be followed			
1.9	The Project Proponent shall also organize employment-based apprenticeship/ internship training program every year with appropriate stipend for the youth and other programs to enhance the skill of the local people. The data should be maintained for the training imparted to the persons and the outcome of the training, for the assessment of the training program should be analyzed periodically and improved accordingly. The preference shall be given to the local people for the purpose of employment. An implementation report in this regard shall be submitted to Ministry's Regional Office on an annual basis.			
1.10	The Project Proponent needs to submit the proof of submission of funds for Wildlife Conservation plan to be approved and its initiation/commencement by Forest Department to Regional Office of the Ministry. The Project Proponent should follow-up the status of implementation on Wildlife Conservation Plan from the Forest Officials and the same shall be submitted to the Ministry's Regional Office in the six monthly compliance reports.			
1.11	The Project Proponent needs to install the permanent fixed water sprinklers along the haul road and the approach road. Further, 6 nos. of fog canons/mist sprayer of atleast 40 m throw shall be installed at various locations in the mine area (and/or other area prone to dust pollution). Effective dust suppression system shall also be adopted at other parts of the mining lease to arrest the fugitive dust emission.			

S. No	EC Conditions				
1.12	The air pollution control equipment's like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed near areas prone to air pollution. PP shall take necessary measures to avoid generation of fugitive dust emissions.				
1.13	The Project Proponent shall ensure that the transportation shall not occur through village road.				
1.14	The Project Proponent needs to explore the possibility to reduce the water consumption by using non-toxic chemicals for haul road dust suppression.				
1.15	The Project Proponent needs to complete the entire 7.5 m peripheral plantation, safety barrier plantation and gap plantation within three years. The Project Proponent should plant quality sapling of appropriate height of native and fruit bearing species. In case of tall transplants (seedlings) the seedlings should have proper trained root stock with root biomass commensurate with seedling height to ensure good growth after out planting. Plantation shall be undertaken in consultation with the State Forest Department. The Project Proponent shall make the actual count on the saplings planted (2500/ha) and its survival rate and in case of failure of achievement of 95% survival rate, action plan for achieving the target survival rate shall be submitted to the Ministry's Regional Office.				
1.16	The Project Proponent should adopt the proper mitigation measures as proposed under EMP. The adoption of mitigation measures and monitoring of the same as proposed in the EMP shall be done under the supervision of the qualified environmental personnel. The implementation status of the same shall be submitted to the Ministry's Regional Office.				
1.17	The Project Proponent should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground). A dedicated team to oversee environment management shall be setup at site which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis instead of engaging environment monitoring laboratories/consultants. Any non-compliance or infringement should be reported to the concerned authority.				
1.18	The Project Proponent shall conduct third party audit of compliance of EC condition at an interval of one year and its report shall be submitted to RO, MoEF&CC.				
1.19	The budget to address the concerns raised by the public in the public hearing to be completed within 3 years from the date of start of mining operations. PP shall comply with all action plans made for public hearing concerns and make regular maintenance and record the progressive activity outcomes. The Project proponent shall ensure that the activities proposed under the public hearing is different from the CSR activities.				

S. No	EC Conditions				
1.20	The Project Proponent shall create awareness among the local people working within the project area as well as its surrounding area on the ban of Single Use Plastic (SUP) in order to ensure the compliance of Notification published by MoEF&CC on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report.				
1.21	The Project Proponent shall explore the possibility of using atleast 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years.				
1.22	The Project Proponent shall provide the rainwater harvesting structure at mine office and other infrastructures to recharge the ground water. Consultation with CGWA should be done in this regard.				
1.23	The Project Proponent needs to obtain the permission from CGWA before intersection of ground water.				
1.24	The Project Proponent needs to provide the good quality RO drinking water supply and also by laying network of pipelines to the Lumshnong village at free of cost.				
1.25	The Project Proponent should periodically monitor and maintain the health records of the mine workers digitally prior to mining operations, at the time of operation of mine and post mining operations. Regular surveillance on Silicosis shall be carried through regular occupational health check-up every year for mine workers. PP shall also organize medical camp for the benefit of the local people and also the monitor the health impacts due to mining activity.				
1.26	The mining lease holders shall, after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. The implementation report of the above said condition shall be submitted to the Ministry's Regional Office.				
1.27	The Project Proponent should install Continuous Ambient Air Quality Monitoring Stations (CAAQMS) as per the scientific study and in consultation with CPCB/SPCB. The real time data so generated should be displayed digitally at entry and exit gate of mine lease area for public display and shall be linked to server of CPCB/SPCB.				
1.28	The Project Proponent needs to use modern equipment's such as Camera Traps for ensuring presence and movement of wild animals in the study area in consultation with Wildlife Wing of Forest Department. Appropriate interventions shall be taken to minimize stress conditions for wild animals and to avoid Man-Animal conflict.				
1.29	PP needs to comply the OM dated 24.07.2024 of MoEFCC, wherein it is stated that the plantation of saplings shall be carried out in the earmarked 33% greenbelt area as part of the tree plantation campaign "EK Ped Ma keNaam" (एकपेड्मॉॅंकेनाम) and the details of the same shall be uploaded in the MeriLife portal(https://merilife.nic.in).				

