NMDC Limited
(A Government of India Enterprise)
Arki Limestone Project, Arki, Distt. Solan (H.P.) 173 208


To,
Ministry of Environment, Forests & Climate Change (MoEF & CC)
Regional Office (NCZ)
Pearson Road, P.O. New Forest
Forest Research Institute (FRI) Campus
DEHRADUN – 248 006 (UA)
Ph.: 0135-2750809, 2753010
E-mail: moef.ddn@gmail.com


R/Sir,
As a part of compliance imposed by the MoEF & CC, New Delhi while according Environmental Clearance to the Arki Limestone Project of NMDC Limited, vide letter cited above, please find ‘Six Monthly Compliance Report’ and ‘Data Sheet’ for the period from Oct 2018 to March 2019.

Thanking you.
Yours faithfully,

16.04.2019

(Dr. Mahesh K Verma)
Sr. Manager (Geol) & OIC
Mob. 0945 942 9428

Enc: As above
Copies to:
1. Member Secretary
   HP State Pollution Control Board
   Him Parivesh, Phase-III New Shimla
   Shimla – 171009
2. Zonal Office (North)
   CPCB, PICUP Bhawan, Vibhuti Khand, Gomti Nagar
   Lucknow-226010
   Tel: 0522-4087601/ Fax: 0522-4087602/ Mob.: 08009100222
   Email: ssmqa.cpcb@nic.in
3. Copy to NMDC Head office for uploading on the website

Tele/Fax +91-177-2674051-52                          e-mail: mkverma@nmdc.co.in
|   | Name and address of the project In-charge along with their telephone, fax, mobile and email address | Dr. Mahesh K. Verma  
Sr. Manager (Geol) & OIC  
Arki Limestone Project  
NMDC Limited  
ARKI, Distt. Solan 173208 (H.P.)  
Mob. 0945 942 9428  
Tel:0177-2674052  
Tel-Fax:0177-2674051-52  
Email: mkverma@nmdc.co.in |
<table>
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<td>Current status of mining operations.</td>
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| 3 | Location of the project | Arki Limestone Deposit located WNW of state capital of Shimla in Himachal Pradesh. It is located at 2 km aerial distant in North of Arki tehsil HQ. Arki town is situated 40 km from Shimla and 58 kms from Solan by road. The nearest Broad gauge railway station is Kalka. The deposit lies between:  
• Longitude E 76° 58' 02” to 76° 56' 24”  
• Latitude N 31° 11’ 05” to 31° 09’ 36”  
• Sol Toposheet No. 53 A/16 (Old). H43E16 (New) |
| 4 | Current status of point wise compliance of the stipulated environmental conditions/ safeguard. | Obtained Environmental Clearance from MoEF & CC, New Delhi vide letter no. No. J-11015/82/2009-IA. II (M), dt. 20.12.2010. Almost all the conditions stipulated in the EC have been fulfilled and remaining would be undertaken in due course of time during mining operation. |
|   | The area of forest land to be diverted for passage or other purpose in your project and forest status of approval from MoEF & CC for seeking Environmental Clearances. | • Area of forest land diverted for mining purpose: 84.36 Ha.  
• MoEF & CC, New Delhi has accorded Forest Clearance, vide letter no. F. No. 8-39/1994-FC, dt. 10.04.2015.  
• NMDC Limited deposited an amount of Rs. 9,47,96,186/- in the CAMPA account in Jan 2013 towards Compensatory Afforestation in 168 Ha (as double of the 84.36 Ha diverted forest land); Fencing, Protection & Regeneration of 3.67 Ha Safety Zone and NPV of the Forest Area).  
• Obtained ST & OTFD Clearance Certificate from DC, Solan. The certificate has been submitted to the MoEF & CC, New Delhi.  
• Prepared ‘Action Plan for Conservation of Flora and Fauna’ (Scheme costing Rs. 
5,77,00,000/-) and got approval from PCCF-Wildlife, H.P.). The plan has been submitted to the MoEF & CC, New Delhi.

