



सत्यमेव जयते

File No: HPSEIAA/2024/1149

Government of India

Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment
Authority(SEIAA), HIMACHAL PRADESH)



Dated 19/10/2024



To,

Sh. Arun Thakur
Khanalag, P.O- Manjhu, tehsil- Arki, Dist- Solan (HP) , RAHU, SOLAN, HIMACHAL PRADESH, ,
174101
1122arunthakur@gmail.com

Subject: Grant of EC under the provision of the EIA Notification 2006-regarding.

Sir/Madam,

This is in reference to your application for Grant of EC under the provision of the EIA Notification 2006-regarding in respect of project STONE MINING PROJECT submitted to Ministry vide proposal number SIA/HP/MIN/490581/2024 dated 13/08/2024.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC24C0108HP5291856N
(ii) File No.	HPSEIAA/2024/1149
(iii) Clearance Type	EC
(iv) Category	B2
(v) Project/Activity Included Schedule No.	1(a) Mining of minerals
(vii) Name of Project	STONE MINING PROJECT
(viii) Name of Company/Organization	ARUN THAKUR
(ix) Location of Project (District, State)	SOLAN, HIMACHAL PRADESH
(x) Issuing Authority	SEIAA
(xii) Applicability of General Conditions	no
(xiii) Applicability of Specific Conditions	no

3. In view of the particulars given in the Para 1 above, the project proposal interalia including Form-1(Part A and B) were submitted to the Ministry for an appraisal by the State Environment Impact Assessment Authority(SEIAA) Appraisal Committee (SEIAA) in the Ministry under the provision of EIA notification 2006 and its subsequent amendments.

4. The above-mentioned proposal has been considered by State Environment Impact Assessment Authority(SEIAA) Appraisal Committee of SEIAA in the meeting held on 30/09/2024. The minutes of the meeting and all the Application

and documents submitted [(viz. Form-1 Part A, Part B, Part C EIA, EMP)] are available on PARIVESH portal which can be accessed by scanning the QR Code above.

5. The brief about configuration of plant/equipment, products and byproducts and salient features of the project along with environment settings, as submitted by the Project proponent in Form-1 (Part A, B and C)/EIA & EMP Reports/presented during SEIAA are annexed to this EC as Annexure (1).

Brief outline of the project:-

- | | | |
|----|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| a) | Proposal No. | SIA/HP/MIN/490581/2024
HP SEIAA/2024/1149 |
| b) | Processing fee | UPI Transaction ID 421846287045 dated 05.08.2024 of Rs. 15,000/- . |
| c) | Project type | Extraction of Stone. |
| d) | Project Location | Khasra number 122 falling in Mauza/Mohal-Rahu, Tehsil-Arki, District-Solan, Himachal Pradesh. |
| e) | Jamabandi | Jamabandi for the year 2017-2018 |
| f) | Land Status | Private Land, hill slope. |
| g) | Capacity | 25,366 TPA |
| h) | Mining Area | 10-09 Bighas, 0.7864 ha , Private land/hill slope. |
| i) | Leases with in 500 meter from the periphery of the area applied. | No mining leases exist within 500 meters. |
| j) | Letter of Intent | Letter of Intent issued on dated 10/01/2024 and valid for one year i.e. 09/01/2025. |
| k) | EMP Cost | Capital cost: Rs. 1.5 Lakhs and Recurring Cost: Rs. 8.50 Lakhs annually. |
| l) | CER cost | Rs. 1.5 Lakhs. |

3. The SEIAA, in its meeting held on 30/09/2024, based on information & clarifications provided by the project proponent and after detailed deliberations recommended the proposal for grant of EC under the provision of EIA Notification, 2006 and as amended thereof subject to stipulation of specific and general conditions as detailed in Annexure (2).
4. The SEIAA has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after accepting the recommendations of the State Environment Impact Assessment Authority (SEIAA) Appraisal Committee hereby decided to grant EC for instant proposal of M/s. Shree Arun Thakur under the provisions of EIA Notification, 2006 and as amended thereof.
5. The Ministry reserves the right to stipulate additional conditions, if found necessary.
6. The EC 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.
7. EC will be valid for a period of five years or upto the validity of Mining Plan whichever is earlier.
3. This issues with the approval of the Competent Authority.

