GOVERNMENT OF KERALA

Abstract
Industries Department - Mining and Geology – Mining Plan for Quarrying Permit – Laterite (Building stone) – Guidelines approved - Orders issued.

INDUSTRIES (A) DEPARTMENT
G.O(Rt) No.816/2017/ID Dated, Thiruvananthapuram, 15.06.2017
Read: Letter No.896/M3/2015 dated 26.05.2017 from the Director, Mining and Geology Department.

ORDER

As per the letter read above, the Director, Mining and Geology Department has furnished guidelines for preparing Mining Plan for Quarrying Permit in respect of laterite (Building stone) where depth of the quarry does not exceed 6 meters, for approval.

2. Government have examined the matter in detail and are pleased to approve the guidelines appended herewith for preparing Mining Plan for quarrying permit in respect of laterite (Building stone) where depth of the quarry does not exceed 6 meters.

(By Order of the Governor)
PAUL ANTONY
Additional Chief Secretary

To
✓ The Director of Mining and Geology Department.
The Member Secretary, SEIAA, Thiruvananthapuram.
The Principal Accountant General (Audit), Kerala, Thiruvananthapuram.
The Accountant General (A & E), Kerala, Thiruvananthapuram.
Administrator, SEIAA, Thiruvananthapuram.
Environment Department/ Revenue Department/ Local Self Government Department.
All District Geologists
The Director, Information & Public Relations Department.
Stock file / Office Copy

Forwarded/ by Order

Section Officer
Guidelines for preparing Mining Plan for Quarrying Permit in respect of laterite (Building stone) where depth of the Quarry does not exceed 6 meters

I. NAME & ADDRESS OF THE APPLICANT

II. PARTICULARS OF THE AREA

The location map of the quarry area has been given in plate No.1

Geological plan of the applied area with spot levels has been given in plate No.2.

a) District

b) Taluk

c) Village

d) Survey Nos.

e) Area

f) Whether the area is recorded to be in forest/ Government puramboke

g) Existence of public road, railway line and other infrastructure facilities available in the quarry area and appropriate distance.

1) Nearest State Highway /National Highway / Other road

2) Nearest Railway Station

3) Grama Panchayat Office

4) Fire Station

5) Ambulance

6) Police Station

7) School

8) Hospital / Dispensary

9) Water Supply
The Geological location of the mine with respect to the boundary pillars (BP) of the quarry area is given below:

<table>
<thead>
<tr>
<th>B.P.No.</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Height from MSL for each BP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
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</tbody>
</table>

III. STATUS OF THE APPLICANT

Private individual / Partnership firm

IV. PERIOD OF CONCESSION APPLIED FOR

One Year

V. BRIEF GEOLOGY OF THE AREA

VI. METHOD OF ESTIMATION OF RESERVES

The entire applied area is considered as mineralized. The following points have been considered while calculating the mineable reserve of laterite (building stone).

The reserve of the mineable laterite building stone has been estimated using the following method:

a) AREA OF THE PROPOSED QUARRYING AREA x AVERAGE DEPTH OF QUARRYING (maximum depth limited to 6.00mt) x SPECIFIC GRAVITY (2.5)= ............. Metric Tonnes

b) Mineral already quarried out = .............MT
c) Balance mineable quantity = 
(a) – (b) = .........................MT

VII. MINING

(a) Whether manual or semi-mechanised: Semi-mechanised
(b) Machines

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Machine Type</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>JCB</td>
<td>Hired</td>
</tr>
<tr>
<td>2</td>
<td>Power Tiller</td>
<td>Own</td>
</tr>
<tr>
<td>3</td>
<td>Tipper / Trucks</td>
<td>Hired</td>
</tr>
<tr>
<td>4</td>
<td>Axe (.....No.)</td>
<td>Own</td>
</tr>
<tr>
<td>5</td>
<td>Chisel (.....No.)</td>
<td>Own</td>
</tr>
</tbody>
</table>

(c) Whether drilling and blasting will be made : Yes / No

(d) Benching : Applicable / Not applicable

VIII. EXCAVATION

The top soil, if any, will be removed with the help of JCB / manually and store it on a marked place, which will be used for concurrent back filling. After obtaining the plain surface, marking will be done on the ground according to the size of the building stone to be removed. Then using blade mounted Tiller, cuttings will be done along the marking. Then by using axe / Chisel etc. the stones will be separated and then shaped.

(a) Loading and Transportation
Loading of the stone will be done manually.

(b) Mineral Processing

c) Safety precautions to be adopted

d) No. Of trees to be uprooted due to quarrying operation

(e) Manpower

   (1) Supervisory

   (2) Non-supervisory (skilled, semi-skilled & unskilled)

(f) Site Services

   (1) Office

   (2) Store

   (3) First Aid Centre

   (4) Drinking Water Shed

   (5) Rest shelter

(g) Use of mineral

IX. WATER MANAGEMENT

X. AIR & NOISE MANAGEMENT

XI. MEASURES TO BE TAKEN FOR LAND RESTORATION & PLANTATION