

कोल इण्डिया लिमिटेड

(महाराष्ट्र कंपनी)

(भारत सरकार उपक्रम)

सामग्री प्रबंधन विभाग

'कोल भवन', प्रीमिसेस नं.04- एमएआर,

प्लॉट सं.-एएफ-III, एक्शन एरिया-1 ए, न्यूटाउन,

राजरहाट, कोलकाता-700 156,

वेबसाइट: www.coalindia.in

सी आई एन सं. L23109WB1973GOI028844

ईमेल: edmc.cil@coalindia.in



5 DECADES OF UNEARTHING ENERGY

COAL INDIA LIMITED

(A Maharatna Company)

(A Govt. of India Undertaking)

Materials Management Division,

'Coal Bhawan', Premises No.04-MAR,

Plot No-AF-III, Action Area -1A,

NewTown, Rajarhat, Kolkata – 700 156

Website: www.coalindia.in

CIN No.L23109WB1973GOI028844

E mail: edmc.cil@coalindia.in

Running Contract No. CIL/C2D/Bulk Explosives/2026-27/AKS/324

दिनांक- 29.12.2025

M/s. AKS Expo Chem Private Limited,
C-5/57, Vasant Kunj,
New Delhi - 110070,
Delhi, India.

email: aksexpochem@gmail.com

महोदय,

विषय - RC for Supply of Bulk Explosives to CIL Subsidiaries for the period 2026-27

संदर्भ - 1. Tender no. CIL/C2D/Bulk Explosives/2025-27/399 Dtd: 21.07.2025
2. Your offer no. AKS / HO / 25-26 / CIL Tender / 071 , DATED
04.08.2025and subsequent correspondence.

With reference to the above, we, for and on behalf of **ECL & BCCL** (Subsidiary Companies) of Coal India Limited are pleased to enter into a **Running Contract (RC)** with you for supply of **Bulk Explosives** to the Subsidiary Companies of Coal India Limited at the following prices, terms and conditions:-

1. Duration of Contract

The RC shall be valid for 2 (two) years effective from 01.01.2026 for the allocations to be issued on 01.01.2026 onwards for supplies to be made on 02.01.2026 onwards. The RC will remain valid till 31.12.2027.

CIL reserves the right to extend the duration of the contract, if required, with the consent of RC holder at same terms and conditions. CIL also reserves the right to rescind / short close the contract in case of breach of terms and conditions of the contract by you.

2. Item Description, Quantity, Unit Price & Subsidiary wise allocation

The item description, quantity, subsidiary-wise allocation and unit prices are mentioned in **Annexure-1**. The subsidiary wise prices indicated are on FOR destination basis for supply down the hole at mine site, inclusive of freight, insurance and all other charges, but excluding GST. The prices mentioned for a Subsidiary shall be valid for supplies to all mines of that Subsidiary.

The monthly allocation will be placed by the respective Subsidiary Companies within their share of RC quantity as indicated in **Annexure-1**. Supplies would be strictly governed by the actual requirement of the areas / mines / collieries / units and as per the allocation / order to be placed by the subsidiary companies in every month against their specific approved indents only.

3. Quantity Variation

[Signature]

[Signature]

[Signature]

CIL/subsidiaries reserve the right to increase/decrease the Year wise ordered/allocated quantity to the extent of (+/-) 40% (Forty percent) of the RC quantity keeping in view the actual need of subsidiary companies. RC holder shall be required to accept the order for such higher/lower quantity at the same terms, conditions and price during the validity of the running contract. The unused quantity of 1st year will be lapsed on the expiry of first year period.

Note: Since CIL / subsidiaries reserve the right to increase the ordered / allocated quantity to the extent of (+) 40% (Forty percent) of the RC quantity, the RC holders shall ensure PESO license capacity to meet 140% of their RC quantity during the currency of the RC (If not already available).

4. Security Deposit

- a. You are required to deposit Security Deposit Bank Guarantee (SDBG) for 5% of the average value of both the years of contract (including GST), which shall be valid for 27 months from the date of issue of RC in the prescribed format (**Annexure-2**).

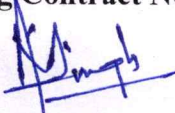
The average value of contract is arrived as follows:

$$\{(1^{\text{st}} \text{ year quantity} + 2^{\text{nd}} \text{ year quantity}) \times \text{RC price on the date of issue of RC}\} / 2$$

You may submit either a single SDBG covering all subsidiaries of CIL or submit SDBGs for different Subsidiaries based on subsidiary-wise allocated value. The SDBG amount – Subsidiary-wise and in total, is indicated in **Annexure-1**. All the SDBGs, if submitted subsidiary-wise, are to be submitted simultaneously.

- b. You shall submit the SDBG(s) within 15 days from the date of issue of RC.
- c. In case you fail to deposit the security money within stipulated time, payment of your bills shall be released after deduction of 5% of the bill amount till the RC holder submits the Security Deposit Bank Guarantee (SDBG) and the same is accepted by CIL/ subsidiaries. The deducted amount will be held by the respective Subsidiary as 'Security Deposit' and will not be used for adjustment against any other recovery / claim amount. This 5% 'Security Deposit' amount will be released / recovered from, only after specific instruction from the RC issuing authority.
- d. After successful completion of the RC, the respective Nodal Officer for Explosives (GM of the respective subsidiary company in charge of production / explosives) shall issue 'No Claim Certificate' after making the necessary deductions / recoveries. However, recoveries from 'Security Deposit' withheld amount is to be made only after specific instruction from CIL. It shall be clearly mentioned in the 'No Claim Certificate' issued by the Nodal Officer that *"All the necessary deductions / penalties have been recovered as per terms and conditions of this RC and there is no claim pending against the RC Holder."*

After receipt of 'No Claim Certificate' from Subsidiaries, you will be asked to submit Subsidiary-wise 'No Claim Certificate' as per format provided in **Annexure-3**. In case 'No Claim Certificate' is received only from some Subsidiaries, you will be asked to submit 'No Claim Certificate' for those specific Subsidiaries.



In case you have submitted Subsidiary-wise SDBGs, the Subsidiary specific SDBG shall be released within 30 days of receipt of "No Claim Certificate" from you for that Subsidiary. In case a single SDBG had been submitted, it shall be released within 30 days of receipt of "No Claim Certificate" from you against all Subsidiaries for which RCs have been concluded.

For contractual failure, the Security Deposit shall be forfeited.

- e. Security Deposit will not fetch any interest.
- f. The SDBG shall be issued by an RBI scheduled Bank in paper form (stamp paper) as well as issued under "Structured Financial Messaging System" in MT760 format. Issuing Bank should send the underlying confirmation message in IFN760COV or IFN767COV message type for getting the BG advised through our bank. Also issuing bank should mention "CIL0066312" in field no. "7037" of IFN760COV or IFN767COV. The message will be sent to the beneficiary bank through SFMS and the date of SFMS confirmation to CIL shall be deemed to be the date of receipt of the BG. The details of beneficiary bank for issue of BG through SFMS platform is furnished below:

Name of the Bank: - ICICI Bank

Branch: - Rasoi Court

IFSC: - ICIC0000006

A/c No: - 000651000038

Customer ID: 066312

Original copy of bank guarantee(s) are to be sent by the issuing bank to MM Department, CIL.

However, if the original copy of the BG is handed over to you by the Issuing bank, the issuing bank shall send an e-mail from their corporate e-mail id (on the date of handing over) directly to corporate e-mail id of the order placing authority that they have handed over the original copy of the BG to the supplier for handing over to the beneficiary, attaching a scanned copy of the SDBG. In such case, you shall also submit a copy of the SFMS message as sent by the issuing bank branch along with the original Bank Guarantee.

- g. The SDBG(s) shall be irrevocable and unconditional and CIL shall have the powers to invoke it notwithstanding any dispute or difference between supplier and CIL pending before the court, tribunal, arbitrator or any other authority.

5. Price and Price Variation

- a. The RC Prices for the assigned Subsidiaries are indicated in **Annexure-1**.
- b. The RC price for Bulk Explosives shall be revised on monthly basis based on the price variation formula indicated below:

$$Pr = Po (0.10 + 0.10 \times CIr/CIo + 0.60 \times ANr/ANo + 0.20 \times HSDr/HSDo)$$

where,

Pr = Revised price as on the date of price revision.

Po = Base price as on base date.

CIr = All India Consumer Price Index (AICPI) for industrial workers [All India (2)] on a date three (3) months prior to the date of price revision, as available on RBI website (www.rbi.org.in).

Clo = All India Consumer Price Index for industrial workers [All India (2)] on a date three (3) months prior to the base date, as available on RBI website (www.rbi.org.in).

ANr = Price of Ammonium Nitrate on a date 5 days prior to the date of price revision.

ANo = Price of Ammonium Nitrate (AN), as on 5 days prior to base date.

The price of AN shall be simple average price of the ex-works AN (100% Melt) price of Rashtriya Chemicals & Fertilizers Limited (RCF) (Rs/MT) & Gujarat Narmada Valley Fertilizers & Chemicals Ltd (GNFC) (Rs/MT) valid on the particular dates (base date & revision date).

HSDr = Retail Selling Price of Diesel in Kolkata, as available on the website of Petroleum Planning & Analysis Cell, MoPNG (www.ppac.gov.in), on 5 days prior to the date of price revision.

HSDo = Retail Selling Price of Diesel in Kolkata, as available on the website of Petroleum Planning & Analysis Cell, MoPNG (www.ppac.gov.in), as on 5 days prior to base date.

- c. The 1st Price Revision shall take place on 01.02.2026, and the Base Price for this revision shall be the RC price and the Base Date shall be date of the Reverse Auction, which is 15.09.2025.
- d. The revised price/indices of each month shall be the base price/indices for next monthly revision.
- e. For 1st Price Revision, the ANo and HSDo shall be as on date of Reverse Auction. For subsequent price revisions, the ANo and HSDo shall be as on date 5 days prior to Base Date.
- f. The Price Revision shall not have any ceiling.
- g. RC prices w.e.f. start date of RC till the first revision and also in between subsequent revisions shall remain firm.

6. Goods & Services Tax (GST)

- a. The RC Price indicated in **Annexure-1** shall be on FOR destination basis down the hole at any mine site(s) in the assigned subsidiary(s), inclusive of freight, insurance and all other charges but excluding GST which will be payable as legally applicable at the time of supply.
- b. The Tax Invoice raised by you must be in compliance of relevant GST Acts, rules & notifications made thereunder and should bear the GSTIN of respective areas of respective subsidiary. The rate and amount of CGST & SGST or IGST related to supply of Bulk Explosives shall be shown separately in tax invoice.



- c. The CGST & SGST or IGST, as applicable at the time of supply, shall be paid extra against submission of proper Tax invoice, as referred above, by the supplier so that the respective subsidiary could be able to avail Input Tax Credit of such CGST & SGST or IGST reflected in the invoice.
- d. If the ITC claimed is disallowed due to failure on your part in incorporating the tax invoice issued to subsidiary company in its relevant returns under GST, payment of CGST & SGST or IGST shown in tax invoice to the tax authorities, issue of proper tax invoice or any other reason whatsoever, the applicable GST paid based on such Tax invoice shall be recovered by the respective Subsidiary Company from your current bills or any other dues.
- e. In the event of any additional tax liability accruing on you due to classification issue or for any other reason, the liability of subsidiary company shall be restricted to the amount of GST charged on the original tax invoice issued by you.
- f. In addition to above, if any other tax/duties are levied over supply of such item in future, it shall be paid extra.
- g. E-way Bill: The e-way bill, if any, required in connection with supply of goods or services shall be arranged by you.
- h. Where a tax invoice has been issued for supply of explosives and the taxable value or tax charged in that tax invoice is found to exceed the taxable value or tax payable in respect of such supply due to Price revision, as the registered person who has supplied the Bulk Explosives, you shall issue a credit note to the recipient containing such particulars as may be prescribed.
- i. Where a tax invoice has been issued for supply of explosives and the taxable value or tax charged in that tax invoice is found to be less the taxable value or tax payable in respect of such supply due to Price Revision, as the registered person who has supplied the Bulk Explosives, you shall issue a debit note to the recipient containing such particulars as may be prescribed.

7. Price Fall Clause

7.1 If you reduces its price or sells or even offers to sell the contracted goods or services following conditions of sale similar to those of the contract, at a price lower than the contract price, to any person or organization during the currency of the contract, the contract price will be automatically reduced with effect from that date for all the subsequent supplies under the contract and the contract be amended accordingly.

Note:

- (i) The currency of contract will mean the period till completion of supply.
- (ii) It shall be your responsibility to inform the purchaser of offer to supply / supply of the ordered / similar item(s) at a lower rate to any Organization / Ministry / Department of the Govt. of India or Coal India Ltd. and/or its Subsidiaries or other PSU or any other private organization during the currency of the contract.
- (iii) You shall submit a certificate along with the bill(s) that you have not offered to



supply / supplied the ordered / similar item(s) at a lower rate to any Organization / Ministry / Department of the Govt. of India or Coal India Ltd. and/or its Subsidiaries or other PSU or any other private organization.