Copy To

1. The Secretary (Environment), Ministry of Environment, Forests & Climate Change (MoEF&CC), GoI, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi - 110003 .
2. The Chairman, Central Pollution Control Board, Him Parivesh Bhawan, CBD-cum-office Complex, East Arjun Nagar, New Delhi-110032.
3. The Chairman, Himachal Pradesh State Pollution Control Board, Shimla-171009.
4. The Director (Environment, Science & Technology) to the GoHP, Shimla-171001.
5. The Adviser (IA), MoEF&CC, GoI, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi - 110003.
6. The Integrated Regional Office, MoEF&CC, CGO Complex, Shivalik Khand, Longwood, Shimla, HP-171001.
7. The Monitoring Cell, MoEF&CC, GoI, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi - 110003

Specific EC Conditions for (Mining Of Minerals)

1. Cer

S. No	EC Conditions																																										
1.1	<p>The capital cost (@ Rs. 4.00 lacs per ≤ ha.) under CER, shall be deposited in the form of Demand Draft/ transfer of funds in the bank account number mentioned in EC letter to the office of Director (DEST&CC), GOHP. The Director (DEST&CC) may device a plan for this purpose as per CER guidelines.</p>																																										
1.2	<p>The project proponent shall provide one plastic waste shredder machine to DEST& CC, Shimla within one month from the date of issuance of EC letter, for further distribution under CER. The machines will be purchased from authorised/ approved sources and CMC/AMC will be assured with supplier for at least three years from date of installation. The Project proponent shall be responsible for functioning of the machines. The size of the shredded plastic shall be less than 2.36 mm. Technical specifications of the plastic waste shredder are as under:</p> <p>Plastic Waste Shredder specifications (250Kg/Hr.)</p> <table border="0"> <thead> <tr> <th data-bbox="331 1077 507 1108">PARAMETER</th> <th data-bbox="790 1077 997 1108">SPECIFICATION</th> </tr> </thead> <tbody> <tr> <td data-bbox="331 1120 507 1151">Mechanism type</td> <td data-bbox="790 1120 1165 1151">Double shaft with rotating blades</td> </tr> <tr> <td data-bbox="331 1173 470 1205">Application</td> <td data-bbox="790 1160 1476 1227">Shredding of RDF waste (Plastic bags, polythene, rags, leather, rubber etc. found in the Municipal Waste)</td> </tr> <tr> <td data-bbox="331 1227 539 1258">Shredder capacity</td> <td data-bbox="790 1227 949 1258">250-300Kg/hr</td> </tr> <tr> <td data-bbox="331 1270 491 1301">Machine Size</td> <td data-bbox="790 1270 1257 1301">Height-4.5 ft, Length-Any & Width-Any.