S. No	EC Conditions		
1.30	PP shall inform the State Water Resources Department (WRD) about the presence of natural streams/nallahs and in close vicinity of the lease area. Any suggestions/ recommendations of the State WRD should be implemented/ followed.		
1.31	All safeguard measures like catch drains, siltation ponds, gabion structures etc. should be constructed to ensure that natural nallahs, streams located in and around the lease area are not adversely affected. PP should submit the water quality report of streams/natural nallahs in the six monthly compliance report to be submitted to Regional Office of the Ministry.		
1.32	All safeguard measures like catch drains, siltation ponds, gabion structures etc. should be constructed to ensure that natural nallahs, streams located in and around the lease area are not adversely affected. PP should submit the water quality report of streams/natural nallahs in the six monthly compliance report to be submitted to Regional Office of the Ministry.		



Standard Conditions (For Mining of Minerals)

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) 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 (<u>www.parivesh.nic.in</u>). 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. PP needs to apply for 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, 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.
- 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.
- 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 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

- 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.
- 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

- 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 Project Proponent shall submit the time- bound action plan to the concerned regional office of the Ministry within 6 months from the date of issuance of environmental clearance for undertaking the activities committed during public consultation by the project proponent and as discussed by the EAC, in terms of the provisions of the MoEF&CC Office Memorandum No.22-65/2017-IA.III dated 30 September, 2020. The action plan shall be implemented within three years of commencement of the project.

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, MoEF&CC.
- 38) The concerned Regional Office of the MoEF&CC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF&CC 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 16.01.2020 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 regrassing 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.
- 40) The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
- 41) Concealing factual data failure to comply with any or submission of false/fabricated data and of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- 42) 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.

43) 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.



Details of the project

The Proposal is for Environmental Clearance for Daba Saitthad Limestone Deposit with production capacity of 2.51 MTPA of Limestone in the mine lease area of 25 Ha by M/s Star Cement Ltd located at Daba Saitthad (wahlareng), Village Lumshnong, District East Jaintia Hills, Meghalaya.

- 2. The details of the project as per the documents submitted by the Project Proponent are given as under:
 - i. The mine lease area is located between Latitude 25°09'24.78"N to 25°09'39.43"N and Longitude 92°21'29.53"E to 92°21'56.03"E.
 - ii. The mine lease area falls under the Survey of India Toposheet No. 83C/8 and falls in Seismic Zone V.
 - iii. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals. The instant proposal attracts the General conditions as the Narpuh Wildlife Sanctuary is located at a distance of 3.9 km, SE direction and its ESZ boundary is located at a distance of 2.7 km SE to the project site and hence the proposal falls under Category "A".
 - iv. The project proponent has obtained Terms of Reference vide file no. IA-J-11015/39/2023-IA-II (NCM) & (TOR identification No. TO23B0000ML5720465N) dated 13.06.2024.
 - v. Details of Mine Lease:

S.No	Prospecting	Date of the	Name of	Period	Granted by	Mine
	License/ Letter of	grant	the Mineral	of		lease
	Intent (LoI)/ Grant		& (Major/	Grant		area
	of Mine lease and		Minor)			in Ha
	Lr No					

1	Prospecting License- MG.6/2023/33	01/03/2023	Limestone (Major)	3 years	Mining & Geology Department, Government of Meghalaya	25 ha.
2	Vide order no. MG.6/2023/277 dated 28.08.2023, Mines and Geology Department, Government of Meghalaya in exercise of power conferred under sub-rule (3) of Rule 27 of the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016, upon satisfying of the bonafides of the applicant, authorized Lumshnong Presbyterian Church, Lumshnong Village, East Jaintia Hills District being the land owner (hereinafter referred to as "Grantor") to grant Mining Lease in favour of Star	28.08.2023	Limestone (Major)	3 years	Mining & Geology Department, Government of Meghalaya	25 ha.