7.2 If the price of a product is reduced for any supplier due to invocation of 'Price Fall clause' or any other reason in a Subsidiary, the same lower price shall also be applicable for the other suppliers who are having parallel RCs against the same tender in that particular Subsidiary. If any parallel RC holder does not accept the lower price, CIL shall have the right to delete the item from the scope of RC of such firm and procure the same from other existing supplier / Reserve RC holders.

7.3 The price fall clause will be applicable only if supplies are made from the same manufacturing plant to other private organizations or Govt. Organizations or PSUs (excluding CIL and its Subsidiaries).

7.4 The provisions of price fall clause will not apply to the following:

- i. Export/Deemed Export by the supplier;
- ii. Sale of goods or services as original equipment prices lower than the price charged for normal replacement;
- iii. Sale of goods such as drugs, which have expiry date;
- iv. Sale of goods or services at lower price on or after the date of completion of sale/placement of order of goods or services by the authority concerned, under the existing or previous Rate Contracts as also under any previous contracts entered into with the Central or State Government Departments including new undertakings (excluding joint sector companies and or private parties) and bodies.

8. Price Certificate:

You have to submit a Price Certificate in all your invoices in the following format for all Subsidiaries:

"We certify that we have not offered to supply / supplied the ordered / similar item at a lower rate to any private organization or Govt. Organization or PSU (excluding CIL and its Subsidiaries) from the same manufacturing unit during the currency of the contract. It will be our responsibility to inform the Purchaser in case items same or similar to the supplied item have been offered / supplied to any private organization or Govt. Organization or PSU (excluding CIL and its Subsidiaries) at a lower price from the same manufacturing unit during the currency of the contract."

9. Payment Terms:

100% payment will be made within 21 days on receipt and acceptance of the materials at site or submission of bill, whichever is later. The payment shall be made as per the Bank details submitted by you in your offer, which are enclosed as **Annexure-4**.

10. Paying Authority:

General Manager (Finance) of the Consignee Subsidiary Company or their authorized representative.

11. Delivery Schedule:

- a. Year wise RC quantity for the allocated Subsidiaries has been indicated in **Annexure-1**.

The tentative quarterly allocation indicating the monthly breakup shall be issued by subsidiary companies to RC holders in advance, latest by the last week of preceding quarter for preparedness of the supplier.

Monthly allocation shall be issued by subsidiary companies normally by the last week of preceding month.

The above allocations (Quarterly & Monthly) shall be communicated to all suppliers through email/fax/letter with copy marked to CIL HQ.

Note: The requirement of Bulk Explosives does not remain uniform throughout the year for various operational reasons, climatic and geo-mining conditions. During the peak production period [Usually Quarter I, III & IV of FY], the requirement for explosives by the subsidiaries may be more than the non-peak production period [Usually Quarter II of FY]. Hence, the allocation and requisition of quantity by the subsidiaries shall be made accordingly in compliance with the provision of the RC for quantities.

- b. The total monthly requirement of the subsidiary company shall be distributed amongst all RC holders in the same ratio in which the total RC quantity of the subsidiary company has been distributed amongst different RC holders.
- c. The supplies of explosives is to be made by you against formal written (letter/e-mail/fax) daily requisition only issued by GM (Production) / In-charge (Explosives) of respective subsidiary or their authorized representatives. GM (Production) / In-charge (Explosives) of respective subsidiary may authorize officers at Area / Unit level for smooth operation of daily requisition mechanism.

The day-wise requisition, supply and consumption data shall be maintained in a register under Blasting Officer of each Mine. Each entry (BMD Vehicle-wise) shall be countersigned by Supervisor / Operator accompanying the BMD and Blasting Officer of the Mine.

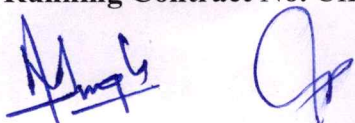
The supplier is liable to supply quantity as per the daily requisition issued by the subsidiary companies, failing which it will be considered as non-supply for evaluation of Delivery Performance.

The illustrations of daily record keeping are as follows-

Fulfilling cases (MT):

In case the daily supplied quantity is equal to the daily requisition quantity and the supplied quantity is either fully or partially consumed, then the requisition quantity and supply quantity shall remain unchanged as illustrated below-

Case	Requisition	Supply	Consumption	Revised Requisition	Revised Supply	Delivery Performance
I	10	10	10	10	10	100%
II	10	10	8	10	10	100%



Short Supply Cases (MT):

In case the daily supplied quantity is less than the daily requisition quantity and the supplied quantity is either fully or partially consumed, then the requisition quantity and supply quantity shall remain unchanged as illustrated below-

Case	Requisition	Supply	Consumption	Revised Requisition	Revised Supply	Delivery Performance
I	10	8	8	10	8	80%
II	10	8	7	10	8	80%

Excess Supply Cases (MT):

In case the daily supplied quantity is more than the daily requisition quantity and the excess supplied quantity is either fully or partially consumed, then the requisition quantity and supply quantity shall be revised as illustrated below-

Case	Requisition	Supply	Consumption	Revised Requisition	Revised Supply	Delivery Performance
I	10	15	10	10	10	100%
II	10	15	15	15	15	100%
III	10	15	12	12	12	100%

- d. It would be mandatory for the RC holder to maintain 90% delivery performance to be evaluated on two monthly basis at each of the consignee subsidiary company. The two monthly delivery performance shall be evaluated by each consignee subsidiary company separately on the basis of daily requisitions issued in a particular 2 monthly period and quantity supplied against the same as illustrated under Clause (g) below.
- e. In case the two monthly delivery performance falls below 90% at any of the subsidiary company, as per report, duly signed by representative of subsidiary company and RC holder, for every percentage reduction / drop (rounded off to nearest two decimal points) in delivery performance from 90%, equal percentage of the non-supply value (without GST) of that item in that two monthly period shall be deducted from the bills of the supplier by the concerned subsidiary company. This will be applicable for shortfall in delivery performance from 90% upto 50%. Thus, there will be maximum 40% penalty on the non-supply value towards non-achievement of delivery performance
- f. In case the two monthly delivery performance falls below 50%, maximum monetary penalty of 40% of the non-supply value (without GST) in that two monthly period will be imposed apart from reserving CIL's right to rescind/short close the RC for the subsequent period in the subsidiary where the shortfall occurs, and the balance RC quantity thereof may be purchased from any of the existing RC holders or empaneled "Reserve RC holders".

- g. Calculation of monetary penalty in terms of clauses-(e) and (f) above, for different situations for "Bulk Explosives", is illustrated below:

Situation	Sum of daily requisitions (revised, if applicable) for the 2 month period	Sum of daily Actual supplied (revised, if applicable) quantity**	% of actual supply	% deduction of 90% delivery performance (limited to 40%)	Non-Supply quantity	Non-supply value (in Rs. Lakh) @Rs. 60,000 /MT	Value of penalty (Rs. Lakh)
(A)	(B)	(C)	(D)	If $D < 90$ then $E = \min. \text{ of } 40 \text{ or } (90 - D)$, else $E = 0$	$(F = B - C)$	$(G = F \times 60,000)$	$(H = E \times G / 100)$
1	7000 MT	5800 MT	82.86	7.14	1200 MT	720	51.41
2	7000 MT	5460 MT	78	12	1540 MT	924	110.88
3	7000 MT	2800 MT	40	40	3000 MT	1,800	720.00
4	7000 MT	0 MT	0	40	7000 MT	4,200	1,680.00

Note: Actual Supplied Quantity is different from Consumption Quantity. The Actual Supply Quantity needs to be measured by the Subsidiaries to arrive at the true Delivery Performance. In cases where Requisition Quantity and Supplied Quantity are revised, as illustrated above, the same should be reflected in Column B and C.

** Actual Supply quantity (on daily basis) will be arrived by deduction of tare weight of BMD vehicle and weight of water tank in full capacity from gross weight of BMD vehicle taken at the weigh bridge of the receiving mine.

The tare weight and weight of water tank in full capacity in BMD vehicle of each BMD vehicle will be decided by an Area level Committee constituted with the approval of Area General Manager comprising Area Nodal Officer (Explosives), Area E&M In-charge (or his representative), Area Finance Manager (or his representative) and Representative of Vendor/Supplier by examining the RTO Registration Certificate and PESO approval of BMD Vehicle. Once the above is decided, it will remain same for the entire RC period. Tare weight and Water Capacity of BMD Vehicle: Once a tare weight and Water capacity of a particular BMD is assessed by a committee of any area, this should be applicable in all areas of subsidiary. However, in the intervening period, if there is any change in the RTO Registration Certificate and/or PESO Certificate of BMD Vehicle, then upon the receipt of written communication from the supplier/vendor, the above procedure shall be repeated.

- h. The delivery performance report shall be duly signed by the representatives of the RC holders and shall be intimated to CIL by the subsidiaries.

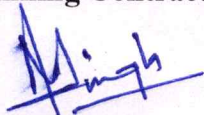
For signing of the delivery performance report, the RC holder will be intimated by letter/fax/e-mail to sign within 3 (three) days from the date of intimation by the subsidiary. If the RC holder / authorized representative fails to sign the said delivery performance report within the stipulated time, it will be deemed that the RC holder has accepted the same and no further communication from the RC holder will be entertained by the subsidiary Co. /CIL in this regard.

12. Risk Purchase

- a. In the event of failure of the supplier to deliver or dispatch the stores within the stipulated date/period of the supply order or in the event of breach of any of the terms and conditions mentioned in the supply order/ contract, Coal India Ltd. or its Subsidiary Companies shall have the right to purchase the stores from elsewhere after due notice to the defaulting supplier at the risk and cost of the defaulting supplier. In the event of failure of the supplier as detailed above, the cost as per risk purchase exercise may be recovered from the Earnest Money Deposit/ Security Deposit/ Performance Security of the supplier and/or bills submitted by the supplier against the same contract or any other contract pending in the same Subsidiary Co. and/or in any other Subsidiary Companies/CIL.
- b. Risk purchase action may be initiated by subsidiary companies under any of the following conditions:
 1. When the supplier fails to deliver the materials even after extending the delivery period.
 2. When the supplier fails to respond to purchaser's request for supply of the materials and fails to provide any genuine and bonafide reason for the delay in supply.
 3. When the supplier breaches any of the terms and conditions of the supply order/ contract and as a result fails to execute the order satisfactorily.

13. Supply of Extra Quantity:

- a. In case of failure of a particular RC holder to supply the Bulk Explosives, the unsupplied/ balance order quantity may be cancelled/reduced from the contract of the defaulting supplier after giving due notice to him and the cancelled order quantity of the defaulting supplier shall be re-distributed amongst other suppliers, including Reserve RC holders, as the case may be, within that Subsidiary Company. Supply of extra quantity has to be preferably on ex-stock basis.
- b. The opportunity to supply extra quantity on ex-stock basis shall be given first to existing RC holders and if the requirement is not met, then to Reserve RC holders. The distribution of extra quantity amongst the RC holders/ Reserve RC holders may be done preferably in an equitable manner, but supplies shall not being delayed on this ground. Subsidiaries shall have the liberty to obtain extra supplies first from any/all of the RC holders and then from any/all the Reserve RC holders.
- c. In case requirement of a subsidiary company exceeds the 140% of RC quantity and Regular RC holders are not willing to supply extra quantity, subsidiary company may allocate additional quantity on Reserve RC holder.



- d. The subsidiaries shall give at least 15 days' time to Reserve RC holders to commence supplies. Allocation should be issued accordingly.

14. Consignee:

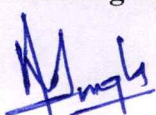
GM of the respective subsidiary company who is in charge of production / explosive requirement or their authorized representatives at the project / mine.

15. Delivery and Documents

- a. The materials should be supplied duly secured.
- b. Each invoice should quote reference to the
- RC number with date, and subsequent amendments, if any, for change in prices, extension of delivery dates, etc.
 - Requisition (letter/e-mail/fax) reference no. and date.
 - Vendor Code and Material Code for SAP/ERP of CIL (Details of which have been mentioned in **Annexure-1**)
 - Manufacturer's Batch no. of Explosives (if applicable)
- c. Invoice relating to the RC should not include supplies made against any other supply order or orders.
- d. Along with each invoice following certificates shall be submitted:-
- i. Price Fall certificate as per clause no 7.1 Note iii.
 - ii. Price Certificate as per clause 8.
- e. Supply of explosives against the RC shall be accompanied by self-attested copy of valid PESO license and valid DGMS certificate, wherever applicable.
- f. The following certificate, whichever is applicable, should be given on each invoice:
- i. In case of delivery by Coal India Ltd.'s vans (BMD Vehicles):
"Certified that the materials mentioned in this bill have been dispatched to the consignee by Road in Van number and on date as mentioned above. The materials have been acknowledged by the consignee/his representative and the acknowledgement memo dated as above is attached. Other claims are as per your purchase order and schedule for the same."
 - ii. In case of delivery by suppliers' vans (BMD Vehicles):
"Certified that the materials mentioned in this bill have been dispatched to the consignee by Road in Van number and on date as mentioned above. The memo acknowledging the materials and dated as above, is attached. Other claims are as per your purchase order and schedule for the same."