- Prepared ‘A Plan for Mitigative Measures to Minimise Soil Erosion & Conservation Plan for Maintenance & Eco-Restoration of the Area Limestone Project Area’ (Scheme costing Rs. 85,54,390/-) and got approval from PCCF-Wildlife, H.P.). The plan has been submitted to the MoEF & CC, New Delhi.
- Submitted all the required ‘Undertakings’ & other documents to the MoEF & CC, New Delhi.
- NMDC Limited deposited an amount of Rs. 65,49,379/- on 31.03.2016 to the State Forest Deptt. towards charges for tree felling in the 84.36 Ha diverted forest land.
- As per MoEF & CC guidelines, 4-feet high RCC Permanent Boundary Pillars on the lease boundary in the 84.36 Ha diverted Forest land have been erected by 31.03.2018.
- Remaining Boundary Pillars, which are falling within the private lands, shall be erected after Private Lands Acquisition.

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<tr>
<td>6</td>
<td>A copy of the application form and subsequent information to be submitted to the MoEF &amp; CC for seeking EC.</td>
</tr>
<tr>
<td>7</td>
<td>A copy DPR/EIA/EMP/Risk Analysis Report etc to be submitted to the MoEF &amp; CC.</td>
</tr>
<tr>
<td>8</td>
<td>Copy of the advertisement given in newspaper about the EC.</td>
</tr>
<tr>
<td>9</td>
<td>Duly filled data sheet.</td>
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<tr>
<td>6</td>
<td>Copy of Form-1 along with EIA EMP report has been submitted to the MoEF &amp; CC, New Delhi.</td>
</tr>
<tr>
<td>7</td>
<td>EIA/EMP report has been submitted to the MoEF &amp; CC, New Delhi.</td>
</tr>
<tr>
<td>8</td>
<td>Submitted to the MoEF &amp; CC, New Delhi.</td>
</tr>
<tr>
<td>9</td>
<td>Data Sheet for the period from Oct-2018 to March-2019 is being submitted alongwith this document.</td>
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DATA SHEET  
(For the Period from Oct-2018 to March-2019)

<table>
<thead>
<tr>
<th></th>
<th>Project Type</th>
<th>Limestone Mining Project</th>
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<tbody>
<tr>
<td>2</td>
<td>Name of the Project</td>
<td>NMDC Arki Limestone Project</td>
</tr>
<tr>
<td>3</td>
<td>Clearance Letter (s) O.M. No &amp; dates</td>
<td>No.J-11015/82/2009-IA.II(M), dt. 20.12.2010</td>
</tr>
</tbody>
</table>
| 4 | Location              | District: Solan  
State: Himachal Pradesh.  
Longitude:76° 58'02” to 76°56’24 E  
Latitude:31°11’05” to 31°09’36” N |
| 5 | Address for Correspondence: | Sr. Manager (Geol) & OIC  
Arki Limestone Project  
NMDC Limited  
Near Govt. Hospital  
Arki - 173208  
District: Solan (H.P.)  
Mob.: 0945 942 9428  
Tel/ Fax: 0177-2674051-52 |
| 6 | Salient Features:  
a. of the project  
b. of the environmental management plans |  
• NMDC Limited intends to develop a limestone mine at Arki in Himachal Pradesh for the Run of Mine (ROM) production of 5.0 Million Tons of Per Annum (MTPA). The mining activity shall be operated using Shovel-Dumper combination and ROM shall be supplied to the Steel and Cement manufacturing units.  
• The mine management will undertake the control measures in coordination with the State Forest Department, CPCB/MoEF & CC and Environmental Consultant. The management of environment shall be made an integral part of the major activities of mining. The environmental data shall be monitored by using on outside agency having valid recognition from CPCB/ MoEF & CC.  

|   | Break up of the Project Area | a. Land use details |  
a. Submergence area: Forest and Non-forest  
b. Others | Govt/Forest Land: 84.36 Ha  
Private Land: 148.24 Ha  
**Total: 232.60 Ha** |
| 7 | Break up of project affected population with enumeration of those losing houses/dwelling | b. Nil |  
• Break up of project affected population:  
1. Landless Families: 18  
2. Houseless Families: 16 |
units, agricultural land only both dwelling units and agricultural land and landless laborers/artisans.
   a) SC/ST/Adivasis.
   b) Others (Please indicate whether these figures are based on any scientific and systematic survey carried out or only provisional figures. If a survey has been carried out give details and year of survey)

