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**INTERVIEW GUIDELINE OF TOTAL QUALITY MANAGEMENT IN
QUARRY INDUSTRY**

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Instruction

- Please answer to all the questions given below under Part-1, Part-2, Part-3 which is not optional.
- The answers you given are fully confidential and will not represent single ID
- The answers you given are fully confidential and will not present to a third-party

PART 1

Name of the Organization/Project (Optional):
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Name of the Respondent (Optional):
.....

Designation of the Respondent:
.....

Years of Experience:
.....

PART 2

GENERAL INFORMATION

2.1. Please give general information of the site based on the guide given below.

- a) Date of Commencement
- b) Location of the site (Village, Grama Niladari Division, Pradeshiya Shaba and District)

.....
 c) Objective of the project

.....
 d) Production categories of the quarry

.....
 e) Total number of employees at the quarry

2.2. Please give brief introduction of the Exploitation / Quarrying stage based on the guide given below.

a) License category of the quarry

1.) IML-A 2.) IML-B 3.) IML-C

b) Total area of the landhectare

c) Permitted area for the quarrying activities by hectare

1.) 01 Hec 2.) 02 Hec 3.) Less than one
 2.) 4.) More than Two

d) Total estimated rock volume of this permitted area.....

e) Applied mining method.....

f) Permitted blasting parameters Spacing Burden

g) Number of employees.....

h) Permitted quantity, present demand and supply of each category.

Production category	Present Demand	Currently achieving Qty (Present Supply)

PART 3

3.0 IDENTIFICATION OF KNOWLEDGE OF THE MANAGEMENT PRACTICES WHICH ARE COMMONLY USED

3.1. What is the general management practices you aware of?

- a) Total Quality Management
- b) Lean Management
- c) Five- “S” system
- d) Just In Time (JIT)
- e) Six Sigma
- f) Other (Mention what it is).....
- g) Nothing

3.2. Do you use any special management practice in your quarry?

Yes / NO

“If yes answer to question 3.3”

3.3. What is the management practices currently use in your site?

- a) Total Quality Management
- b) Lean Management
- c) Five- “S” system
- d) Just In Time (JIT)
- e) Six Sigma
- f) Other (Mention what it is).....
- g) Nothing

3.4.. Knowlegdge level of respondent

	1	2	3	4	5
Total Quality Management					
Lean Management					
Five -" S" System					
Just in Time					
Six-Sigma					

Rating system

Knowledge level	Given weight	Demonstration of the knowledge level
Excellent	5	<ul style="list-style-type: none"> • Management practice can be explained. • Particular system can be demonstrated to the other. • It can implement to the site alone. • Can be performed while motivating others. • Result oriented.
Very good	4	<ul style="list-style-type: none"> • Management practice can be explained • Particular system can be demonstrate to the other • It can implement to the site with the help of another professional. • Can be performed.
Good	3	<ul style="list-style-type: none"> • Management practice can be explained. • Particular system can be demonstrated to the other. • Not confident to implement it to the site along.
Medium	2	<ul style="list-style-type: none"> • Management practice can be explained
Bad	1	<ul style="list-style-type: none"> • Not confident for the above

4.0 TIME MANAGEMENT

4.1. What is the approved time give by license authority to operate your quarry?

4.2. What is the approved time period given by license authority to conduct blasting activities in your quarry?.....

4.3. What is the actual time your quarry operations generally started?

4.4. What is the actual time period blasting activity carry on?

4.5. Do your site adhere to strict time condition given by GSMB ? Yes / No

If "NOT"

4.5.1 Why you do so?

- a) To fulfill the monthly production target
- b) Given workforce is not enough to fill the target within given period?
- c) Management force you to do so
- d) You are not aware of license condition
- e) You do not worry about license conditions
- f) Any other

5.0 HUMAN AND MACHINE RESOURCES MANAGEMENT

5.1. Do you conduct toolbox meeting in your site, YES/NO

5.1.1. If "YES", how often you conduct tool box meetings?

- a. Every day
- b. once a week
- c. once in two week
- d. once a month
- e. only in a special requirement

5.1.2. What are the things you discuss at toolbox meetings?

- a. Day to day operations
- b. Safety
- c. Breakdowns
- d. welfare

5.2. What are the communication techniques you use to pass the management decisions to workers?

- a. Special meetings
- b. general toolbox meeting
- c. Signboard notices
- d. tell it to one by one
- f. any other method

5.3. Do you fulfill monthly production targets regularly? YES / NO

5.4. Do you have enough staff for your quarry operation? YES / NOT

5.5. Do you have enough machinery for your quarry operations? YES/ NO

5.6. Who do the resource allocation for the quarry operation?

- a. Owner b. Manager c. Mining Engineer
d. Supervisor/Forman e. Other.....