The Vouchers and acknowledgement memos mentioned in the certificate should be attached with each invoice.

- g. CIL/Subsidiary companies reserve the right to physically and by any other method (as applicable) verify the documents, infrastructure and transport facilities.



16. Transportation

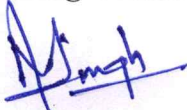
You have to provide transportation of the Goods in PESO approved BMD Vehicles on FOR Destination basis ensuring compliance of all relevant statutory requirements under Mines Act 1952, Mines Rule 1955, CMR 2017 and related Laws and Bye laws, Orders & Circulars published by the Govt. of India.

17. Technical Service:

- 17.1 Whenever a manufacturer supplies explosives for the first time to a subsidiary, CMPDIL test and trial report of that item shall be presented to the CGM/GM (Production / in-charge of Explosives) of the Subsidiary Co. before the explosive is used in any colliery and the manufacturer's representative shall be available for advice.
- 17.2 Sufficient technical representatives (who are minimum Diploma holders in Mining) should be posted to ensure proper supply as per requisition, to monitor blasting performance & for early resolution of technical matters at each Project / Area of Subsidiary. However, at least two technical representative (who is minimum a Diploma in Mining) shall mandatorily be posted in each subsidiary. However, in case of SECL, in view of geographical distances and consumption of explosives, three separate representatives shall be posted.

The details of such persons are to be provided by the supplier to subsidiary with copy to CIL at the time of start of the supply. Further, any change of persons made during the RC period are to be intimated accordingly.

- 17.3 The technical representative of a supplier shall report to user within 48 hours of call (letter/fax/mail), including calls regarding 17.4 and 17.5 below, and failure to reach the caller within 48 hours shall attract a penalty of Rs. 50,000.00 per call / service. Calls (letters/fax/mail) shall also be endorsed to CGM/GM in charge of the explosives at subsidiary headquarter level who will finally decide on imposition of penalty. Failure to provide technical services as per clauses 17.6 to 17.7 mentioned below will also attract a penalty of Rs 50,000/- in each case.
- 17.4 The manufacturer shall give technical expertise in designing the pattern of blast holes to improve the blasting efficiency depending upon the requisition by the subsidiary.
- 17.5 Whenever there is a special problem like vibration and noise near any structure or dwelling and deflagration of explosives, technical representative of the manufacturer along with necessary equipment shall immediately attend to them and solve the problem jointly with the mine representative.
- 17.6 Half yearly workshop/training shall be conducted by the suppliers to explain the technical details of their item as well as to make the people understand and implement the uses of the explosives for safe and efficient operation and for improvement of blasting efficiency.
A report covering the training imparted along with the details of participants attended and event photographs to be submitted in soft copy to concerned subsidiary companies along with copy to CIL.
- 17.7 Quarterly technical service report in soft copy (through email) shall be submitted by the supplier to the concerned subsidiary companies along with copy to CIL. Standard technical service report with details to be covered is attached as **Annexure-5**.



18. Technical Specifications & Random Test Parameters:

Details of the technical specifications of the offered item are listed in **Annexure-6**.

19. Testing Facilities:

You have to ensure that essential equipment required for testing of explosives as detailed below are possessed and maintained by you for the required purpose:

Sl.	Particulars
1	Facility for testing of raw materials: i. Testing of Oxidizer ii. Testing of Fuels
2	Facility for testing of finished products: i. Density ii. Viscosity
3	Facility for temperature sensitivity test and impact sensitivity test.

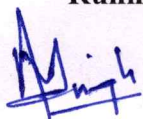
The details of equipment required for the above are listed below:

Sl.	Particulars
1	PH Meter
2	Chemical Balance
3	Kitchen Balance
4	Viscometer
5	Water Bath
6	Heater
7	Dean & Stark Distillation Apparatus
8	Flash Point Apparatus
9	Thermometer
10	Mixer

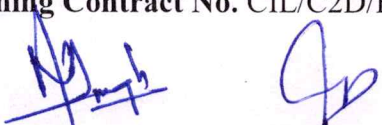
The above equipment must be available all the time in the explosive factories in working condition. CIL or any agencies authorized by CIL shall have the option to check the same.

You are required to submit manufacturer's test certificate of different quality parameters as specified along with supply as per the attached Standard Formats (as per **Annexure-7**) . You shall also keep a record of all tests of raw material and finished product being supplied by you at your end which may be inspected by representative of CIL/Subsidiary Company.

20. Random Testing by CMPDIL



- 20.1 The consignee subsidiary company shall conduct monthly random test of the explosives supplied by the supplier through CMPDIL as per SOP approved by CIL/CMPDIL.
- 20.2 The limits of technical parameters for random test are given in Annexure-6 titled 'Product Specifications and Random Test Parameters' and shall also be mentioned in the RC.
- 20.3 The testing charges shall be borne by CIL/ Subsidiaries for carrying out the testing.
- 20.4 The random test shall be conducted every month in each subsidiary. The authorized representative from CMPDIL shall draw the required number of samples randomly in each month from any BMD Vehicle. The samples shall be drawn and tested on the same day at mine in presence of representatives of subsidiary and the supplier. Subsidiaries shall inform CMPDIL regarding the monthly allocation being made to suppliers.
- 20.5 The Sample shall be treated as "Not Meeting Standards" (NMS) in random test by CMPDIL if it does not meet any of the criterion specified under "Product Specifications and Random Test Parameters" in Annexure-6. Penalty levied on the total supply value (without GST) of explosives supplied in that month shall be @ 1% for 1 NMS/Failed sample, @3% for 2 NMS/Failed samples, @5% for 3 NMS/Failed samples, @7% for 4 NMS/Failed samples and @10% for 5 or more NMS/Failed samples, and shall be deducted from the bills of the supplier by the concerned subsidiary company in every month.
- 20.6 Number of samples to be tested in a contract year shall be equally distributed amongst the months of the year, as far as practicable, so as to ensure total number of samples calculated as per clause 20.7 mentioned below, shall be tested for that particular year for particular supplier.
- 20.7 One sample to be taken for the first 200 tonnes of the annual RC quantity for that year for that subsidiary on a particular supplier and one additional sample for every 300 tonnes or part thereof of annual RC quantity for that year for that subsidiary. For example, in case of a supplier whose annual subsidiary RC quantity of Bulk Explosives is 1600 tonnes, a total of six $(200/200 + 1400/300 = 6)$ samples will be tested.
- 20.8 Explosives of same BMD Vehicle will not be tested more than once in a day.
- 20.9 For the purpose of Random testing, the supervisor /operator accompanying the BMD vehicle will be treated as representative of supplier. Test result shall be finalized even if the representative refuses to sign the Test Result. Refusal to give the sample for testing shall be treated as failure/NMS. Failure to give sample for two consecutive months due to absence on the day of testing in spite of requisition for that day at particular mine or otherwise shall be treated as NMS for those two months.
- 20.10 Standard Operating Procedure (SOP) for random testing is available in CIL website (www.coalindia.in) which is uniformly applicable in all CIL subsidiaries and NEC. Any changes in the Random Testing methodology and/or any future updation in the SOP by CMPDIL/ CIL will also be applicable to RC holders / Reserve RC holders during the RC period



with effect from the date of uploading in the CIL website or communication to RC Holders, whichever is earlier.

21. Powder Factor

21.1 The mine wise annual average achieved powder factor for 2024-25, separately for Coal and OB in OC mines for departmental as well as outsourcing patches for following categories of operations has been indicated at **Annexure -8** in the following format -

- PF for coal (Department and HOE)
- PF for OB in shovel-dumper bench (Department and HOE, and Separate PF for 42 CuM Shovel)
- PF for OB in dragline bench and
- PF dragline formation

NOTE: As far as practicable, each RC Holders should be assigned a particular mine/category of operations (in a mine) as mentioned above, by subsidiary companies, where no other vendor shall supply explosives unless that particular RC holder fails to supply.

However, in case the above is not feasible, then the achieved PF for all the vendors, shall be the overall achieved PF of the mine/ category of operations

21.2 Benchmark powder factor for the 1st financial year 2025-26 (**Annexure-8**) effective from RC start date shall be annual average of the achieved powder factor for the financial year 2024-25. Benchmark Powder factor for the 2nd financial year 2026-27 shall be annual average of the achieved Powder factor for the financial year 2025-26 and Bench mark powder factor for remaining period of proposed RC during financial year 2027-28, if any, shall be annual average of the achieved Powder factor for the financial year 2026-27.

BMPF for the RC period will be as follows-

Period/FY	BMPF
Jan'2026-March'2026	Average Achieved PF of FY-2024-25
April'26 to March'27	Average Achieved PF of FY-2025-26
April'27 to Dec'27	Average Achieved PF of FY-2026-27

Bench mark powder factor for 2nd financial year **2026-27** and for remaining period of proposed RC during financial year **2027-28**, if any, shall be circulated by subsidiary companies directly to the suppliers with the approval of CMD of subsidiary company.

Note: The Subsidiary shall endeavor to finalize and circulate the BMPF for 2nd FY and onwards by the end of April of the succeeding year. However, in cases of delay at least provisional BMPF will be circulated subject to finalization and circulation of final BMPF.

In case of OC mines /patches/benches not worked in the previous financial year of the RC financial year for which the annual average of the achieved powder factor is not available or worked less than 03 months in the year , then the annual average of the achieved powder factor of the year before the previous financial year shall be considered as BMPF with the approval of CMD of subsidiary company.

21.2(A) CIL reserves the right to determine the Benchmark Powder Factor (BMPF) with improved methodology in a phased manner and its applicability during the RC period.

21.2 (B) BMPF (along with +/- 2% range) for mine/ part of mine having the same method of production shall be decided with the approval of the CMD of the company after the determination of BMPF by improved methodology. The modalities of the BMPF with improved methodology are placed as **Annexure-11**.

The BMPF determined with improved methodology will be communicated to the vendor preferably at the start of the quarter in the relevant financial year. Till the time, BMPF determined with improved methodology is communicated to the vendor, the existing provisions i.e Average Achieved PF of previous FY, shall continue.

BMPF once determined shall continue unless it is reviewed for exceeding +/-20 % range or any drastic change in geo mining conditions, with the approval of the CMD of the company.

In no case two parallel BMPF will be applicable in any method of production, to avoid disputes in concurrent RCs.

21.3 The mine wise achieved powder factors of previous month shall be declared by the subsidiaries by end of the subsequent month and suitably be communicated to RC holders by mail/fax/letter with copy endorsed to CIL.

21.4 You shall confirm that explosives supplied by you shall achieve the mine-wise BMPF indicated in the RC and informed as per Clause-21.2. Failure to achieve the benchmark powder factors individually by the RC holder shall attract penalty as detailed in 'Performance and Penalty' clause of NIT.

21.5 In case of new opencast mines i.e. new projects/patches including outsourcing and hired HEMM patches, new seam of existing opencast mine or change in method of work, any significant change in geo-mining conditions, which may come up during the tenure of the contract and for which BMPF is not determined and any changes in the BMPF methodology during the tenure of the contracts necessitating changes in the existing BMPF of mine/part of mine/projects/patches/benches; then BMPF for such mine/part of mine/projects/patches/benches shall be determined through a committee consisting of representatives of Sub. Cos and CMPDIL and shall be decided by the approval of the CMD of the company. The approved BMPF shall be communicated by Subsidiary companies to RC holders through email/fax/letter with copy endorsed to CIL and shall be effective from the date of communication to RC holders (preferably start of quarter).

However, till the time Bench Mark Powder Factor is not communicated to RC holders or upto a period of 06 months, whichever is earlier, the actual powder factor achieved during the intervening period shall be applicable for the mine/part of mine/projects/patches/benches assigned to RC holders. The BMPF, if not finalized within stipulated time, extension of time be given after recording reasons thereof and due approval of CMD of Subsidiary Company.

Further, for new mines the achieved powder factor may be observed for a period of one year for better evaluation and reconsideration of BMPF.



21.6 Mine wise benchmark PFs will be reviewed by the CMD of the Subsidiary Companies in consultation with CMPDIL on Financial Year basis, during the tenure of the contract (1st FY Year, 2nd FY Year, remaining period of proposed RC during FY 2027-28), if the PF deduction/bonus at such mines exceeds 20% of the price of explosives. The revised PF, if any, shall apply during the tenure of the contract including the respective financial year for which BMPF was reviewed. For example, in case contract starts in November 2025 and if benchmark PF for FY 1st year is required to be reviewed for the period from November 2025 to March 2026 (1st FY), then the reviewed PF will be the BMPF for 1st Financial Year and will be applicable from November 2025 to March 2026 in this case.

