To,
M/s Wolkem Industries Ltd.,
E-101, Mewar Industrial Area,
Madri, Post Box no.-21,
Udaipur. (Raj.)

Sub: TOR/EC for Sodpur Wollastonite, Calcite, Quartz & Feldspar Mine (area- 24.865 ha.)
        village- Ravania & Sumel, Tehsil-Raipur, Distt.-Pali.

Sir,

This has reference to your application dated 22.4.10 seeking environmental clearances for the above project under EIA Notification 2006. The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification 2006 on the basis of the mandatory documents enclosed with the application viz. the questionnaire, EIA, EMP and additional clarifications furnished in response to the observation of the State Level Expert Committee Rajasthan, in its meetings held on 26.9.11 & 31.10.11.

2. Brief details of the Project:

1. Item No. in the list of Schedule / Category: 1(a), B1.
2. Location of Mine
   a) Near village: Ravania & Sumel, Tehsil-Raipur, Distt.-Pali.
   b) Mine site located in G.T. Sheet No. 45J/8
3. Total Area
   a) Total Area: 15.285 ha.
   b) Land purchased by P.P.: Govt. Land- 4.856 ha., Private land (Agricultural Lands) - 4.724 ha.
4. Mining Lease No. M.L. No. 14/05
5. Product & capacity
   M.L. No. 14/05
   a) Wollastonite: 19,200 MT/year
   b) Calcite: Nil
   c) Quartz: 2,843 MT/year
   d) Feldspar: 14,213 MT/year
   Total: 36,256 MT/year
6. Expected Cost
   Total : 1.00 crores
7. Water Requirement & Source
   a) Drinking- 8 KLD, Dust Suppression 7 KLD, Green Belt- 5 KLD, Total- 20 KLD.
8. Fuel & Energy
   a) HSD required= 400 litres/day
   b) Electricity = not required for the project
9. Method of Mining
   a) Open cast, semi mechanized method
   b) Drilling & blasting is involved
10. Approval of Mining Plan
    Mining plan and the progressive mine closure plan approved by the RCOM, IBM, Udaipur vide letter dt. 15.11.2010.

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### 11. E.M.P.

**Cost of Env. Protection Measures**  
(Unit in lakhs)

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Item</th>
<th>Proposed Outlay</th>
<th>Capital Cost</th>
<th>Annual recurring cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Pollution Monitoring</td>
<td></td>
<td>5.00</td>
<td>2.00</td>
</tr>
<tr>
<td>2.</td>
<td>Pollution Control</td>
<td></td>
<td>5.00</td>
<td>2.50</td>
</tr>
<tr>
<td>3.</td>
<td>Protective Equipments</td>
<td></td>
<td>1.00</td>
<td>0.50</td>
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<tr>
<td>4.</td>
<td>Green Belt Plantation</td>
<td></td>
<td>1.00</td>
<td>1.00</td>
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<tr>
<td>5.</td>
<td>Occupational Health Monitoring</td>
<td></td>
<td>5.00</td>
<td>0.50</td>
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<tr>
<td>6.</td>
<td>Awareness &amp; training programme</td>
<td></td>
<td>Nil</td>
<td>0.50</td>
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<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td>17.00</td>
<td>7.00</td>
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</tbody>
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### 12. C.S.R. Activities

As mentioned in Form-1, Item no.3.3, page no.18  
- a) Plantation work `50,000/year
- b) Development of the area, nearby schools & basic amenities `50,000/year.
- c) C.S.R. Activities (in addition to above) `2 lacs/year.

**Total proposed annual expenditure** `3.00 lacs.

### 13. R.R. Package

As mentioned in Questionnaire item no. 38 (d) (ii), page no. 22  
Funds earmarked for compensation package `10.00 lacs.

### 3. The SEAC Rajasthan after due considerations of the relevant documents submitted by the project proponent and additional clarifications/documents furnished to it have recommended for Environmental Clearance with certain stipulations. The SEIAA Rajasthan after considering the proposal and recommendations of the SEAC Rajasthan hereby accord Environmental Clearance to the project as per the provisions of Environmental Impact Assessment Notification 2006 and its subsequent amendments, subject to strict compliance of the terms and conditions as follows:

**A SPECIFIC CONDITIONS**

- i. The proponent will obtain prior CTE and CTO under Air Act and Water Act from RPCB and effectively implement all the conditions stipulated by the RPCB.
- ii. As envisaged the PP shall ear mark a sum of Rs.17.00 lacs towards capital cost and Rs.7.00 lac per year towards annual recurring cost for taking up various environmental protection measures under the Environmental Management Programme.
- iii. The mining operations shall not intersect groundwater table. In case of working below ground water table, prior approval of the Central Ground Water Authority shall be obtained.
- iv. Topsoil shall be stacked temporarily at earmarked sites only and it shall not be kept unutilized for a period more than three years; it shall be used for land reclamation and plantation in mined out areas.
- v. The project proponent shall ensure that no natural water course/water body shall be obstructed due to any mining operations.
- vi. The PP shall not mine Asbestos in the lease area. Regular asbestos monitoring shall be carried out and results submitted with ambient air monitoring results to RPCB.
- vii. The dumping site selected and proposed shall be used for OB dump at the designated site as per the approved mine plan. The PP shall remove all old overburden from charagh & agriculture land, if any.
- viii. The benches height and slope shall be maintained as per the DGMS approval.
- ix. The over burden generated shall be stacked at earmarked dump site(s) only and it shall not be kept active for long period of time. The maximum height of the already existing waste dumps shall not exceed 5 meters in single terraces and the slope angle shall not exceed 28°.
- x. Waste dump shall be terraced. The height of the dump and its slope shall not exceed than suggested/DGMS requirements. A retaining wall shall be constructed at the toe of the dump.
- xi. Garland drains shall be constructed to prevent the flow of the water in the dumps.
- xii. Check dams shall be constructed in the seasonal rivulets to prevent the flow of fines to low lying areas during rains.
xiii. De-silting of the check dams shall be done regularly during rains.

xiv. The PP shall not obstruct the natural drains in the area.

xv. The total waste generated in the present plan period shall be as envisaged, which shall be accommodated in old dumpsite in addition to the waste already dumped. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to RPCB and MoEF Zonal Office, Lucknow on six monthly bases.

xvi. Permission from the competent authority shall be obtained for drawl of ground water, if required.

xvii. Drills shall either be operated with dust extractors or equipped with water injection system.

xviii. The higher benches of excavated void/mining pit shall be terraced and plantation done to stabilize the slopes. The slope of higher benches shall be made gentler for easy accessibility by local people to use the water body. Peripheral fencing shall be carried out along the excavated area.

xix. Catch drains and siltation ponds of appropriate size shall be constructed for the working pit, OB dumps and mineral dumps to arrest flow of silt and sediment. The water so collected shall be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly de-silted, particularly after monsoon, and maintained properly.

xx. Garland drains, setting tanks and check dams of appropriate size, gradient and length shall be constructed both around the mine pit and over burden dumps and sump capacity shall be designed keeping 50 % safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity shall also provide adequate pits shall be constructed at the corners of the garland drains and de-silted.

xxi. Dimension of the retaining wall at the toe of dumps and OB benches within the mine to check run-off and siltation shall be based on the rainfall data.

xxii. Plantation shall be raised in an area of 33% area including green belt in the safety zone around the mining lease by planting the native species around ML area, OB dumps, backfilled and reclaimed around water body, roads etc. in consultation with the local DFO/Agriculture Department. The density of the trees shall be 2000 plants per year with assured survival of 1500 plants/year.

xxiii. Regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of SPM and RPM such as haul road, loading and unloading point and transfer points. It shall be ensured that the Ambient Air Quality Parameters conform to the norms prescribed by the CPCB.

xxiv. The project authority shall implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.

xxv. Regular monitoring of ground water level and quality shall be carried out in and around the mine lease. The monitoring shall be carried out four times in a year - pre monsoon (April- May), monsoon (August), post monsoon (November); winter (January) and the data thus collected may be sent regularly to MoEF Regional Office, Lucknow; CGWA and Regional Director CGWB, Jaipur.

xxvi. Data on ambient air quality and stack emissions shall be submitted to Rajasthan State Pollution Control Board once in six months carried out by MOEF/NABL/CPCB/ Government approved lab.

xxvii. Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The vehicles shall be covered with a tarpaulin and shall not be overloaded.

xxviii. Blasting operation shall be carried out only during the daytime controlled blasting shall be practiced. The mitigation measures for control of ground vibrations and to arrest fly rocks and boulders shall be implemented.

xxix. Take all safety measures as per the various mining regulations specifically pertaining to Underground mines.

xxx. Consent to operate shall be obtained from SPCB.

xxxi. The project proponent shall take all precautionary measures during mining operations for conservation and protection of endangered fauna, if any, spotted in the study area. A plan for conservation shall be drawn and approved by the State Wildlife Department. Necessary allocation of funds for implementation of the conservation plan shall be made and the funds so allocated shall be included in the project cost. All the safeguard measures brought out in the wildlife conservation pan so prepared specific to the project site shall be effectively implemented. A copy
of action plan may be submitted to the RPCB and MoEF, Regional Office, Lucknow within 3 months.