5.7. Are you doing any assessment or calculation before resource allocation?
YES/NO

5.8. Are there any standard procedure to allocate new resource to quarry? YES/NO

5.8.1. What are they?
.....

5.9. What are the difficulties face when you request resources for quarry?

- a. Management not allowed even though it is tally with the production requirement

b. Underutilization of people and machineries
c. Difficult to find skilled or good resources
d. Any other

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6.1. Do you keep personal record files of your workers? YES / NO

6.2. Do you keep running chart of machineries and vehicles in your site? YES / NO

6.3. Do you keep maintenance record of machineries? YES / NO

6.4. Do you keep Drilling record in your files? YES / NO

6.5. Do you keep Blasting Records in your files? YES / No

6.6. Do you calculate the drilling and blasting requirement according to the project requirement? YES/NO

6.7. Do you consider about the monthly production requirement when you ordering the explosives? YES / NO

6.8. Do you maintain monthly production records? YES / NO

6.9. Do you maintain a proper accident record book in your site? YES / NO

7.0 ENVIRONMENT AND SAFETY CONCERNS

7.1. What are the safety equipment's you have provided to your quarry workers?

- a. Safety helmets b. Safety boots c. Safety shoes
d. ear guards e. Dust Mask f. eye protector
g. Safety Belts

7.2. Are workers wear the provided PPEs regularly? YES/NO

7.2.1. If "NOT", Do you have any standard methods or rule to direct workers to follow wearing PPEs? YES / NO

7.2.1.1. If "YES" what are they?
.....

7.3. Do you have ever conduct any safety awareness program in your quarry site with a participation of a safety professional? YES / NO

7.4. How often you conduct awareness program in your quarry?

- a. Every day b. once a week c. once in two week
d. once a month e. only in a special requirement

7.5. Have you installed fire extinguishers in your site? YES / NO

7.6. Have you ever arrange firefighting training program in your site? YES / NO

7.7. What are the precautions taken to minimize the soil erosion?

- a. Sedimentation tanks b. Silt trap c. Drainage network
d. Planting e. Other

7.8. Do you believe that, the precautions you have taken are enough? YES / NO

7.8.1. If "NOT" tell why is that?.....

7.9. Do you have a pre-planned proper environment rehabilitation plan in your site? YES/NO

7.10. Do you conduct rehabilitation parallel to the quarry operations? YES/NO

7.11. Do you maintain a proper drainage system to flow down the rain water? YES/NO

8.0 MATERIAL QUALITY MANAGEMENT

8.1. Do you maintain quality standard of your end product? YES / NO

8.2. Do you conduct material testing to maintain product quality? YES / NO

8.2.1 If “ YES” What are the testing you conduct?

- a. LAAV b. AIV c. Tri axial test
d. Sieve analysis e. Other

8.3. How often you conduct material testing?

- a. Every day b. once a week
c. once in two week d. once a month
e. only in a special requirement e. never do

8.4. Do you maintain a material testing record file in your site? YES / NO

8.5. What will you do to the removing top soil layer?

- a. Use for site road preparation b. it is piling in a separate place
c. some amount add with quarry product d. use for rehabilitation
e. out sales f. Pile close to the drilling surface
g. any other

8.6. Are there any Scrap production in your site? YES / NO

8.7. What are the actions taken to remove the scrap product from the site?

- a. mix with end product b. Do not use for any thing
c. do out sales d. Other.....

9.0 BREAKDOWN AND REPAIRING MANAGEMENT

9.1. Do your company have a main workshop? YES / NO

9.2. Do your company have a site workshop in your site? YES/ NO

If “YES”

9.2.1. Do you have enough tools for running repairs? YES/ NO

9.2.2. Do you have enough technical work forces for repairs? YES/ NO

If “NOT”

9.2.3. What will you do when a breakdown took place?

a. Weight for mechanical team come from main workshop

b. Hire a mechanic from outside temporally

9.3. What is the general procurement practice when a break down took place?

a. Keeping general all running spare parts in your stock

b. Buying required parts only at the break downs.

c. Keep some and buy some

9.4. Have you ever face for an operation delay due to stocks failure? YES/ NO

If "YES"

9.4.1. How often you face for this matter?

a. always b. Sometimes c. rarely

9.5. What is the maximum period you have wait for parts?

a. one day b. two day c. Three days

d. one week e. two week

f. more than two week



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9.6. What is the maximum period you have wait for the arrival of main workshop mechanical team/hired person from outside?

a. one day b. two day c. Three days

d. one week e. two week

f. more than two week