The supplier has to lodge claim within three (3) months of receipt of annualized Achieved PF statement of the relevant year in case the deduction exceeds 20% of the price of the explosives. The claim of the supplier shall be settled by respective subsidiaries within three months of lodging the claim. Any Claim made by the suppliers after the above period, shall not be entertained.

If bonus exceeds 20% of price of explosives, the Sub. Co. shall initiate review immediately after completion of the relevant year.

While reviewing the BMPF for the preceding financial year, the relevant applicability clause shall be followed.

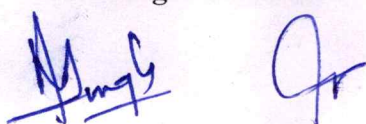
21.7 For new powder factors as well as review of existing powder factor cases explained above, CMD of the subsidiary company is empowered to issue the necessary amendment to the RCs to incorporate the new/revised powder factors without referring the matter to CIL.

22. Performance & Penalty:-

22.1 The mine-wise achievement of powder factor should not be less than the benchmark powder factors specified in the RC. In the event of supplied item not providing satisfactory results, penalty will be imposed by way of Deduction from price of these items. For every percentage decrease in powder factor of Coal/OB compared to the benchmark powder factors as provided in the RC, same percentage deduction of the price (without GST) of explosives shall be made.

In case of applicability of BMPF with improved methodology, the mine-wise achievement of powder factor should be in the range of benchmark powder factors assigned. In the event of supplied item not providing satisfactory results, a penalty will be imposed by way of Deduction from the price of these items. For every percentage decrease in the powder factor of Coal/OB compared to the BMPF below the range prescribed, the same percentage deduction of the price (without GST) of explosives shall be made. For example when the achieved PF is 97% of the BMPF assigned, then the penalty levied will be 1% of the price (without GST) of explosives.

22.2 In case the achieved powder factor is above 105% of the benchmark powder factor, then Bonus may be paid @ 0.3% (zero point three percent) of the price of explosives (without GST) for every percentage increase in powder factor over 100% of the benchmark. Thus for achievement of powder factor between 100% to 105% of the benchmark, there will be no bonus.



For e.g. when achieved PF is 106%, bonus to be paid will be equal to $0.3\% \times 6 \times \text{Price of the explosives}$.

In case of applicability of BMPF with improved methodology, if the achieved powder factor is above 107% of the BMPF, then Bonus may be paid @ 0.3% (zero-point three percent) of the price of explosives (without GST) for every percentage increase in powder factor over 102% of the BMPF. Thus, for achievement of powder factor in between 100% to 107% of the BMPF, there will be no bonus. For e.g. when achieved PF is 108%, bonus to be paid will be equal to $0.3\% \times 6 \times \text{Price of the explosives (without GST)}$.

- 22.3** In the event of failure of blast on account of bulk explosives, double the cost of explosives used in the blast will be recovered from the respective defaulting supplier. In case of blast failure, initially proportionate deduction (proportionate to value) will be made for explosives. After thorough investigation into the cause of failure by Joint Inspection Team as to which item (explosive or accessories) is responsible for the failure, final deduction will be made accordingly. The joint inspection team shall comprise of Blasting Officer, Mine Manger or his representative and Representative of Area and Supplier/Suppliers. The joint inspection to be ensured by supplier/suppliers within 48 hrs of intimation. Post completion of the joint inspection, a report to be prepared incorporating the complete details and deduction statement with signature of all participating members. If supplier representative doesn't turn up for joint inspection and/or refuses to sign the deduction statement, then joint inspection of mine and area officials as above to be completed and report & deduction statement to be prepared and signed with incorporating information of non-representation of the supplier/suppliers representative. All intimation and information to be shared through electronic means with copies to Area, HQ and supplier/suppliers. All relevant documents connected with blast failure to be maintained in electronic form.
- 22.4** The bench mark Powder Factors shall also apply in case of explosives supplied to contractors in outsourcing patches (wherever separate Powder Factors for outsourcing patches are not indicated), if the explosives purchased by CIL is used in such patches with the condition that only the net cost of explosives and accessories (after deduction on account of powder factor) is recovered from the outsourcing contractor.
- 22.5** The payment shall continue to be made as per RC terms. The penalty/ bonus, as the case may be, shall be on financial year basis on the average achieved PF of individual RC holder against the BMPF. However, the PF evaluation of individual RC holder will be done provisionally on quarterly basis against their achieved PF in that mine with respect to defined BMPF as per Clause-21.2 and accordingly deduction, if any, on account of non-achievement of BMPF shall be made from the bills of RC holders. The reconciliation of the provisional deductions if any will be made on financial year basis.
- If an RC Holder supplies only during a part of the year, then achieved PF of the supplier shall be evaluated only for the part of the financial year during which supplies were made.
- 22.6** Deduction due to non-achievement of powder factor shall be made from the price of explosives only and not from accessories prices.



22.7 No Powder Factor deduction shall be made from RC holders, if they are required to supply to an unassigned/ unallocated mine for a continuous period of less than 3 (three) months in terms of 21.1 (Note) or deal with shortfall by other RC holders or otherwise.

23. Other Instructions:

- a. The supplier shall measure specific gravity of the bulk explosives by the standard method and the method of calculating the amount of bulk explosives pumped down the hole will be counter checked with net delivered through weighbridge on day to day basis.
- b. Cast boosters shall be allowed up to the following limit beyond which cost of the same will be borne by the SME suppliers.

Cast booster (PETN/TNT):

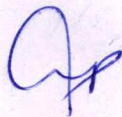
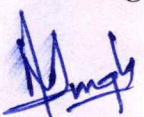
- a) For blast holes more than 10 m length, cast booster allowed up to 0.2% maximum of total explosives charge
- b) For blast holes less than 10 m length, cast booster allowed up to 0.3% maximum of total explosives charge or 100 gms/blast hole, as per applicability.

Cast booster (Emulsion):

- a) For blast holes more than 10 m length, cast booster allowed up to 0.3% maximum of total explosives charge.
- b) For blast holes less than 10 m length, cast booster allowed up to 0.4% maximum of total explosives charge or 150 gms/blast hole, as per applicability.
- c. Any Cartridge Booster to be used with Bulk Explosives shall be indicated by you in terms of quantity. Minimum use of such Cartridge Booster will be preferred and the equivalent of Cast Booster is to be adjusted.
- d. Any increase in the usage of Cast Booster and Cartridge Booster over and above the stipulated percentage will be at your cost.
- e. Bulk Loading Explosives should be suitable for varying sleeping times (Must be stable for minimum 10 days).

24. Pre-Contract Integrity Pact:

The Pre Contract Integrity Pact, signed and submitted by you is enclosed as **Annexure-9** and shall be applicable against this contract. In terms of the Integrity Pact, the Independent External Monitors nominated for this contract are:



Sl.	Name of IEM	Address	e-Mail ID	Mobile No.
1	Mr. K.D.Tripathi IAS (Retd)	Mr. K.D.Tripathi IAS (Retd) A-5, Sector-19, Noida UP - 201301	tripathikd.1958 @gmail.com	9868506966
2	Mr. O.P Singh IPS (Retd.)	Mr. O.P Singh IPS (Retd.) M-6, First Floor, Green Park Extension New Delhi - 110016	ops2020@gmail.com	9818564455
3	Shri Rakesh Mohan, IA&AS(Retd.),	Shri Rakesh Mohan, IA&AS(Retd.), Flat No. 7020, Sector - B-10, Vasant Kunj, New Delhi - 110070	rmohan1987@gmail.com	9205175050

25. Compliance with Statutory Requirements:

The RC items should be supplied only with the approval of the valid statutory authority like DGMS, PESO etc. wherever it is mandatory. It will be your responsibility to obtain valid permission/license from Chief Controller of Explosives/Govt./any other Statutory Body as may be required for manufacture and supply of Explosives at site. Any DGMS / Statutory permission, if necessary, will be obtained by you. Necessary assistance will be provided by the projects. No supply should be effected without having valid permission from DGMS / license from PESO for the product even if there is an allocation for supply of the product from CIL or its Subsidiaries.

You must also ensure compliance of all relevant statutory requirements under Mines Act 1952, Mines Rule 1955, CMR 2017 and related Laws, Acts, Rules, By-laws, Orders & Circulars published by the Govt. of India.

26. Safety Measures

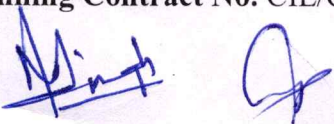
You will ensure all safety measures in respect of manufacture and delivery of Bulk Explosives. You must have valid Statutory License from Chief Controller of Explosives from Plant up to Loading holes including Storage, Manufacturing, Mixing & Transporting till the completion of contract. You will ensure compliance of safety measures prescribed by DGMS or any other statutory authorities from time to time.

27. Other Terms & Conditions:

The terms and conditions, which are not specifically mentioned herein above, shall be as per "General Conditions of Contract" enclosed as **Annexure-10**. The clauses that are not applicable to the present Contract have been struck through.

All the terms and conditions of the subject tender no CIL/C2D/Bulk Explosives/2025-27/399 Dtd: 21.07.2025 are applicable to the present Contract, unless specifically mentioned otherwise.

The provisions of CIL Purchase Manual and its subsequent amendments (available on CIL website, www.coalindia.in) shall also be applicable, if not specified otherwise in the NIT or the RC.

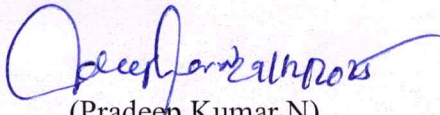


28. If at any point of time it is found that the details furnished by you in your offer against the tender under reference are not correct, CIL reserves the right to cancel the RC and take necessary steps as deemed fit.

29. **Jurisdiction of Courts:** Any dispute arising out of or in respect of the contract will be subject to the jurisdiction of Calcutta High Court, Kolkata, India, only.

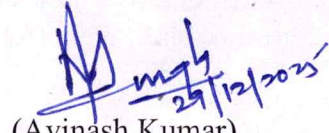
The contract is entered into with issuance of this RC. Please send your acknowledgement within seven days from the date of receipt of this contract for record purpose.

Yours faithfully,
For & on behalf of Coal India Limited



(Pradeep Kumar.N)

Sr Manager (MM)



(Avinash Kumar)

General Manager (MM)

Enclosed:

1. **Annexure-1** – Quantity, subsidiary-wise distribution, price and SDBG value
2. **Annexure-2** – SDBG Format
3. **Annexure-3** – Format for 'No Claim Certificate' to be issued by Supplier
4. **Annexure-4** – Bank Details
5. **Annexure-5** – Standard Technical Service Report
6. **Annexure-6** – Product Specifications & Random Test Parameters
7. **Annexure-7** – Format of Test Certificate
8. **Annexure-8** – Benchmark powder factor of each mine for FY 2025-26
9. **Annexure-9** – Pre Contract Integrity Pact
10. **Annexure-10**- General Conditions of Contract
11. **Annexure-11**- Improved Methodology for Determination of Bench Mark Powder Factor

Distribution:

1. Dir(T),CIL
2. Dir(O),ECL & BCCL.
3. Dir(P&P), ECL & BCCL.
4. ED(MM),CIL
5. ED(Production),CIL
6. ED(Finance),CIL
7. TS to DT(O)/GM(Fin), ECL & BCCL.
8. GM(Production) , ECL & BCCL.
9. Sr Mgr(Fin)-MM, CIL
10. IEMs – Shri . K.D.Tripathi, IAS (Retd)
Shri Mr. O.P Singh, IPS (Retd.)
Shri Rakesh Mohan, IA&AS(Retd.)



Annexure-1

M/s AKS Expo Chem Private Limited

SAP Vendor Code – 10000181

Item, Product Name, Subsidiary wise Quantity for two years, Price

Item	Bulk Explosives	
SAP Material Code	5900000000	
Brand Name	Bengel Plus	
SAP Batch Code	9302001017	
Subsidiary Co.	ECL	BCCL
FOR Destination Price (Rs/MT)	39800	37700
1 st Year Qty (MT)	20662	20833
2 nd Year Qty (MT)	20070	20197
Nature of RC	Regular RC	Regular RC

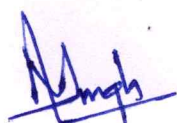
Details of Manufacturing Plant (s) / Support Plant (s) / Silos

The details of manufacturing plant (s) / support plant (s) / silos from where supplies shall be made to the respective subsidiary companies, are as follows:

Sl.	Sub. Co.	Plant / Silo	PESO License No.	Remarks
1	ECL & BCCL	Dejuri, Bankura	E/HQ/WB/SM/6 (E52214)	Burdwan, Bankura, Birbhum of WB and Dhanbad, Deoghar, Godda of Jharkhand for ECL & in the districts of Burdwan in WB and in the districts of Dhanbad and Bokaro for BCCL.
2	ECL & BCCL	Chandankyari, Bokaro	E/HQ/JH/SM/20 (E86831)	BCCL & ECL in Dhanbad, Deoghar and Godda districts

Total/ Subsidiary wise SDBG Value (in Rs.)