Cement Limited,		
Lumshnong		
Village, East		
Jaintia Hills		
District(hereinafter		
referred to as		
"Lessee") for		
Limestone over	. NC	
an area of 25.00	C_{A_A}	
hectares of land		
at "Daba Saitthad"		
(Wahlareng),	T	
Lumshnong	R I V E	
Village, Elaka		
Narpuh, East	1 2 3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Jaintia Hills		
District,		
Meghalaya.		

S. No	Details of grant of Mine Lease deed execution	Period of Grant		Name of the Mineral	Mine lease area in Ha
	8	From	То		
1.	Original lease deed executed vide certificate no.IN- ML03368570562367W dated 12.02.2024 between Lumshnong	12.02.2024	11.02.2074	Limestone	25 ha.
	Presbyterian Church (Grantor) & Star Cement Limited (Lessee) in Form D by State Government of Meghalaya	e-Payme	ents		

vi. LandUse/Land Cover of the Mine Lease Area:

Private land	25 ha.
Government land	-
Forest land	Nil

Total Mining lease area (MLA), ha	25 ha.
Private land for crusher, workshop & other infrastructure outside the MLA	NA

vii. Mining plan details:

Mining Plan including	Letter No.	MCDR-MPCP0CaFI/10/2023-	
Progressive Mine Closure Plan		GUH-IBM_RO_GUH	
(approved by Indian Bureau of	Date	11.12.2023	
Mines/DMG)	Mineral	Major	
6-16-	(Major/Minor)	Ar.	
	Mine Lease	25	
	Area, Ha		
	Validity	5 years from the date of	
		execution of mining lease	
Mining Parameters	Quantitative Desc	cription	
M <mark>ethod of Minin</mark> g	Opencast mecha	nized mining	
D <mark>rilling/Blasting</mark>	Deep hole drilling	& blasting.	
Geological Reserves	52.44 million tons	SS	
Mineable Reserves	40.89 million tons		
Breakup of Total Excavation	2.832 MTPA (including 2.51 MTPA of limeston		
(Topsoil/OB/SB/IB/Mineral	0.322 MTPA of Waste/OB including topsoil).		
Rejects/Waste, MTPA)			
Life of mine	50 Years [Max production of Lst (ROM) shall be		
	restricted to 2.51 MTPA. Production from this min		
C		ML may get reduced. Additional	
	exploration shall also be taken up which will increase the reserves.]		
Mine Bench Height & Bench		bench will be 9 m and a minimum	
Width	•	the benches in mineral will be 18 m	
Vidui	for safe operation of mining machinery.		
	· aylllelle		
No. of Mine Benches	13		
Existing Depth, m bgl	It is a green field	project	
Ultimate Depth of Mining, m bgl	137		
Ground Water Table, m bgl	156		
Details of ground water	Water table will not be intersected as it is at 156 m		
intersection	bgl and mining wi	ill be done up to 137 m bgl.	
Individual bench slope	85° from horizontal		
Overall pit slope	<45°		

Details of existing/ proposed Crusher	There is no crusher proposed within the mining lease area. Limestone will be transported to the cement plant crusher via tippers
Mineral Beneficiation	NA
RoM output size	-1000 mm
Transportation details including capacity of dumper/tipper, mode of transport and distance	The material after blasting will be loaded by hydraulic excavators of about 2.6 m³ bucket capacity into tippers of 25 tons carrying capacity for its transportation to crusher at a distance of 4.6 km and temporary waste dump inside mining lease.
Generation of Topsoil/OB & its Management during plan period & conceptual period	Max. 322,524.25 TPA of Waste/OB including topsoil will be generated. About 2.355 million tons of waste including soil will be generated upto the life of mine. Waste/OB will be dumped temporarily at earmarked places. Later it will be used as blending material after taking permission from the Government. The topsoil generated will be used extensively for plantation.
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	There will be no reject from the mine.

