



सत्यमेव जयते

File No.: ML/SEAC/SEIAA/PP/EWKH/44/2024
Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment Authority(SEIAA),
MEGHALAYA)



Dated 19/08/2024



To,

WENDERLY MARWEIN
MARWEIN BOULDERSTONE MINE
H No. 160, Kynshi Bangla, Mawria, West Khasi Hills, Meghalaya - 793120
wenderlystone@gmail.com

Subject: Grant of prior Environmental Clearance (EC) to the proposed Mining Project under the provisions of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application submitted to SEIAA vide proposal number SIA/ML/MIN/470538/2024 dated 13/06/2024 for grant of prior Environmental Clearance (EC) to Marwein Boulderstone Mine for an area of 3.39 hectare 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.	EC24C0108ML5668476N
(ii) File No.	ML/SEAC/SEIAA/PP/EWKH/44/2024
(iii) Clearance Type	Mining EC Under 5 Ha
(iv) Category	B2
(v) Project/Activity Included Schedule No.	1(a) Mining of minerals
(vii) Name of Project	Marwein Boulderstone Mine
(ix) Location of Project (District, State)	EASTERN WEST KHASI HILLS, MEGHALAYA
(x) Issuing Authority	SEIAA
(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 SEIAA for an appraisal by the SEAC under the provision of EIA notification 2006 and its subsequent amendments.

4. The above-mentioned proposal has been considered by SEIAA in the meeting held on 29/07/2024. 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. Brief description of the project is as under:

5. The proposed mining land is on lease for a period of 20 years vide Deed of Lease made on the 6th December 2021 and certified by Public Notary, East Khasi Hills, Meghalaya.

The applied area is a Non Forest Land which was confirmed by the Chief Conservator of Forests (T), Meghalaya, Shillong vide letter No.MFG.39/42/NFLC/MINING/MMMCR/KH/Pt.II/15210 dated

Shillong, the 27th January, 2023 issued by the Divisional Forest Officer, Social

Forestry & Territorial Division, West & South West Khasi Hills, Nongstoin vide letter No.T/W&SW/23-24/ML/SQ/253/355, dated Nongstoin, the 26th April, 2023.

The project proponent obtained a cluster certificate from the Mining Engineer, Directorate of Mineral Resources, Meghalaya, Shillong vide letter No.DMR/MM/185/2023/14 dated Shillong, the 7th February 2024 which states that there are no approved mining plans lying within 500 meters from the applied mining lease area. Hence, EIA is not required.

The project proponent submitted the Mining Plan with Progressive Mine Closure Plan approved by the Mining Engineer, Directorate of Mineral Resources, Meghalaya, Shillong vide letter No.DMR/MM/185/2023/09 dated Shillong, the 30th November 2023. The Mining Plan has been prepared to extract boulderstone at the rate of 347911 TPA with a project cost of Rs.24.75 lakhs and the operations will be open cast, semi-mechanized method of mining.

As per the approved mining plan, the mineable reserve would be 3478944 Tonnes with an average annual production of 347894(3478944/10=347894) Tonnes. The average annual production of stone may be different from annual production of five years plan period. Thus 1738430 Tonnes of the total mineable reserve will be worked out in first 5 years and the rest quantity of mineable reserve i.e.(3478944- 1738430) = 1740514 Tonnes would be exhausted in further 5 years @ 348103 Tonnes per annum. Therefore, the life of the mine will be 10 years (5 years in plan period + 5 years in conceptual period).

6. Details of the minerals to be mined along with production capacity and the brief on the salient features of the project as submitted by the project proponent in Form 1 (Part A and B) in the reports and as presented during SEIAA are annexed to this EC as Annexure (1).
7. The SEAC, 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 as detailed in the point below.
8. The SEIAA 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 SEAC hereby accords Environment Clearance for the instant proposal to M/s. WENDERLY MARWEIN under the provisions of EIA Notification, 2006 and as amended thereof subject to compliance of the Specific and Standard EC conditions as given in Annexure (2)
9. The Ministry reserves the right to stipulate additional conditions, if found necessary.
10. 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.
11. The PP is under obligation to implement commitments made in the Environment Management Plan, which forms part of this EC.

12. 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 SEIAA 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 SEIAA shall 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.
13. This issue with an approval of the Competent Authority.

Copy To

1. The Principal Chief Conservator of Forests and HoFF, Meghalaya, Shillong, for information.
2. The Secretary to the Govt. Meghalaya, Forests & Environment Department, Shillong, for information.
3. The Secretary to the Govt. of Meghalaya, Mining & Geology Dept., Shillong for information.
4. The Deputy Director General of Forests (C), Regional Office, N.E.Z, Ministry of Environment, Forests & Climate Change (MoEF&CC), Law-u-sib, Lumbatngen, Sawlad, Near M.T.C. workshop, Shillong- 793 021, for information and necessary action.
5. The Deputy Commissioner, Eastern West Khasi Hills District, Mairang for information and necessary action.
6. The Divisional Forest Officer, Social Forestry & Territorial Division, West and South West Khasi Hills, Nongstoin for information and necessary action.
7. The Member Secretary, State Expert Appraisal Committee, Meghalaya for information.
8. The Director, Directorate of Mineral Resources, Meghalaya, Shillong for information.
9. The Member Secretary, Meghalaya Pollution Control Board, 'Arden', Lumpynggad, Shillong – 793 014 for information and necessary action.