ECL	BCCL	Total
4,78,23,441.00	4,56,31,515.00	9,34,54,956.00




Security Deposit Bank Guarantee Proforma

COAL INDIA LIMITED
Coal Bhawan
Materials Management Division
Premises No. 04, Action Area – 1A
New Town, Rajarhat,
Kolkata – 700 156

Re: Bank Guarantee in respect of Agreement / RC no. CIL/C2D/Bulk/2025-27/_____ dated .10.2025
between Coal India Limited (Name of Purchaser Company) on behalf of (Name of Subsidiary
Companies) and..... (Name of Supplier Company)

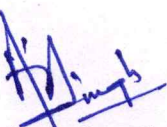
Messersa Company / Firm having its office at No.
..... (hereinafter called 'the Contractor') has received the
Running Contract vide no. dated..... (hereinafter called 'the said Agreement') with Coal India
Limited (hereinafter called 'the Company') to supply..... stores/ materials amounting to
Rs.on the terms and conditions contained in the said Agreement.

The..... (Name of the Bank) (hereinafter called 'the Bank') having its office
at..... has at the request of the Contractor agreed to give the guarantee as hereinafter
contained.

We.....(Name of the Bank) do hereby unconditionally agree with the Company
that if the Contractor shall in any way fail to observe or perform the terms and conditions of the said
Agreement or shall commit any breach of its obligations thereunder, the Bank shall on demand and
without any objection or demur pay to the Company, the said sum of Rs..... or any portion
thereof without requiring the Company to have recourse to any legal remedy that may be available to it
to compel the Bank to pay the same or calling on the Company to compel such payment by the
Contractor.

Any such demand shall be conclusive as regards the liability of the Contractor to the Company and as
regards the amount payable by the Bank under this guarantee. The Bank shall not be entitled to withhold
payment on the ground that the Contractor has disputed its liability to pay or has disputed the quantum
of the amount or that any arbitration proceeding or legal proceeding is pending between the Company
and the Contractor regarding the claim.

We, the Bank, further agree that the guarantee shall come into force from the date hereof and shall remain
in full force and effect till the period that will be taken for the performance of the said Agreement which
is likely to be the day of..... but if the period of Agreement is extended either pursuant to
the provisions in the said Agreement or by mutual agreement between the Contractor and the Company,
the Bank shall renew the period of the guarantee failing which it shall pay to the Company the said sum
of Rs....., or such lesser amount out of the said sum of Rs.....as maybe due to the



Company and as the Company may demand. This guarantee shall remain in force until the dues of the Company in respect of the said sum of Rs. are fully satisfied and the Company certifies that the Agreement has been fully carried out by the contractor and discharges the guarantee.

The Bank further agrees with the Company that the Company shall have the fullest liberty without the consent of the Bank and without affecting in any way the obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend the time for performance of the said Agreement from time to time or to postpone for any time or from time to time any of the powers exercisable by the Company against the contractor and to forbear to enforce any of the terms and conditions relating to the said Agreement and the Bank shall not be relieved from its liability by reason of such failure or extension being granted to the contractor or through any forbearance, act or omission on the part of the Company or any indulgence by the Company to the contractor or any other matter or thing whatsoever which under the law relating to sureties would but for this provisions have the effect of relieving or discharging the Guarantor.

The Bank further agrees that in case this guarantee is required for a longer period and it is not extended by the Bank beyond the period specified above, the Bank shall pay to the Company the said sum of Rs. or such lesser sum as may then be due to the Company and as the Company may require.

Notwithstanding anything herein contained the liability of the Bank under this guarantee is restricted to Rs. only. The guarantee shall remain in force till the day of 20... and unless the guarantee is renewed or a claim is preferred against the Bank within the validity period and/or the claim period from the said date, all rights of the Company under this guarantee shall cease and the Bank shall be released and discharged from all liability hereunder except as provided in the preceding clause.

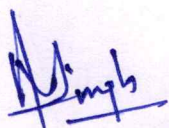
The Bank has under its constitution power to give this guarantee and [(Name of the person(s)] who have signed it on behalf of the Bank has authority to do so.

Dated this day of 20.....

Place.....

Signature of the authorized person(s)
For and on behalf of the

For and on behalf of the Bank



Format for 'No Claim Certificate' to be issued by Supplier

(On company letterhead)

To
Coal India Limited,
Coal Bhawan,
1st Floor, Premises No. 04,
Plot no. AF-III, Action Area 1A,
New Town, Kolkata – 700 156

NO CLAIM CERTIFICATE

Sub: RC no. ----- dated ----- for the supply of Bulk Explosives to -----
Subsidiaries of CIL

We have received the full and final settlement of all the payments due to us from _____ (Name of CIL's Subsidiary) for the supply of Bulk Explosives under the abovementioned RC, between us. We hereby unconditionally and without any reservation whatsoever, certify that we shall have no claim whatsoever, of any description, on any account, against _____ (Name of CIL's Subsidiary), against aforesaid RC executed by us other than release of the Security Deposit. We further declare unequivocally, that we have received all the amounts payable to us from _____ (Name of CIL's Subsidiary), and have no dispute of any description whatsoever, regarding the amounts worked out as payable to us and received by us, and that we shall continue to be bound by the terms and conditions of the RC, as regards performance of the contract.

Yours faithfully,

Signatures of contractor or

officer authorised to sign the contract documents

on behalf of the contractor

(Company stamp)

Date: _____

Place: _____

Bank Details

Name of RC Holder	M/s AKS Expo Chem Private Limited
Bank A/C No.	650014054218
IFSC	NDB0000161
Account Type	Cash Credit General
Bank Name	INDUSIND BANK LIMITED
Address of Branch	Vasant Kunj Branch, Common Cause House, 5 , Institutional Area, Nelson Mandela Road, Vasant Kunj, New Delhi - 110070

Annexure-5

Standard TECHNICAL SERVICE REPORT (Quarterly) to be submitted by Explosive Supplier/Vendor

Period: From To

Name of Mine/Project:

Area:

Name of Explosive Vendor:

Name of Technical Service Personnel: **Contact Details:**

Point A: Blast Design Parameters for optimum blast performance

Point B: Demonstration/Implementation status of Point A

1. Date(s) of Technical Visit/Field Demonstration:
2. Any Trial Blast Conducted? If yes, give details and performance feedback.
3. Number of Blasts Attended:

Point C: Safety & Statutory Compliance by Vendors

Point D: Vibration and Sound Monitoring

1. Monitoring Equipment Used:
2. Distance of Vibration Monitor from Blast Site:
3. Peak Particle Velocity (PPV) Recorded (mm/s):
4. Noise Level (dB):
5. Limits as per DGMS Guidelines/Permissions for the mine :
6. Compliance Achieved: [Yes/No]

Point E: Feedback of Technical Service Personnel

1. Brief on Support Provided:
2. Performance Evaluation of Blast Result:
3. Suggestions for Improvement:
4. Name & Signature of Technical Service Personnel:

Point F: Incident Report (if any)

1. Number of times Technical Service Not Provided:
2. Dates and Reasons for Non-Availability:
3. Any Blasting Irregularities Observed:
4. Remedial Action Taken:

Certified by Vendor Representative:

Name:

Designation:

Signature:

Date:

Certified by Mine Manager/Agent:

Name:

Signature with Seal:

Date:



Annexure-6

Product Specifications & Random Test Parameters

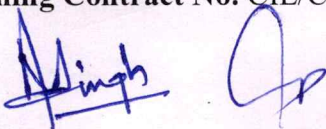
Sl.	Particulars of test to be conducted		Acceptable Standards
1	Velocity of detonation [#] (m/sec.)	Fresh Sample * After Sleepage in water(24 hrs)	≥ 3500
2	Density (gm/cc)	Fresh Sample *After Sleepage in water(24 hrs)	1.15 +/- 0.05
3	Booster Sensitivity	Fresh Sample *After Sleepagein water(24 hrs)	Sample should fire with Cast Booster (PETN) 100 gm / CastBooster (Emulsion) 150 gm

[#]Unconfined with 83 mm dia

*Where sleepage is not available, criterion of Not Meeting Standards shall be done on fresh sample. If any explosives fails to explode, the product will be treated as Not Meeting Standards.

The Sample shall be treated as "Not Meeting Standards" in random test if it does not meet any of the criterion specified under "Acceptable Standards".

The above technical parameters shall also be treated as the acceptable technical specification for technical evaluation of offered items.



FORMAT OF TEST CERTIFICATE**(To be submitted by supplier)****Bulk Explosive**

1. **NAME OF THE MANUFACTURER** :
2. **NAME OF THE PRODUCT** :
3. **CONSIGNEE NAME** :
4. **Date of Manufacture#** :
5. **Sample No.** :
6. **Place of Testing** :
7. **Date of Testing** :

8. Tests Conducted		Specified limit	Results*	Remarks
(i)	Physical Condition			
(ii)	Density (g/cc)	1.15 ± 0.05		
(iii)	pH			
(iv)	Viscosity (cps)			

*In Result column, write values if applicable.

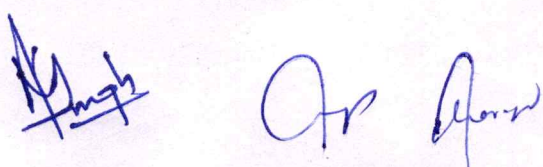
Signature of Testing Official

Name

Designation.....

Signature with stamp

Name.....

QA Incharge/ HOD


Benchmark powder factor of each mine for FY 2025-26

Benchmark Powder Factor for coal and

Benchmark Powder Factor for OB in Shovel-Dumper bench and

Powder Factor for OB in Dragline bench & Dragline formation.

Powder factor for Coal in Te/Kg and OB in CuM/Kg

ECL

NAME OF AREA	NAME OF OC MINE/ PATCH	ACH. POWDER FACTOR	
		COAL (Te/Kg)	OB (Cum/Kg)
PANDAVESWAR	KHOTTADIH OC (D)	7.65	2.32
	KHOTTADIH OC(H)	-	2.34
	MADHAIPUR OC (H)	4.58	3.56
	DALUR. OC PH-II (H)	6.13	2.08
	DALUR. OC PH-III (H)	6.14	2.10
BANKOLA	NAKRAKONDA KUMARDIHI B	4.52	1.69
KAJORA	JAMBAD OC(D)	3.90	2.29
KENDA	NEW KENDA (H)	3.29	2.08
	CL JAMBAD	2.48	1.81
	SHANKARPUR (D)	9.34	-
KUNUSTORIA	N.SEARSOLE OC Phase-IV (D)	3.15	2.05
	N.SEARSOLE OC Phase-IV (H)	3.13	1.78
	NARAYANKURI HIGHWALL	2.63	1.73
SONEPUR BAZARI	D/L BENCH	-	1.78
	S/D BENCH	-	1.67

NAME OF AREA	NAME OF OC MINE/ PATCH	ACH. POWDER FACTOR	
		COAL (Te/Kg)	OB (Cum/Kg)
	SBP(DEPT.)	5.04	-
	HASDIA-IV (NEW)	-	1.51
	QUARRY 2B	-	1.79
	QUARRY-2A PART C	-	1.52
	UCC (FACE to CHP)	3.10	1.35
	CMAT-1A(2C-2D)	-	1.33
	HASDIA V	-	1.29
SATGRAM-SRIPUR	AMKOLA (H)	3.18	1.44
	NIMCHA HIGHWALL	-	1.59
	SSI(NINGHA)OC PATCH (H)	3.12	1.85
	BHANORA (CHARANPUR) OC (H)	1.41	1.62
SALANPUR	MOHANPUR OC(H)	4.19	1.49
	BONJEMIHARY (H)	-	1.38
	DABOR PH-III OC (H)	5.25	1.50
	GOURANGDIH (D)	4.12	1.82
	BEGUNIA (H)	3.42	1.64
MUGMA	BARMURI OC (D)	3.19	1.99
	RAJPURA OC (D)	4.58	2.63
	NIRSA OC (H)	5.90	2.51
	CHAPAPUR OC - 10 No. (H)	4.66	1.60
	CHAPAPUR OC - II (H)	3.50	1.35
	BADJNA OC (H)	3.55	1.43
S. P. MINES	CHITRA OC (D)	7.41	2.15




NAME OF AREA	NAME OF OC MINE/ PATCH	ACH. POWDER FACTOR	
		COAL (Te/Kg)	OB (Cum/Kg)
	CHITRA OS Patch	-	1.37
RAJMAHAL	RAJMAHAL (D)	4.50	4.29
	RCML (H)	5.67	4.06
	BLS(H)	-	3.85
	AMPL-20 Million (H)	-	4.08
	AMPL-34 Million (H)	-	4.05
	HURRA-C	-	3.30