viii. Water requirement

Total water requirement	40 KLD	Fresh water	05 KLD
		Sewage Treated water from	35 KLD
	e-Paul	Cement Plant	
Source	Total wate	r requirement for the proposed m	ine will be
	around 40	KLD which will be sourced thro	ugh water
	tankers from	m the company's cement plant.	
Permission for withdrawal/	Vide Lette	r No. AGRO/IRRI-110/96/2004-05	5/80 dated
intersection along with	Shillong, 15	5 th September, 2004	
details of grant and its			
validity			

Additional information	Total water requirement for the proposed mine will be
(if any)	around 40 KLD, out of which 35 KLD will be STP treated
	water and 5 KLD will be fresh water for domestic
	purposes.

ix. Nearest village / town/ highway/railway station / water bodies

Particulars	Particular's Name	Distance	&
	JVC	Directions	
Village	Lumshnong	1.95 Km NE	
Town	Khliehriat	21.70 Km N	
Highway	NH-6	0.57 km SE	
Interstate	India-Bangladesh International	9.08 km SSW	
Boundary	Boundary		
	Meghalaya-Assam State Boundary	12.88 Km SE	
Railway station	Hilara railway station	65 km (by road)	
Water bodies	Um Badoh Stream	0.85 Km WNW	
	Lubha River	3.71 km SE	
	Seshymp <mark>a Riv</mark> er	4.87 Km WSW	
	Wah Lukh <mark>a</mark> River	6.36 Km ENE	
	Thangpyrshaid Nala	6.60 Km N	
	Sakha Nala	<mark>7.</mark> 79 Km N	
	Kukha Nala	7.99 Km NE	
	Khaddum Pieltleng Falls	8.37 Km ENE	
\ 6 \	Dongtangle Nala	8.74 Km NNE	
3.	Prang River	9.16 Km WSW	
2/2	Rumplung Nala	9.27 Km SW	
3/2	Natural swimming Pool	9.28 Km NE	
	Apha Nala	9.56 Km S	
	Cher Fall	9.69 Km NE	
	Larung Nala	9.76 Km SW	
	Sharai Nala	10.29 Km SW	
Forest	Narpuh Reserve Forest	4.13 km SSW	

x. Presence of Environmentally Sensitive areas in the study area

Forest	Land/Protected	Yes/No	Details	of	Certificate/letter	issued	by	the
Area/Env Sensitivit	ironmental y Zone				Department ment t and remarks	ioning th	e Lr	no,
	and within the se area and (if	No	Not App	licab	ole			

yes) status of Forest		
Clearance		
National Park	No	Not Applicable
Wildlife Sanctuary	Yes	Narpuh Wildlife Sanctuary - 3.90 km SE
Elephant/Tiger Reserve	No	Not Applicable
Eco-Sensitive Zone(ESZ)	Yes	Narpuh Wildlife Sanctuary ESZ - 2.70 km SE
/Eco-		
Sensitive Area(ESA)		
Coastal Regulation Zone	No	Not Applicable
(CRZ)		
Schedu <mark>le-I spec</mark> ies (No.s	Yes	There are 14 Schedule I Species found in the
and n <mark>ame of sch</mark> edule-I		buffer zone are given below:
speci <mark>es with authen</mark> ticated		Hog Badger (Arctonyx collaris), Golden Jackal
lette <mark>r)</mark>		(Canis aureus), Red Serow (Capricornis
		rubidus), Leopard Cat (Felis bengalensis),
\simeq		Domestic Cat (Felis catus), Indian Grey
		Mongoose (Herpestes edwardsii), Hoolock
		Gibbon (Hoolock hoolock), Himalayan Crestless
		Porcupine (Hystrix brachyura), Pangolin (Manis
		pentadactyla), Slow Loris (Nycticebus
		bengalensis), Indian Python (Python
0		molurus), Indian Cobra (Naja naja), Great Pied
		Hornbill (Buceros bicornis), Himalayan Vulture
O. I		or Himalayan Griffon Vulture (Gyps
		himalayensis).
		The authenticated list of flora & fauna has been
100		obtained from DFO, Jaintia Hills Wildlife Division,
-0		Jowai vide letter MWL/JH/299/Mining Plan/2023-
		24/881 dated 5 th November, 2024.

