

Annexure 8.4: Guidelines for Existing Quarry Management

The Concessionaire will finalise the locations from the list given by Consultant's for procuring materials. The Concessionaire shall establish a new quarry only with the prior consent of the Independent Consultant (IC) only in cases when: (i) Lead from existing quarries is uneconomical and (ii) Alternative material sources are not available. The Contractor shall prepare a Redevelopment Plan for the quarry site and get it approved by the IC.

The construction schedule and operations plans to be submitted to the IC prior to commencement of work shall contain a detailed work plan for procuring materials that includes procurement, transportation and storage of quarry materials.

CONSTRUCTION STAGE

Development of site: To minimise the adverse impact during excavation of material following measures are need to be undertaken:

- i) Adequate drainage system shall be provided to prevent the flooding of the excavated area
- ii) At the stockpiling locations, the Concessionaire shall construct sediment barriers to prevent the erosion of excavated material due to runoff
- iii) Construction of offices, laboratory, workshop and rest places shall be done in the up-wind of the plant to minimize the adverse impact due to dust and noise.
- i) The access road to the plant shall be constructed taking into consideration location of units and also slope of the ground to regulate the vehicle movement within the plant.
- iv) In case of storage of blasting material, all precautions shall be taken as per The Explosive Rules, 1983.

QUARRY OPERATIONS INCLUDING SAFETY

- i) Overburden shall be removed and disposed inline with Guidelines for Debris Disposal Site and management giving in Annexure-9.1
- ii) During excavation, slopes shall be flatter than 20 degrees to prevent their sliding. In cases where quarry strata are good and where chances of sliding are less this restriction can be ignored.
- iii) In case of blasting, procedure and safety measures shall be taken as per The Explosive Rules, 1983
- iv) The contractor shall ensure that all workers related safety measures shall be done as per guidelines for Workers and Safety.
- v) The Concessionaire shall ensure maintenance of crushers regularly as per manufacturer's recommendation.

Topsoil will be excavated and preserved during transportation of the material measures shall be taken to minimize the generation of dust and prevent accidents.

The IC shall review the quarry site for the management measures during quarry operation, including the compliance to pollution norms.

POST CONSTRUCTION STAGE

- ⌚ The Concessionaire shall restore all haul roads constructed for transporting the material from the quarries to construction site to their original state.
- ⌚ The IC shall be entrusted the responsibility of reviewing the quarry site for the progress of implementation of Redevelopment Plan.
- ⌚ The redevelopment of exhaust quarry shall be the responsibility of the agency providing the permit to ensure the implementation of Redevelopment Plan.

For existing quarry managed directly by a third party / contractor from whom the concessionaire is sourcing the materials, the plan should contain the following:

Sl. No.	Item	Unit	Details	Remarks by IC, if any
1.	Name / identity of the location			
2.	Nearest project road Chainage.			
3.	Name of the owner			
4.	Area involved			
5.	Arrangement with the owner (agreement with the third party / contractor should be attached as an Annexure and should necessarily require the adaptation of good quarry management practices - a description of the requirements should be included)	Cum		
6.	Quantity of material to be withdrawn vis-a-vis the material available			
8.	Machinery & equipment to be used	Cum		
9.	Drainage plans			
10.	Top soil management			
11.	Description of the operating practices			
12.	Health facilities			
13.	Safety provisions made including fire protection systems and the availability of different personal protective equipment			
14.	Copy of the consents to operate from PCB, licences from Mining & Geology, Police & Fire dept should be attached as an Annexure.			
15.	Conditions laid down in the clearances / licenses and plans to ensure compliance			
16.	Monitoring plans for air quality			
17.	Information on whether or not the quarry will be closed under this project. If yes, the proposed closure & restoration plan.			
18.	Photograph of the quarry prior to commencing operations.			
19.	Sketch of the layout of the quarry			

Attach Photograph of Proposed Site, Location Map, consents, licenses and Agreement with land owner

REMARKS

Submitted

Signature
Name
Designation
Contractor

Checked

Signature
Name
Designation
Concessionaire

Approved

Signature
Name
Designation
Independent Consultant