</td> </tr> <tr> <td data-bbox="331 1312 475 1344">Blade MOC</td> <td data-bbox="790 1312 1045 1344">WP45/ENOS(Harden)</td> </tr> <tr> <td data-bbox="331 1355 790 1422">Minimum height of hook above shaft & disc</td> <td data-bbox="790 1355 906 1422">70-80mm</td> </tr> <tr> <td data-bbox="331 1422 678 1453">Output shredded material size</td> <td data-bbox="790 1422 906 1453"><2.36 mm</td> </tr> <tr> <td data-bbox="331 1464 542 1496">Working chamber</td> <td data-bbox="790 1464 981 1496">300mmX380mm</td> </tr> <tr> <td data-bbox="331 1507 454 1538">Motor HP</td> <td data-bbox="790 1507 861 1538">7.5HP</td> </tr> <tr> <td data-bbox="331 1550 470 1581">Total motor</td> <td data-bbox="790 1550 861 1581">1 Nos.</td> </tr> <tr> <td data-bbox="331 1592 502 1624">RPM of shafts</td> <td data-bbox="790 1592 853 1624">30-40</td> </tr> <tr> <td data-bbox="331 1635 470 1666">Motor make</td> <td data-bbox="790 1635 997 1666">Havells/Crompton</td> </tr> <tr> <td data-bbox="331 1677 478 1709">Motor rating</td> <td data-bbox="790 1677 837 1709">IE2</td> </tr> <tr> <td data-bbox="331 1720 494 1751">Total gearbox</td> <td data-bbox="790 1720 853 1751">1Nos.</td> </tr> <tr> <td data-bbox="331 1762 470 1794">Hopper size</td> <td data-bbox="790 1762 989 1794">500mmX 350mm</td> </tr> <tr> <td data-bbox="331 1805 726 1836">Structure & cover & Hopper MOC</td> <td data-bbox="790 1805 949 1836">MS with paint</td> </tr> <tr> <td data-bbox="331 1848 494 1879">Extra features</td> <td data-bbox="790 1848 1013 1879">Cladding total body</td> </tr> <tr> <td data-bbox="331 1890 414 1921">Supply</td> <td data-bbox="790 1890 1021 1921">3 Phase 440V-50Hz.</td> </tr> <tr> <td data-bbox="331 1933 399 1964">Panel</td> <td data-bbox="790 1933 1476 2045">Overload Protection, Short Circuit protection, Tower light, Limits switch for safety (when machine front cover open machine to stop working)</td> </tr> <tr> <td data-bbox="331 1975 502 2007">Panel function</td> <td data-bbox="790 1975 1476 2045"></td> </tr> </tbody> </table>	PARAMETER	SPECIFICATION	Mechanism type	Double shaft with rotating blades	Application	Shredding of RDF waste (Plastic bags, polythene, rags, leather, rubber etc. found in the Municipal Waste)	Shredder capacity	250-300Kg/hr	Machine Size	Height-4.5 ft, Length-Any & Width-Any.	Blade MOC	WP45/ENOS(Harden)	Minimum height of hook above shaft & disc	70-80mm	Output shredded material size	<2.36 mm	Working chamber	300mmX380mm	Motor HP	7.5HP	Total motor	1 Nos.	RPM of shafts	30-40	Motor make	Havells/Crompton	Motor rating	IE2	Total gearbox	1Nos.	Hopper size	500mmX 350mm	Structure & cover & Hopper MOC	MS with paint	Extra features	Cladding total body	Supply	3 Phase 440V-50Hz.	Panel	Overload Protection, Short Circuit protection, Tower light, Limits switch for safety (when machine front cover open machine to stop working)	Panel function	
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S. No	EC Conditions
	Warranty Duration 12 months or more Scope under warranty All the spares & repair work including labor