Wildlife	Conservation	Yes	The Chief Wildlife warden had a meeting with
Plan			Industries and Government departments for
			preparation of Regional Conservation plan for
			the East Jaintia Hills district under the
			supervision and guidance of CWLW, Meghalaya
			and the cost for preparation and implementation
			of the Regional Conservation Plan may be
		NC.	shared by various project proponents on a
	0-1	KI	proportionate basis keeping in view the likely
			impacts of each project on the wild life and their
			habitat. PP also confirmed that they shall be part
			of the regional conservation plan and will pay the
		R	fee as determined for their project by State
		~ *	Govt. In this regard PP submitted a commitment
57			letter dated 10.08.2021.

xi. Green belt/plantation details:

Proposed area for green belt/plantation	At the end of life of mine, out of the total 25 ha area, 23.14 ha mined out area will be reclaimed by Bench Plantation/ Grassification, 1.46 ha along the 7.5 m wide peripheral boundary will be developed to green belt.
Budget for green plant	Rs 129 lakhs, Total plantation will be done in 24.60 ha. &
&plantation till the end of	42988 saplings will be planted till conceptual period.
life of mine.	CD < N / S
Budget for nursery	NA
Details of existing	215 trees
plantation and its survival	PI
rate	
No. of tree cuts in the	215 trees will be cut in the mine lease. Total about 42,988
mine lease area and	saplings will be planted upto conceptual period.
compensatory	
afforestation	
Particulars for Green	Area covered (in Ha)
belt/plantation	
7.5 m barrier & non-	1.46 Ha
mineralized zone	
50 m safety zone of	-
nallah, roads, electric	
lines	

500 m safety zones of	-
nearest habitation villages	

xii. Baseline detail:

Baseline Data (Air / W	/ater / Noise / Soil / Hydro geological study/ Traffic Study/others
Period of baseline data collection	March to May 2023
Season (Summer / Pre-monsoon / Post- monsoon / Winter)	Summer Season
Predominant Wind direction (From)	From South West
Ambient Air Quality (no. of locations)	No. of locations-06
and results	Results- Core zone: The mean value of PM10 ranges from (64.55 - 66.49 μg/m3) & PM2.5 ranges from (29.20 - 30.08 μg/m3), SO2 ranges from (6.15 - 6.33 μg/m3), NO2 ranges from (16.45 - 16.94 μg/m3) & CO ranges from (0.29 - 0.30 mg/m3) which are within the limits of NAAQS. As per the Air Quality Index by CPCB, the air quality of the core zone is found to be Satisfactory in the Summer season. Buffer zone: The mean value of PM10 ranges from (69.07 - 75.53 μg/m3), PM2.5 ranges from (31.25 - 34.17 μg/m3), SO2 ranges from (6.57 - 7.19 μg/m3), NO2 ranges from (17.60 - 19.24 μg/m3) & CO ranges from (0.31 - 0.34 mg/m3) which are within the limits of NAAQS. As per the Air Quality Index by CPCB the air quality of the buffer zone is found to be Satisfactory during the sampling campaign. Thus, it can be concluded from the above results that all the parameters are within the range of the NAAQS and as per AQI by CPCB the buffer zone falls in the Satisfactory range.

Noise level (no. of locations) and results

No. of locations- 08

Results- Core Zone (Industrial Area): N1 & N2: The ambient noise level during day time at the proposed project site varies from 57.4 dB (A) to 57.6 dB (A) which are within the standard limit of Industrial area ~ 75 dB (A). During night the noise level at the project site ranges from 44.7 dB (A) to 44.8 dB (A) which are within the standard limit of Industrial area 70.0 dB (A).

Buffer Zone: Residential Area: N5 to N8- The ambient noise level in residential areas ranges from 53.1 dB (A) - 56.6 dB (A) during day time which is slightly higher than the standard limit of residential area of ~ 55 dB (A) and from 43.9 dB (A) to 47.2 dB (A) during night time which is slightly higher than the standard limit of residential area ~ 45 dB (A). The slightly higher noise level compared to standard limit may be regarded to the residential and other local activities occurring within the village. Commercial Area: N3- Approach Road, N4- NH - 6- The ambient noise level in commercial area i.e. Approach Road &

ambient noise level in commercial area i.e. Approach Road & NH-6 is 57.4 dB (A) to 62.8 dB (A) during day time which is within the standard limit of commercial area of ~ 65 dB (A) and 46.7 dB (A) to 57.9 dB (A) during night time which is within the standard limit of commercial area ~ 55 dB (A). The increased noise level is due to vehicular movement.