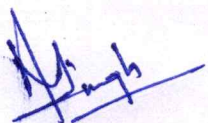
BCCL

Sl.NO.	Name of Area & Mine	Deptt./ Hired	OC Mines	
			Coal PF	OB PF
			Shovel / Dumper	
BARORA				
1	MURAIIDH OCP	Deptt.	4.73	1.50
2	PHULARITAN HIRED OCP	Hired	5.30	1.38
3	PATCH 7	Hired	5.51	1.32
4	DAMODA COLLIERY Deptt. OCP	Deptt.	*	1.10
BLOCK II				
1	ABOCP	Deptt.	6.52	1.56
2	NEW BENEDIH HIRED PATCH	Hired	6.50	1.30
3	NEW NUDKHURKEE HIRED PATCH	Hired	5.80	1.34
GOVINDPUR AREA				

Sl.NO.	Name of Area & Mine	Deptt./ Hired	OC Mines	
			Coal PF	OB PF
			Shovel / Dumper	
1	NEW AKASHKINAREE COLLIERY	Deptt.	7.31	1.87
2	NEW AKASHKINAREE COLLIERY	Hired	6.21	1.37
3	(ABG) BLOCK IV GOVINDPUR	Deptt.	7.33	1.98
KATRAS AREA				
1	AKWMC, DEPARTMENTAL	Deptt.	7.75	1.74
2	KANTAPAHARI	Hired	4.59	1.52
3	TETULMARI	Hired	6.02	1.46
SIJUA AREA				
1	SENDRA BANSJORA COLLIERY	Hired	7.54	1.34
2	KANKANEE COLLIERY PATCH - B	Hired	6.56	1.54
3	NICHITPUR COLLIERY	Deptt.	7.10	1.47
4	NICHITPUR COLLIERY PATCH - B	Hired	7.44	1.21
5	BASDEOPUR COLLIERY	Deptt.	8.14	1.46
6	TETULMURI COLLIERY (PAHARI PATCH)	Hired	6.14	1.23
7	TETULMARI (MUDIDIH COLLIERY)	Hired	6.07	1.29
KUSUNDA AREA				
1	AMALGAMATED DHANSAR COLLIERY (ADIC) PATCH N	Deptt.	4.60	1.50
2	ADIC PATCH - P	Hired	2.94	1.47
3	NEW GODHUR KUSUNDA COLLIERY (PATCH 'C') (NGKC)	Hired	3.76	1.48
4	EAST BASSURIYA COLLIERY (PATCH - C)	Hired	4.10	1.05
5	ENA MEGA PATCH DE	Hired	4.33	1.60

Sl.NO.	Name of Area & Mine	Deptt./ Hired	OC Mines	
			Coal PF	OB PF
			Shovel / Dumper	
6	GONDUDIH KHAS KUSUNDA COLLIERY (PATCH 'R') (GKKC)	Hired	5.99	1.13
PB AREA				
1	GOPALICHUK PATCH - B	Hired	*	1.38
2	GOPALICHUK QUARRY A (FIRE PATCH)	Hired	6.29	1.30
BASTACOLLA AREA				
1	KUYA	Deptt.	8.55	1.47
2	NC PATCH - II	Hired	6.44	1.16
3	SOUTH JHARIA	Hired	4.95	0.80
4	BASTACOLLA OCP-1	Hired	6.35	1.07
LODNA AREA				
1	AMAL NT/ST OCP	Deptt.	5.00	1.02
3	AMAL. JOYRAMPUR COLLIERY (PATCH D)	Hired	5.78	1.49
5	KUJAMA COLLIERY (PATCH - G)	Hired	5.82	1.52
EASTERN JHARIA AREA				
1	4A PATCH, BHOWRA SOUTH COLLIERY	Hired	4.81	1.60
2	C-2 PATCH, ABNS COLLIERY	Hired	4.76	1.52
3	X-2 PATCH, ASP COLLIERY	Hired	5.44	1.29
4	COCF FIRE PATCH A, ASP COLLIERY	Hired	-	1.42
5	EASTWARD EXTENSION OF FIRE PATCH A,	Hired	5.51	1.46
CHANCH VICTORIA AREA				
1	BASANTIMATA DAHIBARI COLLIERY DEPTT	Deptt.	5.26	1.66
2	BASANTIMATA DAHIBARI COLLIERY/PATCH - B	Hired	*	1.20

Sl.NO.	Name of Area & Mine	Deptt./ Hired	OC Mines	
			Coal PF	OB PF
			Shovel / Dumper	
3	DAMAGORIA COLLIERY/BORIRA PATCH - A EXTENSION	Hired	3.96	1.26



PRE CONTRACT INTEGRITY PACT

General

This pre-bid pre-contract Agreement (hereinafter called the Integrity Pact) is made on the day of submission of bid, between, on one hand, Coal India Limited/Subsidiary Cos. (hereinafter called the "BUYER / Principal", which expression shall mean and include, unless the context otherwise requires, his successors in office and assigns) of the First Part and undersigned who is authorized to sign the bid (hereinafter called the "BIDDER/Seller/Contractor" which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns) of the Second Part.

WHEREAS the BUYER proposes to procure the tendered stores / Equipment / Item / Goods (Name of the Stores/Equipment/Item) and the BIDDER/Seller is willing to offer/has offered the stores and

WHEREAS the BIDDER is a private company/public company/Government undertaking/partnership/registered export agency, constituted in accordance with the relevant law in the matter and the BUYER is a Central Public Sector Unit.

NOW, THEREFORE,

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to:-

Enabling the BUYER to obtain the desired said stores/equipment at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and

Enabling BIDDERS to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the BUYER will commit to prevent corruption, in any form, by its officials by following transparent procedures.

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:

Section 1 – Commitments of the Principal

(1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-

a. No employee of the Principal, personally or through family members, will in connection with the tender for , or the execution of a contract, demand ; take a promise for or accept, for self or



third person, any material or immaterial benefit which the person is not legally entitled to.

b. The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.

c. Principal will exclude from the process all known prejudiced persons.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/ PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

Section 2 - Commitments of the Bidder(s)/ Contractor(s)

(1) The Bidder(s) / Contractor(s) commit themselves to take all measures necessary to prevent corruption. The Bidder(s) / Contractor(s) commit themselves to observe the following principles during participation in the tender process and during the contract execution.

a. The Bidder(s) / Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/ she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

b. The Bidder(s) / Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non- submission of bids or any other actions to restrict competitiveness or to introduce cartelisation in the bidding process.

c. The Bidder(s) / Contractor(s) will not commit any offence under the relevant IPC/ PC Act; further the Bidder(s) / Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

d. The Bidder(s) / Contractors(s) of foreign origin shall disclose the name and address of the Agents/ representatives in India, if any, Similarly the Bidder(s) /Contractors(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any.

Further details as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s) / Contractor(s). Further, as mentioned in the Guidelines all the payments made to the Indian agent/ representative have to be in Indian Rupees only. *The guidelines and terms and conditions for India agents of foreign supplier shall be as per the provisions mentioned in the NIT.*

e. The Bidder(s) / Contractor(s) will, when presenting their bid, disclose any and all payments made, is committed to or intends to make to agents, brokers or any other intermediaries in

connection with the award of the contract.

f. Bidder(s) / Contractor(s) who have signed the Integrity Pact shall not approach the Courts while representing the matter to IEMs and shall wait for their decision in the matter.

(2) The Bidder(s) / Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 - Disqualification from tender process and exclusion from future contracts

If the Bidder, before contract award, has committed a transgression through a violation of Section 2 or in any other form such as to put his reliability or credibility as Bidder into question, the Principal is entitled to disqualify the Bidder from the tender process or to terminate the contract, if already signed, for such reason.

(1) If the Bidder / Contractor / Supplier has committed a transgression through a violation of Section 2 such as to put his reliability or credibility into question, the Principal is also entitled to exclude the

Bidder / Contractor / Supplier from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case. In particular the number of transgressions, the position of the transgressors within the company hierarchy of the Bidder and the amount of the damage. The exclusion will be imposed for a minimum of 6 months and maximum of 3 years.

(2) A transgression is considered to have occurred if the Principal, after due consideration of available facts and evidences within his / her knowledge concludes that there is a reasonable ground to suspect violation of any commitment listed under Section 2 i.e "Commitments of Bidder(s) / Contractor(s)."

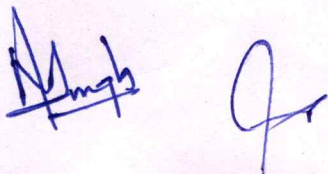
(3) The Bidder accepts and undertakes to respect and uphold the Principal's absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.

(4) If the Bidder / Contractor / Supplier can prove that he has restored / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely.

Section 4 - Compensation for Damages

(1) If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/ Bid Security.

(2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the Contract value or the amount equivalent to Performance Bank Guarantee.



Section 5 - Previous transgression

- (1) The Bidder declares that no previous transgressions occurred in the last three years with any other Company in any country conforming to the anti-corruption approach or with any Public Sector Enterprise in India that could justify his exclusion from the tender process.
- (2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action can be taken as per the procedure mentioned in "Guidelines on Banning of business dealings".

Section 6 - Equal treatment of all Bidders / Contractors / Subcontractors

- (1) In case of Sub-contracting, the Principal Contractor shall take the responsibility of the adoption of Integrity Pact by the Sub-contractor.
- (2) The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors.
- (3) The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7 - Criminal charges against violating Bidder(s) / Contractor(s) / Subcontractor(s)

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

Section 8 - Independent External Monitor

- (1) The Principal appoints competent and credible Independent External Monitor for this Pact after approval by Central Vigilance Commission. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
 - (2) The Monitor is not subject to instructions by the representatives of the parties and performs his/ her functions neutrally and independently. The Monitor would have access to all Contract documents, whenever required. It will be obligatory for him / her to treat the information and documents of the Bidders/Contractors as confidential. He/ she reports to the Chairman, Coal India Limited / CMD, Subsidiary Companies
 - (3) The Bidder(s) / Contractor(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his/ her request and demonstration of a valid interest, unrestricted and unconditional access to their project documentation. The same is applicable to Sub-contractors.
 - (4) The Monitor is under contractual obligation to treat the information and documents of the Bidder(s) / Contractor(s) / Sub-contractor(s) with confidentiality. The Monitor has also signed
-

declarations on 'Non-Disclosure of Confidential Information ' and of 'Absence of Conflict of Interest'. In case of any conflict of interest arising at a later date, the IEM shall inform Chairman, Coal India Limited / CMD, Subsidiary Companies and recuse himself / herself from that case.

(5) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

(6) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he/ she will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.

(7) The Monitor will submit a written report to the Chairman, Coal India Limited / CMD, Subsidiary Companies within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.

(8) If the Monitor has reported to the Chairman, Coal India Limited / CMD, Subsidiary Companies, a substantiated suspicion of an offence under relevant IPC/ PC Act, and the Chairman, Coal India Limited / CMD, Subsidiary Companies has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.

(9) The word 'Monitor' would include both singular and plural.\

Section 9 - Pact Duration

This Pact begins when both parties have legally signed it. It expires after the completion of the Contract. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings.

If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged / determined by Chairman Coal India Limited / CMD, Subsidiary Companies.

Section 10 - Other provisions

(1) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

(2) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.

(3) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

(4) Issues like Warranty / Guarantee etc. shall be outside the purview of IEMs.

(5) In the event of any contradiction between the Integrity Pact and its Annexure, the Clause in the Integrity Pact will prevail.

Section 11- Facilitation of Investigation

In case of any allegation of violation of any provisions of this Pact or payment of commission, the BUYER or its agencies shall be entitled to examine all the documents including the Books of Accounts of the BIDDER and the BIDDER shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

Section 12- Law and Place of Jurisdiction

This Pact is subject to Indian Law. The place of performance and jurisdiction is the seat of the BUYER.