3. Patra Vyakti (Eligible Persons): 32
   “Landless Family” means a family that was having more than 5 bigha land and entire land holding has been acquired for the project. Such family does not possess any land after the acquisition.
   “Houseless Family” means a family whose dwelling house/houses have been acquired and no alternate house to live after acquisition.
   “Patra Vyakti (Eligible Persons)” means a person who is having less than 5 bigha (around 3675 sqm) land and who’s entire 5 bigha land shall be acquired.
   • Above data are based on ‘Inescapability Certificate’ obtained from the DC, Solan in June 2009.
   • ST & OTFD Clearance Certificate has been obtained from the DC, Solan in July 2013.

Financial Details:
   a) Project cost as originally planned and subsequent revised estimates the year of price reference
   b) Allocations made for environmental management plans with and year wise break up.
   c) Benefit cost ratio/Internal Rate of Return and the year of assessment.
   d) Whether (c) Includes the cost of environmental management as shown in b) above.
   e) Actual expenditure incurred on the project so far.
   f) Actual expenditure incurred on the environmental management plans so far:

   a. Capital outlay of the project: Rs.1042 Cr.
   b. Environmental Management Cost: 20.75 Cr.
   c. IRR = 14.71% (Before Tax)
      12.02% (After Tax)
   d. Yes. No capital expenditure is involved.
   e. Rs.18, 08, 06, 860.00 Upto March 2019
   f. Rs. 10,13,45,565.00 (Compensatory Afforestation in double of the diverted forest land; Fencing, Protection & Regeneration of Safety Zone and NPV of the Diverted Forest area + Tree Felling Charges).

Forest Land Requirement:
   a. The status of approval for diversion of forest land for non forest use.
   b. The status of tree felling
   c. The status of compensatory afforestation

   a. Forest Clearance has been accorded by the MoEF & CC, New Delhi vide letter no. F. No. 8-39/1994-FC, dt. 10.04.2015.
   b. Deposited Rs. 65,49,379/- on 31.03.2016 towards Tree Felling Charges. No tree has been felled as yet.
   c. Deposited Rs. 9,47,96,186/- in the CAMPA
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<td><strong>d. Comments on the availability of CA programme in the light of actual field experience so far.</strong></td>
<td>account in Jan 2013 towards CA in 168 Ha as double of the 84.36 Ha diverted forest land; Fencing, Protection &amp; Regeneration of 3.67 Ha Safety Zone and NPV of the Forest Area. d. CA programme shall be commenced by the State Forest Deptt in the identified land bank.</td>
</tr>
<tr>
<td><strong>11</strong></td>
<td><strong>The status of clear felling in non forest areas such as submergence area of reservoir approach road if any with quantitative information</strong></td>
</tr>
<tr>
<td></td>
<td>Nil</td>
</tr>
<tr>
<td><strong>12</strong></td>
<td><strong>Status of construction:</strong> a. Date of commencement actual and planned b. Date of completion actual and planned</td>
</tr>
<tr>
<td><strong>13</strong></td>
<td><strong>Reasons for delay if the project is yet to start.</strong></td>
</tr>
<tr>
<td></td>
<td>1. Lack of Statutory Clearances like Private land Acquisition, Consent to Establish, Road Transport Permission etc. 2. Issue regarding establishment of a suitable market for limestone lumps and fines. 3. Issue regarding Transport Logistics.</td>
</tr>
</tbody>
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15.04.2019

(Dr. Mahesh K. Verma)
Sr. Manager (Geol) & OIC  
Arki Limestone project  
NMDC Limited  
Arki, Distt: Solan (H.P.) 173 208  
Mob.: 0945 942 9428  
Ph.: 0177-2674052

Specific Conditions:

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<th>SN</th>
<th>Conditions</th>
<th>Compliance</th>
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| 1  | The project proponent shall obtain Consent to Establish and Consent to operate from the Himachal Pradesh State Pollution Control Board and effectively implement all the conditions stipulated therein | • To obtain ‘Consent to Establish’ (CTE) from Himachal Pradesh State Pollution Control Board (HPSPCB), submitted 2 copies of the required documents at HPSPCB, Regional Office, Parwanoo on 12.08.2016.  
• Online application was filed on 22.09.2016 on XIM XEN.  
• Permission from the State Geologist has been submitted on 16.11.2016.  
• Got Single Window Clearance from State Level Single Window Approval and Monitoring Authority’ in their 3rd meeting held on 23.08.2018 headed by Hon. Chief Minister, Himachal Pradesh.  
• Minutes of the clearance have been submitted to the HPSPCB on 17.09.2018.  
• Application has been filed at OCMMS (Online Consent Mechanism and Monitoring System) on 20.12.2018 to obtain CTE, where a fee amount of Rs. 7.5 Lakh has appeared.  
• Matter is under process to deposit such amount |
| 2  | The environmental clearance is subject to approval of the State Land use Department, Government of Himachal Pradesh for diversion of agricultural land for non-agricultural use. | Noted. |
| 3  | Necessary forestry clearance under the Forest (Conservation) Act, 1980 shall be obtained from the competent authority for the | • Obtained Final Forest Clearance from the MoEF & CC, New Delhi vide letter no. F. No. 8-39/1994-FC, dt. 10.04.2015 for diversion of 84.36 Ha Forest land falling under 232.6 Ha |
| Forestland involved in the project. The environment clearance is subject to grant of forestry clearance to the project. | Mining Lease.  
- An amount of Rs. 9,47,96,186/- has been deposited on 16.01.2013 in the CAMPA A/c in Jan 2013 towards charges for CA in 168 Ha (double of the 84.36 Ha diverted forest land); Safety Zone in 3.67 Ha (Fencing, Protection & Regeneration) and NPV of the forest area.  
- An amount of Rs. 65,49,379/- has been deposited to the State Govt. on 31.03.2016 towards charges for tree felling in the 84.36 Ha diverted forest land.  
- For taking possession of the 84.36 Ha diverted forest land, ‘Boundary Pillars’ have been erected on the lease boundary in the forest land, as per EC guidelines. |
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<td>The mining operations shall be restricted to above ground water table and it should not intersect the groundwater table. In case of working below the ground water table, prior approval of the Ministry of Environment and Forests and the Central Ground Water Authority shall be obtained, for which a detailed hydro-geological study shall be carried out.</td>
<td>As per EIA/EMP studies, all benches will plan to be work above ground water level. Further, there will no ground water tapping for mining and mineral processing purpose. The mining activities will not puncture the ground water table during its life time. The ground water table is not anticipated to be polluted, as there are no harmful ingredients, which could leach and puncture down to water table.</td>
</tr>
<tr>
<td>The project proponent shall ensure that no natural watercourse and/or water resources including the first and second order streams, nallahs etc. are obstructed due to any mining operations.</td>
<td>As per EIA/EMP studies, there will no impact on any of the watercourses surrounding the ML area.</td>
</tr>
<tr>
<td>The top soil shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation.</td>
<td>Noted. It is estimated that only 21024 tonnes of solid waste (Soil) will be generated during the life of the mine which will be disposed-off in the form of two external dumps. That will be used for land reclamation and plantation.</td>
</tr>
<tr>
<td>The over burden (OB) generated during the mining operation shall be stacked at earmarked dump site(s) only and it should not be kept active for a long period of time and their phase-wise stabilization shall be carried out. There shall be two external dumps having maximum height of 10m having two terraces of 5m each. Proper terracing of OB dump(s) shall be carried out so that the overall slope shall not exceed 280. The over burden dump(s) shall be scientifically vegetated with suitable native species to prevent</td>
<td>Noted and it is estimated that 21024 tonnes of solid waste (Soil) will be generated during the life of the mine which will be disposed-off in the form of two external dumps. The maximum heights of the dumps will be 10 meter having two terraces of 5 meter each. No backfilling is proposed. Plantation will be raised in an area of 53.3 Ha at the end of 25th year of mining operation.</td>
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erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dumps. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the Ministry of Environment & Forests and its Regional Office, Dehradun on six monthly basis.

Catch drains and siltation ponds of appropriate size shall be constructed for the working pit, soil, mineral and OB dump(s) to arrest flow of silt and sediment directly into the private land, the Arki ki Khad, a perennial nallah and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly de-silted particularly after the monsoon and maintained properly. Garland drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed both around the mine pit and over burden dump(s) to prevent run off of water and flow of sediments directly into the private land, the Arki ki Khad, a perennial nallah and other water bodies and sump capacity should 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 should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits should be constructed at the corners of the garland drains and de-silted at regular intervals.