2. Six Monthly Compliance Report

S. No	EC Conditions
2.1	The project proponent shall sensitize and create awareness among people working within the project area as well as its surrounding area on the ban of 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 being submitted by the project proponents

Additional EC Conditions

A. Statutory Compliance

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

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

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

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

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

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

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

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

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

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

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

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

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

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

B. Air Quality Monitoring And Preservation

1. 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, CO2 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.

2. 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 equipment's/ 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.

C. Water quality monitoring and preservation

1 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.

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

3 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.

4 The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease and maintain its records. The project proponent shall undertake regular monitoring of water quality upstream and downstream of water bodies passing within and nearby/ adjacent to the mine lease and maintain its records. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. PP shall carryout regular monitoring w.r.t. pH and included the same in monitoring plan. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEFCC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre-monsoon

(April-May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Regional Office, MOEFCC, SEIAA, 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.

5 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.

6 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 & SEIAA annually.

7 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.

8 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, SEIAA and State Pollution Control Board/Committee.

D. Noise and vibration monitoring and prevention

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

2. 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.

3. 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.

E. Mining plan

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

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

3. 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 concerned Regional Office, MoEFCC & SEIAA.

F. Land reclamation

- 1. The Overburden (O.B.) generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by D.G.M.S w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of top soil/OB dumps. The topsoil shall be used for land reclamation and plantation.**
- 2. The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.**
- 3. The reclamation of waste dump sites shall be done in scientific manner as per the Approved Mining Plan cum Progressive Mine Closure Plan.**
- 4. 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.**
- 5. The Project Proponent shall carry out slope stability study in case the dump height is more than 30 meters. The slope stability report shall be submitted to concerned regional office of MoEF&CC & SEIAA.**
- 6. 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.**
- 7. 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.**
- 8. The top soil, if any, shall temporarily be stored at earmarked site(s) within the mine lease only and should not be kept unutilized for long. The physical parameters of the top soil dumps like height, width and angle of slope shall be governed as per the approved Mining Plan and as per the guidelines framed by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of dumps. The topsoil shall be used for land reclamation and plantation purpose.**
- 9. The mining lease holders shall, after ceasing mining operations, undertake re-grassing 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.**

G. Transportation

- 1. 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.**
- 2. 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.

H. Green Belt

1. The Project Proponent shall develop greenbelt in 7.5 m 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 SEIAA irrespective of the stipulation made in approved mine plan.

2. 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.

3. 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.

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

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

I. Public hearing and human health issues

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

2. The Project Proponent must demonstrate commitment to work towards 'Zero Harm' from their mining activities and carry out Health Risk Assessment (HRA) for identification workplace hazards and assess their potential risks to health and determine appropriate control measures to protect the health and wellbeing of workers and nearby community. The proponent shall maintain accurate and systematic records of the HRA. The HRA for neighbourhood has to focus on Public Health Problems like Malaria, Tuberculosis, HIV, Anaemia, Diarrhoea in children under five, respiratory infections due to bio mass cooking. The proponent shall also create awareness and educate the nearby community and workers for Sanitation, Personal Hygiene, Hand washing, not to defecate in open, Women Health and Hygiene (Providing Sanitary Napkins), hazard of tobacco and alcohol use. The Proponent shall carryout base line HRA for all the category of workers and thereafter every five years.

3. The Proponent shall carry out Occupational health surveillance which be a part of HRA and include Biological Monitoring where practical and feasible, and the tests and investigations relevant to the exposure (e.g. for Dust a X-Ray chest; For Noise Audiometric; for Lead Exposure Blood Lead, For Welders Full Ophthalmologic Assessment; for Manganese Miners a complete Neurological Assessment by a Certified Neurologist, and Manganese (Mn) Estimation in Blood; For Inorganic Chromium- Fortnightly skin inspection of hands and forearms by a responsible person. Except routine tests all tests would be carried out in a Lab accredited by NABH. Records of Health Surveillance must be kept for 30 years, including the results of and the records of Physical

examination and tests. The record of exposure due to materials like Asbestos, Hard Rock Mining, Silica, Gold, Kaolin, Aluminium, Iron, Manganese, Chromium, Lead, Uranium need to be handed over to the Mining Department of the State in case the life of the mine is less than 30 years. It would be obligatory for the State Mines Departments to make arrangements for the safe and secure storage of the records including X-Ray. Only conventional X-Ray will be accepted for record purposes and not the digital one). X-Ray must meet ILO criteria (17 × 14 inches and of good quality).

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

5. The Project Proponent shall ensure that Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.

6. Project Proponent shall make provision for the housing for workers/labours or shall construct labour 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.

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

J. Corporate Environment Responsibility (CER)

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

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

K. Miscellaneous

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

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

3. 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, SEIAA, Central Pollution Control Board and State Pollution Control Board.

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

5. The concerned Regional Office of the MoEFCC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEFCC officer(s) & competent Authority by furnishing the requisite data / information / monitoring reports.

- 6 The mining shall be carried out manually only; no mechanical device shall be used for mining.
7. The mining shall be carried out strictly as per the approved mining plan.
8. The project proponent shall ensure that Forest Clearance, if applicable, shall be obtained before start of the mining activities.

Annexure 2

Details of Products & By-products

Name of the product /By-product	Product / By-product	Quantity	Unit	Mode of Transport / Transmission	Remarks (eg. CAS number)
STONE	STONE	25366	Tons per Annum (TPA)	Road	

