

Ref. No. OMDC/BH/2024-25/240521

Date: 15/05/2024

Sub:To conduct scientific study for controlled blasting as per the regulation 164(1-b)of MMR 1961 at Bagiaburu iron mines of OMDC near Barbil, District - Keonjhar (Odisha)

You are requested to submit budgetary offer (excluding GST) for conducting scientific study for controlled blasting as per the regulation 164(1-B) of MMR 1961 at Bagiaburu iron mines of OMDC near Barbil, District - Keonjhar (Odisha). The detailed scope of work, period of study, date of commencement, payment terms, and last date of submission of budgetary offer, validity of offer, acceptance and obligation of OMDC are placed below:

1. Scope of work:-Design of blasting parameter such as

1. Depth of hole as per benches/method of working.
2. Determination of Burden & Spacing.
3. Delay between rows & measurement of delay in successive shots.
4. Quantity of Explosive charge per hole.
5. Length of stemming column.
6. Characteristic and types of explosives being used.
7. Charge per delay.
8. Charge per blast.
9. Type of drilling and blasting method including controlled blasting so warranted.
10. Effect of blast vibration on dump stability or Pit stability, Monitor the impact of ground Vibration on OB dumps.
11. Monitor Blast induced ground vibration & air over pressure.
12. Suggest control measures to minimized ground vibration & air over pressure within permissible limit.
13. Monitor fly-rock distance and suggest control measures.
14. Suggest proper blast design with safe charge per delay for better productivity of the machine and safety of nearby structures.
15. Presentation of Scientific study report shall be done with OMDC authorities and DGMS authorities.

2. Work Elements:-

- a) Conducting blasts by using slurry explosive (Nitrate mixture) with various blast patterns.
- b) Monitoring post blast parameters like ground vibrations, air over pressure and fly rock by state of the art measuring instruments.
- c) Analysis of vibration data and determination of vibration attenuation model.
- d) Assessment of effect of ground vibration, air over pressure & fly rock on the surrounding sensitive structures like dwellings & OB dumps.
- e) Design of safe and productive blast pattern keeping in the view of ground vibrations, fragmentation & Fly rock.

- f) To develop a blast vibration predictor for Bagiaburu Iron Mines to arrive at the Maximum Charge Per Delay (MCPD) and per round for limiting the Peak Particle Velocity (PPV) of blast induced ground vibration within permissible limit for considering the nearby plants and labour hutments.
- g) Submission of final report.
- h) The final report will provide safe blast design recommendation specific to Bagiaburu Iron Mines M/s. Orissa Minerals Company Limited (OMDC LTD).
- i) Obtaining/ facilitating permission from DGMS for controlled blasting.
- j) No part of the report shall contradict any provision made under the mine act 1952, explosion rule, regulation or orders made there under.

3. Period of study:

The period of study within 03 (three) months from 30% advance receiving date and it is required to conduct minimum 20 (Twenty) trial blasting rounds to evaluate performance of the blast.

4 Date of Commencement:

Commence the study immediately after releasing of 30 % advance.

5. Payment Terms: The payment shall be made in instalments as per following schedule based on progress of project work.

30% of cost: As advance payment on your acceptance to conduct the aforesaid work.

50% of cost: After completion of work with submission of final report.

20% of cost: After acceptance of report by the Directorate General of Mines Safety, Ministry of Labour and Employment, Govt. of India.

6. Last date of submission of budgetary offer:

You are requested to submit your budgetary offer in sealed envelope by speed post or protected e-mail address: bh.omdc@birdgroup.co.in to The Business Head OMDC.Ltd., P.O. Thakurani, Via – Barbil, Dist.Keonjar(Odisha) Pin -758035 on or before Dated 29.05.2024 at 3.30 P.M. The budgetary offer will be open 4.00 P.M. Dated 29.05.2024. All Institutions representative may be allowed to present during the time of opening of budgetary offer. The Institution submits also Bank details with budgetary offer.

7. Validity of offer: 90 days from the submission of offer.

8. Acceptance: Lowest offered price (excluding GST) will be accepted for the award of work.

9. Obligation of OMDC: OMDC will extend co-operation, provide pertinent data, required manpower for setting up instruments during field investigation, local transport accommodation and local hospitality to the visiting team as and when required.

9. Contact no. For any query: 1. Shri B.B. Gamango, Business Head, OMDCo.Ltd., Mobile no.9491032209, e-mail address: bh.omdc@birdgroup.co.in 2. Mr. Rakesh Kumar, DGM(Mines) Mobile No.9439308905 e-mail address: omd.mines@yahoo.in.

Note: - OMDC reserves the right to cancel/postpone the said proposal without bearing any liability whatsoever.

Sd/-

BUSINESS HEAD