As per MoEF & CC letter no: F. No. 8-39/1994-FC, dt. 21.02.2014 ‘A Plan for Mitigative Measures to Minimise Soil Erosion & Conservation Plan for Maintenance & Eco-Restoration of the Area Limestone Project Area (Schemes costing Rs. 85,54,390/- has been prepared by NMDC and got approval of CF, Bilaspur (H.P.). The plan has been submitted to the MoEF & CC, New Delhi through the Nodal Officer, Shimla 21.10.2014.

‘An Action Plan for Conservation of Flora and Fauna’ for Arki Limestone Project (Schemes costing Rs. 5,77,00,000) has been prepared by NMDC and got approval of State Forest and Wildlife Department in March 2012.

Copy of the above both schemes have been submitted by hand to the Regional Office, MoEF & CC, FRI, Dehradun on 27.06.2016.

Dimension of the retaining wall at the toe of the OB dump(s) and the OB benches within the mine to check run-off and siltation should be based on the rain fall data. Noted.

Plantation shall be raised in an area Noted.
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<td>of 53.3 Ha including a 7.5m wide green belt in the safety zone around the mining lease, OB dump(s), along the roads etc. by planting the native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2000 plants per Ha. Greenbelt shall be developed all along the mine lease area in a phased manner and shall be completed within first five years.</td>
<td>Noted.</td>
</tr>
<tr>
<td>Effective safeguard measures, such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulate matter such as around crushing and screening plant, loading and unloading point and all transfer points. Extensive water sprinkling shall be carried out on haul roads. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.</td>
<td>Air pollution measures have been considered in the EIA/EMP studies.</td>
</tr>
<tr>
<td>Regular monitoring of water quality upstream and downstream of perennial nallahs falling in the impact zone shall be carried out and record of monitoring data should be maintained and submitted to Ministry of Environment and Forests, its Regional Office, Chandigarh, Central Groundwater Authority, Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board.</td>
<td>Noted. These activities shall be carried out after starting the mining operations as per EIA/EMP studies and shall be submitted to dealing authorities.</td>
</tr>
<tr>
<td>Appropriate measures shall be taken for treatment of the upper catchment of the mine lease area.</td>
<td>Noted. Measures shall be taken after starting the mining operations.</td>
</tr>
<tr>
<td>The project authority should implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.</td>
<td>Noted. Measures shall be taken after starting the mining operations.</td>
</tr>
<tr>
<td>Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing</td>
<td>Noted. Regular monitoring of ground water level and quality shall be carried out after starting the mining operations.</td>
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</table>
wells and installing new piezometers during the mining operation. The periodic monitoring (at least four times in a year: pre-monsoon (Apr-May), monsoon (Aug), post-monsoon (Nov) and winter (Jan); once in each season) shall be carried out in consultation with the State Ground Water Board/Central Ground Water Authority and the data thus collected may be sent regularly to the Ministry of Environment and Forests and its Regional Office Dehradun, the Central Ground Water Authority and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity, necessary corrective measures shall be carried out.

| 16 | The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water, required for the project. |
| 17 | Suitable rainwater harvesting measures on long term basis shall be planned and implemented in consultation with the Regional Director, Central Ground Water Board. |
| 18 | The mineral transportation by road shall be limited to the first five years and thereafter it shall be carried out by conveyor only. |

- To draw 650 cum water/day from Gambhar Khad river to the mine, got prepared a scheme costing Rs. 13,02,33,764/- from Ex. Eng., I&PH Division, Arki, Distt. Solan (H.P.).
- The Scheme is ‘In-principal’ approved by the NMDC management in Sept 2010.
- The scheme shall be implemented at the time of mining operations.
- 4 Nos. of Rain Water Harvesting Structures have been proposed in the ‘Plan for Mitigative Measures to Minimise Soil Erosion & Conservation Plan for Maintenance & Eco-Restoration of the Area Limestone Project Area (Schemes costing Rs. 85,54,390/-)’, that is approved by CF, Bilaspur and submitted to the MoEF & CC, New Delhi.
- Rain harvesting measures shall be implemented after starting of mining operations.
- Submitted copy of the scheme to the Regional Office, MoEF & CC, FRI, Dehradun on 27.06.2016.