xxxii. A sum of rupees Rs. 3,00000/- per year may be kept earmarked for socio economic up-liftment activities of the area particularly in the area of plantation work, development of the area, nearby schools & basic amenities and C.S.R. activities habitat, sanitation, health or education, and spend prior to receiving of CTE. Item wise break up in this regard may be submitted to RPCB at the time of applying for CTE.

xxxiii. A final mine closure plan along with details of corpus fund shall be submitted to the MoEF 5 years in advance of final mine closure for approval.

xxxiv. The water reservoir, which would be created/available during post closure (all pits), shall be provided with suitable benches and fencing to provide the access to the water body and safety purposes.

xxxv. The PP shall ensure taking necessary steps on urgent basis to improve the living conditions of the construction labour at site.

xxxvi. The PP shall ensure that, the EC letter as well as the status of compliance of EC conditions and the monitoring data are placed on company's website and displayed at the project site.

xxxvii. Group Insurance is to be provided.

PART-B. GENERAL CONDITIONS

1. Any change in mining technology/scope of working shall not be made without prior approval of the SEIAA.

2. Any change in the calendar plan including excavation, quantum of mineral and waste shall not be made.

3. Periodic monitoring of ambient air quality shall be carried out for PM10, PM2.5, SPM, SO2 and NOx monitoring. Location of the stations (minimum 6) shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring shall be decided in consultation with the Rajasthan State pollution Control Board (RPCB). Six monthly reports of the data so collected shall be regularly submitted to the RPCB/CPCB including the MoEF, Regional office, Lucknow.

4. Measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM etc. shall be provided with earplugs/muffs.

5. Industrial waste water (workshop and waste water from the mine) shall be properly collected & treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May'93 and 31st December 1993 (amended to date). Oil and grease trap shall be installed before discharge.

6. Personnel working in dusty areas shall wear protective respiratory devices they shall also be provided with adequate training and information on safety and health aspects.

7. Occupational health surveillance program of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.

8. The project authorities shall inform the RPCB and the Regional office of MoEF located at Lucknow as well as to the 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.

9. The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year wise expenditure shall be reported to the RPCB and the Regional office of MoEF located at Lucknow.

10. The RPCB and MoEF, Regional Office, Lucknow shall monitor compliance of the stipulated conditions. The project authorities shall provide a set of a filled in questionnaire and EIA/EMP report to them and extend full cooperation to the above office(s) by furnishing the requisite data/information/monitoring reports.

11. The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the SEIAA, Rajasthan, RPCB, CPCB and MoEF, Regional Office, Lucknow.

12. A copy of the clearance letter will be marked to the concerned Panchayat/local NGO, if any, from whom suggestions/representations were received while processing the proposal.
13. The RPCB shall display a copy of the clearance letter at the Regional Office, District Industry Center and Collector/Tehsildar’s office for 30 days.

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

15. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

16. 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(all amended till date) and rules made hereunder and also any other orders passed by the Hon’ble Supreme Court of India/High Court of Rajasthan: and any other Court of law relating to the Subject Matter.

17. Any appeal against this Environmental Clearance shall lie with the National Environmental Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environmental Appellate Act, 1997.

18. The Project authorities shall advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the RPCB and its web site, besides, a copy of the same shall be forwarded to the Regional Office of MoEF located at Lucknow.

Yours faithfully,

(Sankatha Prasad)
Member Secretary
SEIAA Rajasthan

Copy to following for information and necessary action:

1. Secretary, Ministry of Environment and Forest, Govt. of India, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi.
2. Addl. Chief Secretary, Environment Department, Rajasthan, Jaipur.
3. Smt. Alka Kala, Chairman, SEIAA, Rajasthan, 69-A, Bajaj Nagar Enclave, Jaipur
4. Shri Moti Lal Daima, Member, SEIAA, Rajasthan, 48/9, Moti Path, Mansarovar, Jaipur.
5. Member Secretary, Rajasthan State Pollution Control Board, Jaipur for information & necessary action and to display this sanction on the website of the Rajasthan State Pollution Control Board, Jaipur.
6. Secretary, SEAC Rajasthan.
8. IA- Division, Monitoring Cell, MoEF, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi-110003.
9. Nodal Officer (Departmental Website), Department of Environment, Government of Rajasthan, Jaipur with the request to upload the copy of this environmental clearance on the website.

M.S. SEIAA (Rajasthan)