Section 13 - Other Legal Actions

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

VARUN
SAHAY

Digitally signed by VARUN SAHAY
Date: 2025.08.11 11:32:10 +05'30'

(For & On behalf of Bidder)

This document is digitally signed

M Singh

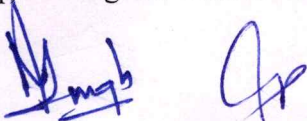
Or

General Conditions of Contract

1. Definitions

In the interpretation of the contract and the general and special conditions governing it, unless the context otherwise requires, the following terms shall be interpreted as indicated below:

- a) "The Contract" means the agreement entered into between the Purchaser and the Supplier including all attachments and appendices thereto and all documents incorporated by reference therein including Invitation to tender, Instructions to tenderers, Acceptance of tender, Particulars and the General and Special Conditions specified in the acceptance of tender;
- b) "Contract Price" means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations;
- c) "Goods" means all of the equipment, plant, machinery, and/or other materials which the Supplier is required to supply to the Purchaser under the Contract;
- d) "Services" means those Services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental Services, such as installation, commissioning, provision of technical assistance, training and other such obligations of the Supplier covered under the Contract;
- e) "GCC" means the Conditions of Contract contained in this section;
- f) "SCC" means the Special Conditions of Contract;
- g) "Purchaser" means the organization purchasing goods and services, i.e., Coal India Limited or its subsidiaries or areas falling under various subsidiaries of Coal India Limited;
- h) "Purchaser's country" is India;
- i) "Supplier/Contractor" means the individual, firm or company with whom the contract has been concluded for supplying the Goods and Services under the Contract. The Supplier/Contractor shall be deemed to include its successors (approved by the purchaser), representatives, heirs, executors, administrators and permitted;
- j) "CIL" means Coal India Limited or the Subsidiary Company of CIL or areas falling under various subsidiaries of CIL where Goods are deployed/ used;
- k) "Year" means the Calendar Year.
- l) "Chairman" means the Chairman of Coal India Limited.
- m) "Chairman-cum-Managing Director" means Chairman-cum-Managing Director of any of the Subsidiary Companies of Coal India Limited, presently Central Coalfields Limited, Eastern Coalfields Limited, Western Coalfields Limited, Bharat Coking Coal Limited, Central Mine Planning & Design Institute Limited, South Eastern Coalfields Limited, Northern Coalfields Limited and Mahanadi Coalfields Limited.
- n) "Drawing" means the drawing and plans specified in or annexed to the schedule or specifications.
- o) "Inspector" means any person nominated by or on behalf of the purchaser to inspect supplies, stores or work under the contract or his duly authorized agent.
- p) "Progress Officer" means any person nominated by or on behalf of the Purchaser to visit



supplier's works to ascertain position of deliveries of Goods ordered.

- q) "Materials" shall mean anything used in the manufacture or fabrication of the stores.
- r) "Stores" means the goods specified in the Supply Order or schedule which the supplier/contractor has agreed to supply under contract.
- s) "Test" means such test or tests as are prescribed by the specifications or considered necessary by the Inspector or any agency acting under direction of the Inspector.
- t) "Site" mean the place or places named in the "Supply Order" or such other place or places at which any work has to be carried out as may be approved by the purchaser.
- u) Words denoting the persons shall include any company or association or body of individuals whether incorporated or not.
- v) Words in singular include the plural and vice-versa.
- w) Words denoting the masculine gender shall be taken to include the feminine gender.
- x) "Writing" shall include any manuscript, typewritten or printed statement under or over signature or seal as the case may be.
- y) "Unit" and "Quantity" means the unit and quantity specified in the schedule.
- z) "Purchase Order" or "Supply Order" or "Order" or "Contract" means an order for supply of stores and includes an order for performance. The terms "Supply Order", "Purchase Order", "Order" and "Contract" are interchangeable.
- aa) "Particulars" shall mean the following:
 - i) Specifications;
 - ii) Drawing;
 - iii) Sealed pattern denoting a pattern sealed and signed by the Inspector;
 - iv) Certified or sealed sample denoting a copy of the sealed pattern or sample sealed by the purchaser for guidance of the Inspector;
 - v) Trade pattern denoting a standard of the ISI or other standardizing authority or Coal India Ltd. and/ or any of its subsidiary companies or a general standard of the industry and obtainable in the open market;
 - vi) Proprietary make denoting the product of an individual manufacturer;
 - vii) Any other details governing the construction, manufacture and/or supply as existing in the contract.
- bb) Terms and expressions not defined herein shall have the meanings assigned to them in the Indian Sale of Goods Act, 1930 or the Indian Contract, 1872 or the General Clauses Act, 1897, as amended, as the case may be.

2. Application

These Conditions shall apply to the extent that they are not superseded by provisions in other parts of the Contract.

3. Standards

The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications. Such standards shall be the latest issued by the concerned institution.

4. Use of Contract Documents and Information

- 4.1 The Supplier shall not, without the Purchaser's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the Purchaser in connection therewith, to any person other than a person employed by the Supplier in the performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- 4.2 The Supplier shall not, without the Purchaser's prior written consent, make use of any document or information enumerated in sub-clause 4.1 above, except for purposes of performing the Contract.
- 4.3 Any document, other than the Contract itself, enumerated in sub-clause 4.1 above shall remain the property of the Purchaser and shall be returned (in all copies) to the Purchaser on completion of the Supplier's performance under the Contract if so required by the Purchaser.

5. Patent Rights

The Supplier shall indemnify the Purchaser against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the Goods or any part thereof in the Purchaser's country.

6. Security Deposit

- 6.1 The successful tenderers will have to submit Security Deposit for the 5% value of the total landed value of the contract including all taxes, duties and other costs and charges. In case of Rate / Running Contracts the Security Deposit shall be for an amount of 5% of annual offtake contractual value; and in case RC period is longer than 1 year, SD amount shall be 5% of average annual offtake. In case of Contracts for procurement of Capital Goods along with Warranty Spares & Consumables (if applicable) and additional Spares & Consumables / AMC / CMC for more than one year, the Security Deposit shall be for 5% of equipment landed value along with maximum annual landed value of Spares & Consumables.
- 6.2 The Security Deposit shall be deposited through RTGS/NEFT/IMPS/e-BG/other digital modes or in the form of a Bank Guarantee in the prescribed format from a RBI Scheduled Bank in purchaser's country (on a non-judicial stamp paper) within 15 days from date of notification of award or placement of order.
- 6.3 The Security Deposit shall be in the same currency(ies) in which contract is to be signed/ issued. In case of multi-currency contract, separate Security Deposit Bank Guarantee (SDBG) in respective currency for required value as above shall be submitted.
- 6.4 In case of equipment, SDBG shall not be individual equipment wise. However, multiple Bank Guarantees for Security Deposit shall be permissible provided value of all the SDBGs totals to 5% of the ~~contract~~ value as mentioned above, and all are submitted simultaneously within the specified time schedule and all of them are in the same prescribed format of SDBG without linking to any particular equipment.
- 6.5 The SDBG shall remain valid up to 3 months after completion of supplies and acceptance of materials by the consignee in case of supply contracts and in case of contracts for equipment involving installation and commissioning, 3 months after the supply and commissioning of all the equipment covered in the contract.
- 6.6 If the successful tenderer fails to deposit the security deposit within 15 (fifteen) days from date of notification of award/ placement of order, another opportunity may be given to them for submission of Security Deposit within next 15 days. If the successful tenderer still fails to

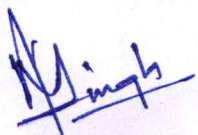
deposit the security deposit within the extended period but executes the supplies within scheduled delivery period, the submission of Security Deposit may be waived, as the purpose of submission of SD is fulfilled.

If the Supplier fails to deposit the SD within the extended period and no supplies are made, the order shall be cancelled and the case shall be processed to order elsewhere at firm's risk and cost. Moreover, the firm's performance is to be kept recorded for future dealings with them. Further, if during execution of the contract, the firm fails to extend the Bank Guarantee for Security Deposit, suitably as required, the same shall be recorded as unsatisfactory performance for future dealings apart from taking any other penal action as may be deemed fit by CIL.

- 6.7 In cases where the successful tenderer did not submit the security deposit even within the extended period for SD submission but has supplied the materials either in full or in part after the extended period for SD submission, the SD may be deducted from the first bill or in case of insufficient amount from subsequent bill(s) of the supplier till the full SD amount is deducted. Further, a penalty equivalent to 0.5% (half percent) of SD amount for delay of each week or part thereof (period of delay is to be calculated from the 31st day from the date of notification of award/placement of order to the date of receipt of full SD/deduction of full SD) shall be levied subject to a maximum of 5% of the contract value.
- 6.8 Security Deposit will be released with the approval of HOD of MM Department/ Area GM within 30 days after completion of supplies and acceptance of material by the consignee in case of supply contractor after successful commissioning and on receipt of confirmation of Performance Bank Guarantee(s) for all the equipment covered in the contract in case of contracts for equipment and all those items/ goods involving installation and commissioning and PBG.
- 6.9 Security Deposit may be converted into Performance Bank Guarantee (PBG) wherever PBG is required at the option of the supplier. At the time of conversion of security money into PBG, it should be ensured that the amount of PBG should not be less than 10% of landed value of order. In case of Contracts for procurement of Capital Goods along with Warranty Spares & Consumables (if applicable) and additional Spares & Consumables / AMC / CMC for more than one year, the amount of PBG should not be less than 10% of equipment landed value along with maximum annual landed value of Spares & Consumables. Wherever Security Deposit is converted into PBG, the operation of such SDBG/ Performance BG shall be guided by Performance Bank Guarantee Clause.
- 6.10 All Central/State Government Organization/PSUs shall be exempted from submission of Security Deposit. OEM/OES shall also be exempted from submission of Security Deposit in case of procurement of Spare Parts for equipment against Single Tender Enquiry/Open/Limited Tenders.
- 6.11 Submission of Security Deposit is exempted for the contracts having value upto Rs.2 lakhs.
- 6.12 The SDBG will be submitted Through Structured Financial Management System (SFMS).

7. Performance Bank Guarantee

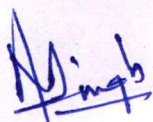
7.1 Wherever applicable, the successful bidder shall be required to furnish a Performance



Guarantee equivalent to 10% value of the total landed value of the contract including all taxes, duties and other costs and charges. In case of Contracts for procurement of Capital Goods along with Warranty Spares & Consumables (if applicable) and additional Spares & Consumables / AMC / CMC for more than one year, the Performance Guarantee shall be for 10% of equipment landed value along with maximum annual landed value of Spares & Consumables.

- 7.2 The Performance Guarantee shall be in the form of a Bank Guarantee issued by a RBI scheduled bank in India in the prescribed format on a non-judicial stamp paper.
- 7.3 The Performance Bank Guarantee (PBG) shall be in the same currency (ies) in which contract has been signed. In case of multi-currency contract, separate PBG in respective currency for required value shall be submitted.
- 7.4 If the contract is for procurement of equipment, the PBG (s) may be submitted equipment wise also. For this purpose, the value of each equipment will be worked out by dividing the total value of contract for a particular item of NIT, worked out as per provisions contained in clause-7 above, by the number of equipment ordered for that particular item of the NIT.
- 7.5 The PBG (s) shall remain valid till 3 months after the completion of warranty period.
- 7.6 The PBG shall be submitted sufficiently in advance (say 3-4 weeks) to enable its verification from the issuing bank, before submission of the invoice for 80% payment of the particular goods/ equipment(s).
- 7.7 The release of the Performance Bank guarantee(s) after above indicated period, shall be subject to satisfactory performance of the equipment/ items during the warranty period and fulfillment of contractual obligations failing which, action for further extension or encashment of PBG, as deemed suitable shall be taken. The PBG / converted SDBG shall be released with the approval of HOD (MM) of the concerned subsidiary after expiry of validity period upon receipt of:
- a. 'No Claim Certificate' from the HOD of User department; and
 - b. 'No Claim Certificate' from the Supplier as per format provided as **Annexure-10**
- 7.8 In case of procurement of equipment, if the successful tenderer which does not have the After Sales Service Support facilities in India like Depot/ Warehouse for supply of spare parts, Workshop facilities for servicing and repair of assemblies, sub-assemblies and equipment, availability of trained technical manpower etc., training facilities for providing training to CIL's personnel, wherever required, additional Performance Bank Guarantee for the 30% value of the total landed value of the contract including all taxes, duties and other costs and charges shall have to be submitted. This 30% PBG will be released after establishment of After Sales Service Support facilities in India subject to confirmation of the same by concerned Head of Technical Department. However, the supplier shall have to submit PBG for 10% of the total contract value to be kept valid for the remaining period of the contract plus 3 months processing period before release of 30% PBG. This 10% PBG will be released after satisfactory performance of all equipment/ items and fulfillment of contractual obligations including warranty obligations.
- 7.9 The PBG will be submitted through Structured Financial Management System (SFMS).