- For transport by Ropeway or Conveyor System, NMDC prepared a Feasibility Report in year 2013. The report has been studied by committee of Functional Directors from SAIL and NMDC and accorded approval for inviting a broad GEOI for setting up of transportation system for SMS grade limestone (Arki to Bharatgarh) either through
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 mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded. Monitoring of vehicular emissions and maintenance of vehicles shall be carried out regularly after starting the mining operations.

Controlled blasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders shall be implemented after starting the mining operations.

Drills shall either be operated with dust extractors or equipped with water injection system. The condition shall be implemented after starting the mining operations.

Mineral handling area shall be...
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<th>provided with the adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.</th>
<th>starting the mining operations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>Sewage treatment plant shall be installed for the colony. ETP shall also be provided for the workshop and wastewater generated during the mining operation.</td>
<td>Noted. The condition shall be implemented after starting the mining operation.</td>
</tr>
<tr>
<td>24</td>
<td>Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.</td>
<td>Noted. All the medical facilities for the pre-placement and periodical medical examination shall be installed during mining operation.</td>
</tr>
<tr>
<td>25</td>
<td>Digital processing of the entire lease area using remote sensing technique should be done regularly once in three years for monitoring land use pattern and report submitted to MOEF and its Regional Office, Chandigarh.</td>
<td>Noted. The condition shall be fulfilled after starting the mining operation.</td>
</tr>
<tr>
<td>26</td>
<td>Land oustees and land losers/affected people shall be compensated and rehabilitated as per the National Rehabilitation and Resettlement Policy, 2007.</td>
<td>Draft scheme for Rehabilitation &amp; Resettlement for Arki Limestone Project has been prepared in year 2010. The scheme is approved by the NMDC management, which will be reviewed, modified and implemented in consultation with the State Govt. at the time of Private Land Acquisition.</td>
</tr>
<tr>
<td>27</td>
<td>Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.</td>
<td>The condition shall be fulfilled after starting the mining operation.</td>
</tr>
<tr>
<td>28</td>
<td>The project proponent should take all precautionary measures during mining operation for conservation and protection of endangered flora as well as endangered fauna namely leopard etc. spotted in the study area. Action plan for conservation of leopard etc.</td>
<td>• An ‘Action Plan for Conservation of Flora and Fauna’ for Arki Limestone Project, containing schemes costing for Rs. 5,77,00,000/- has been prepared in consultation with the State Forest Deptt in March 2012. The plan is approved by the PCCF (Wildlife), Forest Deptt., Govt. of H.P..</td>
</tr>
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flora and fauna shall be prepared and implemented in consultation with the State Forest and 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. Copy of action plan may be submitted to the Ministry and its Regional Office at Chandigarh within 3 months.

- Submitted copy of the plan to the Regional Office, MoEF & CC, FRI, Dehradun on 27.06.2016.

The critical parameters such as RSPM (Particulate matter with size less than 10micron i.e., PM10) and NOX in the ambient air within the impact zone, peak particle velocity at 300m distance or within the nearest habitation, whichever is closer shall be monitored periodically. Further, quality of discharged water shall also be monitored [(TDS, DO, PH and Total Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The Circular No. J-20012/1/2006-IA.II(M) dated 27.05.2009 issued by Ministry of Environment and Forests, which is available on the website of the Ministry www.envfor.nic.in shall also be referred in this regard for its compliance.

Noted. The condition shall be fulfilled after starting the mining operations.

A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the MoEF & CC 5 years in advance of final mine closure for approval.