e-Payments

Water Quality (no. of locations) and results

No. of GW locations- 08 No. of SW locations- 04 Results of GW-

- The Total Dissolved Solids (TDS) of the sampling locations W1, W2, W3, W4, W5, W6, W7, W8 range from 68 mg/l to 182 mg/l which are within the drinking water standard (IS:10500) i.e. 500 mg/l.
- The Total Hardness of the sampling locations ranges from 18 mg/l to 70 mg/l which are within the drinking water standard (IS:10500) i.e. 200 mg/l.
- The Alkalinity of the sampling locations ranges from 13.80 mg/l to 61.60 mg/l which are within the drinking water standard (IS:10500) i.e. 200 mg/l.
- The Fluoride content in the sampling locations ranges from <0.1 mg/l to 0.64 mg/l which are within the drinking water standard (IS:10500) i.e. 1.0 mg/l.
- The Calcium Concentration of sampling locations ranges from 5.4 mg/l to 26 mg/l. Calcium levels of sampling locations are within the drinking water standards (IS:10500) i.e. 75 mg/l.
- The Magnesium Concentration of sampling locations ranges from 0.48 mg/l to 7.20 mg/l. Magnesium levels of sampling locations are within the drinking water standards (IS:10500) i.e. 30 mg/l.
- The Chloride Concentration of all the sampling locations ranges from 6.80 mg/l to 31 mg/l. Chloride levels of all the sampling locations are within the drinking water standards (IS:10500) i.e 250 mg/l.

Results of Surface Water-

- Surface water samples were derived from 4 locations in different surface water bodies within study area, analysis results of the same revealed that pH values amongst all samples varied in the range of 7.40 7.78, Total Hardness concentration varied in the range of 118 mg/l to 172 mg/l &, TDS concentration varied in the range of 201 to 252 mg/l. Electrical Conductivity was found to be ranging in between 352 to 432 mS/cm.
- The surface water samples falls under class D (i.e. Water is suitable for Propagation of Wildlife and Fisheries) & E (i.e. Irrigation, Industrial Cooling, Controlled Waste disposal) as per CPCB surface water criteria.

Soil Quality (no. of	No. of locations- 08
locations) and	Results- Soil samples at location S1 - S8 shows that the soil
results	texture class is Clay, Clay Loam, Colour is 5/3 Dull reddish
	brown, Brown (3/4), 5/3 Dull brown, pH range is (6.90 - 7.70).
	Amount of primary nutrients like Organic matter range is (0.35 -
	2.31)%, the available nitrogen range is (62.40 - 106.40) mg/kg
	is Low and available Potassium range is (12.20 - 43.70) mg/kg
	is Low while the available Phosphorus range is (7.20 - 14.10)
	mg/kg is medium to high. Thus it can be concluded that soil is
	average fertile.
Lludro godogical	
Hydro geological	Hydro geological study has been done by Hydro-Geosurvey
study and results	Consultants Private Limited, Jodhpur, as per the study done, In
	the core zone, the average depth of the ground water table is
	250 mRL while the ultimate pit depth is 269 mRL hence mining
T T	activities will not intersect ground water table. There are no
	streams entering the mining lease area from outside sources,
	eliminating the need for any stream diversions during the mining
	period. Consequently, the surface water resources are not
	anticipated to be adversely affected by mining activities. Given
	that the mine will be constructed on the slope of a hill and well
	above the groundwater table, there will be no impact on the
	hydrogeology of the area. To minimize any potential impact on
19	first-order streams, garland drains will be constructed to ensure
	uninterrupted downstream flow.
3.	In conclusion, the proposed mining activities are not expected to
10/2	affect, disturb, or pollute the water regime in the buffer zone.
	The mining lease area is a virgin, hilly terrain that receives high
C _c	rainfall. Therefore, no NOC is needed from CGWA due to the
	non-intersection of the groundwater table.
Traffic study (no. of	1 Locations, NH-6
locations) and	The carrying capacity of the NH-6 is much higher than the
results	proposed traffic volume. The traffic (to & fro) from the
	Proposed Daba Saitthad Limestone Deposit will not create
	any traffic congestion.
	The volume/capacity ratio is likely to be changed 0.18 to 0.20
	with LOS being "A" to "A" only
L	

xiii. Public Hearing (PH) Details

Advertisement for PH with date	In English newspaper "The Shillong Times" and "The Times of India" on 03.09.2024 & 06.09.2024 respectively and in local language newspaper "U Nongsain Hima" and "Mawphor" on 04.09.2024 & 06.09.2024 respectively.		
Date of PH	07.10.2024		
Venue	At project Site Saitthad, Lumshnong, East Jaintia Hills		
	District.		
Chaired by	Additional Deputy Commissioner		
Main issue raised	Proper Implementation of environment management, green		
during PH	belt development & Local recruitment in the company.		
Budget proposed for	PP vide email dated 22.11.2024 submitted a budget of Rs		
add <mark>ressing is</mark> sues	86.55 lakhs over a period of five years to complete the		
rai <mark>sed during PH</mark>	commitments made during Public Hearing		

xiv. Rehabilitation & Resettlement:

R & R details	PP s	PP submitted that	
	no R	no R&R is required	
	for th	e instant	
	proje	ct.	

xv. Court case details:

Court Case,	No and its	s present	rects if	She		No	۸_	
status		//C	5					
Undertaking	by	Project	Project	Proponent	has	submitted	an	undertaking
Proponent w.r.t court case		dated 08.11.2024 w.r.t. no court cases.						

xvi. Affidavit/Undertaking details:

Affidavit as per Ministry's OM	PP has submitted the affidavit on 17.10.2023 as		
dated 30.05.2018	per Ministry's OM dated 30.05.2018.		
Undertaking by Project	PP has submitted in EIA-EMP.		
Proponent in EIA/EMP report			
Undertaking by Consultant in	Consultant has submitted an Undertaking in EIA-		
EIA/EMP report.	EMP report.		
Plagiarism Certificate	Plagiarism Certificate vide email 22.11.2024.		

xvii. Details of the Environmental Management Plan (EMP):- The EMP budget will be calculated during preparation for EIA to mitigate the environmental impacts.

EMP Activities	Capital cost (Lakh)	Recurring cost (Lakhs/annum)
*Pollution Control (Water Sprinkling, Double Retaining wall, Check Dams, siltation pond, oil & grease trap and Garland drain)	96.22	1.80
Environment Monitoring	160.00	6.48
Public Health and Safety	4A-	5.0
Green Belt	129.00	5.0
Haul & Approach Road Maintenance	150	10.0
Bud <mark>get for Public he</mark> aring issues	86.55	-
Wire fencing towards the southern side of the mine boundary for avoiding wildlife entry at mine site	20	10
Total	641.77	38.28

xviii. Details of project cost and employment:

Particulars	(Rs. In Lakhs)
Total cost of EMP (Capital Cost of EMP + capital cost of Public hearing)	641.77
Project Cost	3730
Employment	99 nos.

3. Observation and Recommendation of the Committee:

The Expert Appraisal Committee (EAC) deliberated on the Environmental Clearance (EC) proposal submitted by M/s Star Cement Ltd for the Daba Saitthad Limestone Deposit, with a production capacity of 2.51 MTPA of limestone within a mine lease area of 25 hectares, located at Daba Saitthad (Wahlareng), Village Lumshnong, District East Jaintia Hills, Meghalaya.

The Project Proponent (PP)/Consultant presented the KML/KMZ file of the mine lease area and highlighted the key site features of the project. The PP informed the committee that the mine lease area is situated 3.90 km to the southeast of the Narpuh Wildlife Sanctuary and 2.70 km from its Eco-Sensitive Zone (ESZ). Additionally, it was

noted that the Lubha River flows at a distance of 3.71 km in the southeast direction, while the nearest stream, Um Badoh, is located 0.85 km to the west-northwest of the project site. The nearest village is Lumshnong Village, located approximately 3 km from the project site.

The Project Proponent (PP) further informed the committee that the India-Bangladesh International Boundary is located at a distance of 9.08 km in the south-southwest (SSW) direction. The PP also presented a No Objection Certificate (NoC) dated 05.04.2024, issued by the Ministry of Defence in compliance with its directions vide letter dated 08.05.2023.

The proposal pertains to a greenfield project seeking Environmental Clearance (EC). A public hearing was conducted following the issuance of the Terms of Reference (ToR). The proposal attracts the General Conditions of the EIA Notification, 2006, as the Narpuh Wildlife Sanctuary is located at a distance of 3.9 km to the southeast (SE) of the project site, with its Eco-Sensitive Zone (ESZ) boundary situated 2.7 km in the same direction.

The EAC subsequently inquired about the proposed transportation route for the mineral. The Project Proponent (PP) informed the committee that the mineral would be transported using 25-tonne tippers via a private road spanning 1.4 km from the mine lease (ML) boundary to NH-6. From there, the material would be transported via NH-6 to the crusher at the existing cement plant.