Annexure 1

Specific EC Conditions for (Mining Of Minerals)

1. Specific Additional Conditions

S. No	EC Conditions
1.1	A settling Tank is to be constructed, at a suitable site within the mining area for collection of debris, sediment, silt, fragmented stones etc. carried by surface water channelized through the Curtain drain. The deposited debris, spoils etc are to be removed/cleared, both from the tank and drain as and when required. Overflowing water that flows downhill shall be dispersed but precautions to be taken that spoils etc. generated from mining are not carried along.
1.2	A retaining wall of adequate height not less than 6 ft above the ground level and 4-6 ft below the ground level is to be constructed within mining site for stacking of Over Burden (OB) to ensure that no debris etc. overflows to adjoining land/agricultural field.
1.3	Garland drains is to be constructed along the periphery of the mining lease boundary to capture the storm water run-off from the mining area, all drains will link to a settling tank with compartments to check and arrest siltation in the mine water prior to discharge.
1.4	Curtain Drain is to be constructed properly to intercept the surface water from flowing into the mining area and water flowing out of the mine channelized to the settling tank.
1.5	In annual EMP budget under GREENBELT, creation of plantations including nursery cost, fencing etc the notified norms of Forest and Environment Department, Govt of Meghalaya is to be followed strictly, including financial cost. Budget under said head stands revised accordingly.
1.6	To increase the allocation for plantation and maintenance to a minimum of 1 lakh per annum and increase the number of saplings to be planted. The Nurseries for the approved species as given in the EIA report should be created before commencement of the mining plan and the types of species should be according to the Forest Department Plantation Norms (Amended in 31.03.2023) & plantation should be done in the 1 st and 2 nd year of the planed period.
1.7	Boundary pillars with the height not less than 2.5 feet above the ground level and 1.5 feet below ground and minimum 8 inches on all face of pillar should be erected.
1.8	GPS coordinates of each pillar should be carved/painted clearly on the pillars with red colour.
1.9	A board highlighting the name of project and project proponent, location name, total area of the mine, date of issue of EC by SEIAA and CTE & CTO by MSPCB should be installed at the entrance to the mining site and clearly visible.
1.10	Fencing of the boundary of site with minimum two strands of barbed wire or ordinary split bamboo fencing is to be erected all around the periphery of the approved mining area.
1.11	Storing and collection of water through rainwater harvesting for dust sprinkling and recharging of the aquifers.
1.12	The Green Belt shall be created within the Safety Zone area during the first year of the project and if there are any sorts of vegetation in the said area, they shall be preserved and not damaged.

Standard EC Conditions for (Mining of minerals)

1. Statutory Compliance

S. No	EC Conditions
1.1	The Environmental clearance shall be subject to orders of Hon'ble Supreme Court of India, Hon'ble High Courts, NGT and any other Court of Law, from time to time, and as applicable to the project
1.2	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
1.3	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
1.4	Solid/hazardous waste generated in the mines needs to be addressed in accordance to the Solid Waste Management Rules, 2016/Hazardous & Other Waste Management Rules, 2016.
1.5	Permission of power supply to be taken from the concerned authority for meeting power demand of the project site.
1.6	The maximum production or peak production at any given time shall not exceed the limit as prescribed in the EC.
1.7	Validity of EC is as per life of the mine mentioned in the Approved Mining Plan or 30 years as per EIA Notification, 2006 and its amendments therein

2. Air Quality Monitoring And Mitigation Measure

S. No	EC Conditions
2.1	Adequate ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely particulates, SO ₂ and NO _x . Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive receptors in consultation with the State Pollution Control Board. Online ambient air quality monitoring station/stations may also be installed in addition to the regular air monitoring stations as per the requirement and/or in consultation with the SPCB
2.2	The Ambient Air Quality monitoring in the core zone shall be carried out and the monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.
2.3	Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centres.
2.4	Adequate number of Fog canon (mist sprayer) shall be installed to reduce the impact of air pollution at dust generating sources with time bound action plan.