Presently the Progressive Mine Closure Plan is applicable that is approved by IBM on 27.04.2012. No Final Mine Closure Plan is prepared because no closure activities shall be done within next 5 years as Mining Lease is deemed to be extended upto 06.08.2041.
### General Conditions:

<table>
<thead>
<tr>
<th>SN</th>
<th>Conditions</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment &amp; Forests.</td>
<td>Noted.</td>
</tr>
<tr>
<td>2</td>
<td>No change in the calendar plan including excavation, quantum of mineral limestone and waste should be made.</td>
<td>Noted.</td>
</tr>
<tr>
<td>3</td>
<td>Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM (Particulate matter with size less than 10micron i.e., PM10) and NOx monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.</td>
<td>Noted. The monitoring of ambient air quality shall be taken after start of mining operations.</td>
</tr>
<tr>
<td>4</td>
<td>Data on ambient air quality RSPM (Particulate matter with size less than 10micron i.e., PM10) &amp; NOx should be regularly submitted to the Ministry of Environment and Forests including its Regional office located at Dehradun and the State Pollution Control Board/Central Pollution Control Board once in six months.</td>
<td>Noted. The condition shall be fulfilled after starting the mining operations.</td>
</tr>
<tr>
<td>5</td>
<td>Data on ambient air quality RSPM (Particulate matter with size less than 10micron i.e., PM10) &amp; NOx should be regularly submitted to the Ministry of Environment and Forests including its Regional office located at Dehradun and the State Pollution Control Board / Central Pollution Control Board once in six months.</td>
<td>Noted. The condition shall be fulfilled after starting the mining operations.</td>
</tr>
<tr>
<td>6</td>
<td>Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs.</td>
<td>Noted. The condition shall be fulfilled after starting the mining operations.</td>
</tr>
<tr>
<td>7</td>
<td>Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to</td>
<td>Noted. The condition shall be fulfilled after starting the mining operations.</td>
</tr>
<tr>
<td>8</td>
<td>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. Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.</td>
<td>Noted. The condition shall be fulfilled after starting the mining operations.</td>
</tr>
<tr>
<td>9</td>
<td>A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.</td>
<td>Noted.</td>
</tr>
<tr>
<td>10</td>
<td>The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the MoEF &amp; CC and its Regional Office located at Dehradun.</td>
<td>Noted.</td>
</tr>
<tr>
<td>11</td>
<td>The project authorities should inform to the Regional Office located at Dehradun regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.</td>
<td>Noted.</td>
</tr>
<tr>
<td>12</td>
<td>The Regional Office of this Ministry located at Dehradun 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.</td>
<td>Noted.</td>
</tr>
<tr>
<td>13</td>
<td>The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by e-mail) for the period from Oct-2018 to March-2019 on the status of compliance of the stipulated Environmental Clearance conditions to the concerned offices.</td>
<td>• The project proponent is hereby submitting six monthly report &amp; monitored data (both in hard copies as well as by e-mail) for the period from Oct-2018 to March-2019 on the status of compliance of the stipulated Environmental Clearance conditions to the concerned offices.</td>
</tr>
</tbody>
</table>

NMDC Arki Limestone Project: EC SMR for Oct 2018-March 2019
 mail) to the MoEF & CC, its Regional Office Dehradun, the respective Zonal Office of Central Pollution Control Board the State Pollution Control Board. The proponent shall upload the status of compliance of the environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the Ministry of Environment and Forests, Dehradun, the respective Zonal Office of Central Pollution Control Board and the State Pollution Control Board.

- This report is being sent to the MoEF & CC, Regional Office, Dehradun and the following offices simultaneously:
  1. Central Pollution Control Board, North Zone, Lucknow (U.P.).
  2. H.P. State Pollution Control Board, Shimla (H.P.).

14 A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/ Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.

The condition has been already fulfilled at the time of obtaining EC.

15 The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and the Collector’s office/ Tehsildar’s Office for 30 days.

HPSPCB, District Industry Centre and DC office have been informed about EC. Copies of the clearance letter had been given for display for 30 days.

16 The environmental statement for each financial year ending on 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the Regional Office of the Ministry of Environment and Forests, Dehradun by e-mail.

Noted.
The condition shall be fulfilled after starting the mining operations.

17 The project authorities should advertise at least in two local newspapers widely circulated, one of them should be in Hindi and English.

The advertisement in Hindi and English had been published in two local newspapers after receipt of EC letter in Dec 2010.
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 State Pollution Control Board and also at web site of the Ministry of Environment and Forests at [http://envfor.nic.in](http://envfor.nic.in) and a copy of the same should be forwarded to the Regional Office of this Ministry located at Chandigarh.

15.04.2019
Sr. Manager (Geol) & OIC
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