The EAC advised the PP to upgrade the private road to a pucca (paved) road with a minimum width of 10 meters to ensure efficient and environmentally compliant transportation.

The EAC inquired about the status of the Wildlife Conservation Plan and the presence of elephants near the mine lease (ML) area. The Project Proponent (PP) informed the committee that the State Government of Meghalaya is in the process of preparing a Regional Conservation Plan aimed at preventing, minimizing, and mitigating the impacts of developmental projects on wildlife and their habitats in the East Jaintia Hills District. The PP also submitted the minutes of a meeting held on 9th August 2021, which discussed the modalities for the preparation and implementation of the Regional Conservation Plan. These minutes were issued by the office of the Additional PCCF (Wildlife) & Chief Wildlife Warden, Meghalaya.

The PP further submitted a commitment letter dated 10.08.2021addressed to the APCCF & CWLW, confirming its financial support for the Regional Conservation

Plan. The EAC noted that vide order dated 28.08.2023, Mines and Geology Department, Government of Meghalaya in exercise of power conferred under sub-rule (3) of Rule 27 of the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016, upon satisfying of the bonafides of the applicant, authorized Lumshnong Presbyterian Church, Lumshnong Village, East Jaintia Hills District being the land owner (hereinafter referred to as "Grantor") to grant Mining Lease in favour of Star Cement Limited, Lumshnong Village, East Jaintia Hills District(hereinafter referred to as "Lessee") for Limestone over an area of 25.00 hectares of land at "Daba Saitthad" (Wahlareng), Lumshnong Village, Elaka Narpuh, East Jaintia Hills District, Meghalaya. Accordingly, lease deed was executed vide certificate no.IN-ML03368570562367W dated 12.02.2024 between Lumshnong Presbyterian Church (Grantor) & M/s Star Cement Limited (Lessee) in Form D by State Government of Meghalaya. However, the proposed Regional Conservation Plan is yet to be finalized. The EAC also observed that as per specific condition no. 29.1 of the Terms of Reference (ToR) letter dated 13.06.2024, the PP was required to prepare a Wildlife Conservation Plan, including Schedule-I species as per the Wildlife Amendment Act, 2022. This requirement has not been fulfilled by the PP.

Accordingly, the EAC advised the PP to prepare a site-specific Wildlife Conservation Plan and submit the same State Forest Department. A copy of the proof of proof of submission of Wildlife Conservation Plan is to submitted to Ministry's Regional Office. This will be in addition to the ongoing proposed Regional Conservation Plan, which is yet to be finalized.

With regard to the method of mining, the Project Proponent (PP) submitted that mining will be carried out using an opencast mechanized method with Heavy Earth Moving Machinery (HEMM) and deep-hole drilling/blasting. The EAC noted this submission and recommended that the PP explore the possibility of using electric vehicles (EVs) and renewable energy, preferably solar, for sustainable operations. The PP responded that the mine lease (ML) area receives over 2000 mm of annual rainfall, making the deployment of solar facilities less viable.

Regarding the data on air pollution, the EAC inquired whether the data was collected using online or offline methods. The PP clarified that the data was collected offline but assured the committee that they would install Continuous Ambient Air Quality Monitoring Stations (CAAQMS) within the ML area in consultation with the State Pollution Control Board (SPCB).

With regard to the budget and activities proposed during the Public Hearing, the EAC requested the Project Proponent (PP) to provide a tangible and monitor able

action plan. In response, the PP, via email dated 22.11.2024, submitted a detailed budget Rs 86.55 lakh, to be utilized over a five-year period for fulfilling the commitments made during the Public Hearing. Additionally, as requested by the EAC, the PP also submitted a Disaster Management Plan via the same email.

Based on the above discussion, EAC **recommended** the proposal in the 36th EAC meeting held during 21-22nd November, 2024 for Environmental Clearance for Daba Saitthad Limestone Deposit with production capacity of 2.51 MTPA of Limestone in the mine lease area of 25 Ha by M/s Star Cement Ltd located at Daba Saitthad (wahlareng), Village Lumshnong, District East Jaintia Hills, Meghalaya under the provisions of EIA Notification, 2006 and its subsequent amendments therein with certain specific conditions in addition to standard conditions applicable to the non-coal mining projects.