3. Water Quality Monitoring And Mitigation Measures

S. No	EC Conditions
3.1	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.
3.2	Monitoring of water quality upstream and downstream of river including ponds, lakes, tanks shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.
3.3	Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.
3.4	The project proponent shall not alter major water channels around the site. Appropriate embankment shall be provided along the side of the river/nallah flowing near or adjacent to the mine. The embankment constructed along the river/nallah boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side, stabilized with plantation so as to withstand the peak water pressure preventing any chance of mine inundation.
3.5	Garland drains (of suitable size, gradient and length) around the critical areas i.e. mine shaft and low lying areas, shall be designed keeping at least 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine sites. The sump capacity shall also provide adequate retention period to allow proper settling of silt material of the surface runoff
3.6	The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly
3.7	Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.
3.8	The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations shall be prepared, considering the presence of any river/rivulet/pond/lake etc., with impact of mining activities on it, and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the provisions of the approved Mining Plan/ EIA-EMP submitted to this Ministry and the same should be done with due approval of the concerned State/GoI Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved mining plan and as per the permission of DGMS.
3.9	Domestic water shall be providing to the residents/villages which are coming under the zone of influence of the project due to ground water extraction by installing a RO plant with proper supply line and Taps within 2 years
3.10	No obsolete technologies for sewage treatment shall be implemented. Construction of Sewage Treatment Plant with latest technology should be completed within 2 years and treated water

S. No	EC Conditions
	shall be reused for plantation. CTE and CTO of STP shall be obtained as per the norms.

4. Noise And Vibration Monitoring And Prevention

S. No	EC Conditions
4.1	Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.
4.2	The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.

5. Mining Plan

S. No	EC Conditions
5.1	Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.
5.2	No change in mining method i.e. UG to OC, calendar programme and scope of work shall be made without obtaining prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC).
5.3	Mining shall be carried out as per the approved mining plan (including Mine Closure Plan) abiding by mining laws and the relevant circulars issued by Directorate General Mines Safety (DGMS).
5.4	No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980 and also adhering to The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 read with provisions of Indian Forest Act, 1927.
5.5	Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.

6. Land Recalvation

S. No	EC Conditions
6.1	Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change(MOEFCC) from time to time shall be submitted to MOEFCC/Regional Office (RO).
6.2	Native tree species shall be selected and planted over areas affected by subsidence.

S. No	EC Conditions
6.3	The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.

7. Public Hearing And Human Health Issues

S. No	EC Conditions
7.1	Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored.
7.2	The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.
7.3	Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.
7.4	Skill training as per safety norms specified by DGMS shall be provided to all workmen including the outsourcing employees to ensure high safety standards in mines.
7.5	Effective arrangement shall be made to provide and maintain at suitable points conveniently situated, a sufficient supply of drinking water for all the persons employed.
7.6	The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-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'.
7.7	PP to conduct need based assessment survey of the area to for in order to decide the activities to be carried under the CSR and to provide detail of the activity carried out with adequate budgetary provision and time bound action plan.

8. Corporate Environment Responsibility

S. No	EC Conditions
8.1	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
8.2	Self environmental audit shall be conducted annually. Every three years third party environmental

S. No	EC Conditions
	audit shall be carried out.

9. Miscellaneous

S. No	EC Conditions
9.1	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
9.2	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 has to display the same for 30 days from the date of receipt.
9.3	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
9.4	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
9.5	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
9.6	The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
9.7	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
9.8	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
9.9	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
9.10	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.
9.11	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
9.12	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company

S. No	EC Conditions
	in a time bound manner shall implement these conditions.
9.13	The Regional Office of this Ministry shall 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.
9.14	The above conditions shall 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, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
9.15	The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during presentation to the EAC. All the commitments made on the issues raised during public hearing shall also be implemented in letter and spirit.
9.16	Compensation of the land acquired for the project shall be settled as per the R&R Policy. Adequate facility of drinking water, plantation and other social amenities should be provided to established R&R villages.
9.17	Persons of nearby villages shall be given training on livelihood and skill development to make them employable with its proper records.
9.18	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 light/night hours

Annexure 2

Details of the Project

S. No.	Particulars	Details	
a.	Details of the Project	Marwein Boulderstone Mine	
b.	Latitude and Longitude of the project site	1)25°32'27.5"N 91°31'30.8"E 2)25°32'30.2"N 91°31'36.2"E 3)25°32'25.4"N 91°31'39.3"E 4)25°32'21.5"N 91°31'33.9"E	
c.	Land Requirement (in Ha) of the project or activity	Nature of Land involved	Area in Ha
		Non-Forest Land (A)	3.39

S. No.	Particulars	Details	
		Nature of Land involved	Area in Ha
		Forest Land (B)	0
		Total Land (A+B)	3.39
d.	Date of Public Consultation	Public consultation for the project was held on	
e.	Rehabilitation and Resettlement (R&R) involvement	NO	
f.	Project Cost (in lacs)	24.75	
g.	EMP Cost (in lacs)		
h.	Employment Details		

Details of Minerals Products & By-products

Name of the Mineral to be mined	Classification of mineral [Major/Minor]	Production capacity in MTPA	Remarks
Boulderstone	Minor	0.348	Targeted production peak