8 Inspections and Tests



- 81 The Purchaser or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract Specifications at no extra cost to the Purchaser. Generally, the Goods shall be of the best quality and workmanship and comply with the contract or supply order in all respect. The Technical Specifications shall specify what inspections and tests the Purchaser requires and where they are to be conducted. The Purchaser shall notify the Supplier in writing, of the identity of the inspector(s). The Purchaser reserves the right, at the Purchaser's cost, to depute its own inspector(s) and/or to engage any other third party inspecting agency, to conduct inspections and tests pursuant to the Contract. Sufficient time, atleast 30 days in advance will be given for inspection.
- 82 The inspections and tests may be conducted on the premises of the Supplier, at point of delivery and/or at the Goods' final destination. If conducted on the premises of the Supplier, all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Purchaser. However, any drawing and proprietary information provided for this purpose shall remain in control of the supplier. The inspector shall have full and free access at the supplier's works for the purpose of carrying out inspection. The Inspector shall have the right to put all the stores or materials forming part of the same or any part thereof to such tests as he may think fit and proper. The supplier shall not be entitled to object, on any ground whatsoever, to the method of testing adopted by the Inspector. Unless otherwise provided for in the contract, all stores/materials expended in test will be to supplier's account. In the event of Goods found acceptable by the Inspector during inspection, he shall furnish the supplier with necessary copies of Inspection notes for attaching to the supplier's bill.
- 83 Should any inspected or tested Goods fail to conform to the Specifications, including acceptance tests and periodic tests to verify guaranteed performance, the Purchaser may reject the Goods, and the Supplier shall either replace the rejected Goods or make alterations necessary to meet Specification requirements free of cost to the Purchaser within thirty days of such rejection. Replaced or altered goods shall be subjected to repeated inspection or tests to demonstrate conformity with the Specifications. In the event that replacement or alteration is not done within thirty day period as aforesaid, or, replaced or altered goods fail to demonstrate conformity with the Specifications in repeated inspections or tests as aforesaid, the Purchaser reserves the right to terminate the Contract in part or in whole and the Supplier shall repay forthwith to the Purchaser all monies paid including all costs incurred in the inspection and tests, in respect of Goods and Services associated therewith, for which the termination is applicable and, subsequently remove the same from the Purchaser's Site at the Supplier's cost.
- 84 Any Goods rejected at a place other than the premises of the supplier, shall be removed by the supplier within 14 days of the date of receipt of intimation of such rejection. The Inspector may call upon the supplier to remove what he considers to be dangerous, infected or perishable Goods, within 48 hours of the receipt of such intimation. The rejected stores shall under all circumstances lie at the risk of the supplier from the moment of rejection and if such stores are not removed by the supplier within the above mentioned period, the Inspector/Purchaser may either return the same to the supplier at the supplier's risk and cost (a public tariff rate) by such mode of transport as the Purchaser or Inspector may select or

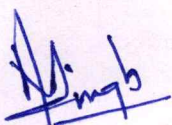


dispose of such stores at the supplier's risk on his account and retain in such portion of the proceeds as may be necessary to cover any expense incurred in connection with such disposal. The purchaser shall also be entitled to recover handling and storage charges for the period during which the rejected stores are not removed.

- 85 The Purchaser's right to inspect, test and where necessary, reject the Goods after the Goods' arrival in the Purchaser's country shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the Purchaser or its representative prior to the Goods' shipment from the Supplier's premises.
- 86 Nothing in this clause shall in any way relieve the Supplier of any warranty or other obligations under this Contract.

9 Packing and Marking

- 9.2 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.
- 9.3 All packing cases, containers, packing and other similar materials shall be supplied free by the Supplier and these shall not be returned unless otherwise specified in the Contract/Purchase order.
- 9.4 The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified in the contract and in any subsequent instructions ordered by the Purchaser. Packages will be stamped with identification marks both outside the packages as well as on the contents inside. Packages containing articles liable to be broken by rough handling like glass or machinery made of cast iron will be marked with cautionary words like 'Fragile' 'Handle with care'.
- 9.5 The marking of the Goods must comply with the requirements of the law relating to Merchandise Mark, in force in India.
- 9.6 Packing instructions: The Supplier will be required to make separate packages for each consignee. Each package will be marked on three sides with proper paint with the following:
- i. Project;
 - ii. Contract No;
 - iii. Country of origin of Goods;
 - iv. Supplier's name;
 - v. Packing list Reference Number;
 - vi. The gross weight, net weight and cubic measurement;
 - vii. Consignee Name and Address;
- 9.7 A complete list of contents in each package called the packing list will be prepared and one copy of the packing list shall be inserted inside the package.



10 Delivery and Documents

- 10.1** The delivery period stipulated in the Contract/Purchase Order shall be deemed to be the essence of the contract and delivery of the Goods must be completed within the specified period.
- 10.2** Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in the Schedule of Requirements. The delivery of Goods shall be deemed to take place on delivery of the Goods in accordance with the terms of the contract after approval of Goods by the Inspector.
- 10.3** For purposes of the Contract, "EXW", "FOB", "FCA", "CFR", "CIF", "CIP" and other trade terms used to describe the obligations of the Parties shall have the meanings assigned to them by the prevailing edition of Incoterms on the date of tender opening, published by the International Chamber of Commerce, Paris.
- 10.4** The details of shipping documents to be furnished by the Supplier are specified below:

(a) For Imported Goods:

Within forty eight (48) hours of shipment, the Supplier shall notify the Purchaser, Port Consignee and Ultimate Consignee by fax and email, full details of the shipment including Contract number, description of Goods, quantity, the vessel, the bill of lading number and date, port of loading, date of shipment, port of discharge, etc. The Supplier shall deliver by express courier service the following documents to the Purchaser, with a copy to the Port Consignee and Ultimate Consignee:

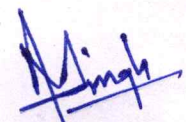
- i. Supplier's shipping invoice showing Contract Number, Goods description, quantity, unit price, total amount and GST number of ultimate consignee;
- ii. Clean on-board bill of lading indicating the Importer-Exporter Code (IEC) of the concerned Subsidiary Company of CIL and non-negotiable bill of lading;
- iii. Packing list identifying contents of each package;
- iv. Manufacturer's/Supplier's warranty /guarantee certificate;
- v. Manufacturer's Test & Inspection certificate;
- vi. Certificate of Country of Origin issued by the Chamber of Commerce of Manufacturer's Country;
- vii. Documentary evidence of marine freight & marine insurance.

The above documents shall be sent by supplier well in advance, so that the same are received by the Purchaser at least one (1) week before arrival of the Goods at the port or place of arrival and, if not received, the Supplier will be responsible for any consequent expenses.

(b) For Domestic Goods from within India:

Upon dispatch of the Goods to the consignee, the Supplier shall notify the Purchaser and Ultimate Consignee and deliver by express courier service the following documents to the Purchaser with a copy to the Ultimate Consignee:

- i. Supplier's invoice showing Contract Number, Goods description, quantity, unit price, total amount;



- ii. Railway receipt/ Transporter's consignment note /acknowledgement of receipt of Goods from the consignee(s);
- iii. Manufacturer's/Supplier's warranty / guarantee certificate;
- iv. Manufacturer's Test & Inspection certificate;

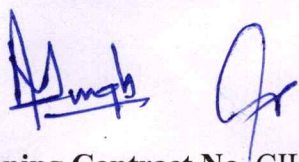
The above documents shall be provided by the supplier at the time of arrival of the Goods at the consignee's end. In case of delay, the Supplier will be responsible for any consequent expenses.

11 Insurance

- 11.1 Wherever necessary, the goods supplied under the contract, shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, delivery, storage and erection and commissioning at site (wherever applicable) in the manner specified in the contract. The insurance is to be done for coverage on "all risks" basis including war risks and strike clauses. The amount to be covered under insurance should be 110% of the invoice value to take care of the overall expenditure to be incurred by the purchaser for receiving the goods at the destination.
- 11.2 Where delivery of imported goods is required by the purchaser on CIF/CIP basis, the supplier shall arrange and pay for marine/air insurance, making the purchaser as the beneficiary. Where delivery is on FCA/ FOB/ CFR basis, marine/air insurance shall be the responsibility of the purchaser.
- 11.3 In case of domestic supplies on Free Delivery at site/FOR Destination basis, the supplier has to arrange insurance at its cost. For Ex-works and FOR station of dispatch contracts, it is the responsibility of the purchaser to arrange for insurance.
- 11.4 Where the delivery of the Goods is on CIP Basis, the supplier shall deliver the goods at the named place of destination at its own risks and costs. CIL has no obligation to the supplier for arranging insurance. However, CIL will provide the supplier upon request, with necessary information for obtaining insurance.
- 11.5 Where the delivery of the Goods is on FOR destination Basis, the supplier shall deliver the goods at the FOR destination site at its own risks and costs. CIL has no obligation to the supplier for arranging insurance. However, CIL will provide the supplier upon request, with necessary information for obtaining insurance".

12 Transportation

- 12.1 In case of FOB (Port of Shipment) contracts, the purchaser has to arrange transportation its own cost and risk.
- 12.2 In case of CIF (Port of Destination) contracts, transport of the goods to the port of destination in the Purchaser's country, as shall be specified in the contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price. In case of inland transportation of goods, the same is to be done through registered common carriers only.
- 12.3 In case of CIP (Final Place of Destination) contracts, transport of the goods to the port of destination and further to the named place of Final Destination in the Purchaser's country,



as shall be specified in the contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price. In case of inland transportation of goods, the same is to be done through registered common carriers only.

- 12.4 In case of FOR Destination contracts, transport of goods to the Destination site shall be arranged and paid for by the supplier and the cost thereof shall be included in the contract price. Transportation of goods is to be done through registered common carriers only.

13 Warranty

- 13.1 The Supplier warrants that the Goods supplied under the Contract are new, unused, of the most recent or current models and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Supplier further warrants that all Goods supplied under this Contract shall have no defect arising from design, materials or workmanship or from any act or omission of the Supplier that may develop under normal use of the supplied Goods in the conditions prevailing in the purchaser's country.
- 13.2 This warranty shall remain valid for twelve (12) months from the date of Commissioning of the equipment. However, in case of other Goods, warranty shall remain valid for eighteen (18) months from the date of receipt and acceptance of materials at consignee's end or twelve (12) months from the date of its use / fitment / commissioning, whichever is earlier.
- 13.3 The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty. The Supplier shall, within thirty days, repair or replace the defective Goods or parts thereof, free of cost at the ultimate destination. The Supplier shall take over the replaced parts/Goods at the time of their replacement. No claim whatsoever shall lie on the Purchaser for the replaced parts/Goods thereafter.
- 13.4 If the Supplier, having been notified, fails to remedy the defect(s) within thirty days, the Purchaser may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.
- 13.5 For the goods whose life is less than twelve (12) months, the warranty period will depend on the nature of the item under procurement and shall accordingly be specified in SCC.

14 Payment

- 14.1 Specific payment terms may be stipulated in the NIT and the resultant contracts depending on the nature of goods to be procured, as per provisions contained in Chapter-22.

14.2 Payment for Indian Agency Commission

The payment of Indian Agency Commission, if any, involved, may be considered in case of necessity, subject to compliance of the Government of India guidelines issued from time to time. Agency commission, if any, shall be paid in equivalent Indian Rupees, after erection and commissioning of the equipment, wherever applicable, within twenty-one days of submission of bills along with following documents:

- (A) Copy of foreign principal's invoice.
- (B) Copy of bill of lading.
- (C) Certificate from State Bank of India regarding Bill selling exchange rate ruling on the



date of bill of lading (in case of bank holiday on date of bill of lading, Bill Selling exchange rate on next working day shall be considered).

(D) In case of procurement of equipment, commissioning certificate signed by the concerned officials of the Project and counter-signed by the Area General Manager and HOD of Technical Dept. of the subsidiary company, where the equipment has been deployed.

- 14.3 In order to enable the purchaser to avail Input Tax Credit as per applicable Indian laws, the supplier shall furnish all the necessary documents to the consignee / paying authority as required, failing which the equivalent deduction will be made from the supplier's bills. In case of successful bidder(s), if at the time of supply, it is found that Input Tax Credit as per Invoice (Credit available to CIL / Subsidiary on this account) is less than the "Input Tax Credit Amount" declared in the Price Bid, the differential amount between the two shall be deducted from the Supplier's bills while making payment to them. If the evaluation of the supplier has been made considering the concessional rate of customs duty applicable for import from certain countries under trade agreements / treaties with Govt. of India, all the required documentation for availing concessional customs duty and subsequent customs clearance etc. will be provided by the supplier failing which the equivalent deduction will be made from their bills.

15 Changes in Order

The Purchaser may at any time, by a written order given to the Supplier, make changes within the general scope of the Contract in any one or more of the following:

- 15.1 drawings, designs or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
- 15.2 the method of shipment or packing;
- 15.3 the place of delivery; and/or
- 15.4 the place of Services to be provided by the Supplier.

16 Contract Amendments

Subject to relevant clause of GCC, no variation in or modification of the terms of the Contract/ Purchase Order shall be made except by written amendment issued against the Contract/ Purchase Order.

17 Assignment

The Supplier shall not assign, in whole or in part, its obligations to perform under this Contract, except with the Purchaser's prior written consent. However, the consent of the Purchaser shall not relieve the supplier from any obligation, duty or responsibility under the contract.

18 Subcontracts

The Supplier shall notify the Purchaser in writing of all subcontracts awarded by it to discharge the works under this Contract. Such notification, in the original bid or later, shall not relieve the Supplier of any liability or obligation under the Contract and the supplier will be solely responsible for all obligations under the contract.



19 Delays in the Supplier's Performance

- 19.1 Delivery of the Goods and performance of Services shall be made by the Supplier in accordance with the time schedule prescribed by the Purchaser in the Schedule of Requirements.
- 19.2 If at any time during performance of the Contract, the Supplier or its Subcontractor(s) should encounter conditions impeding timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may at its discretion extend the Supplier's time for performance, with or without liquidated damages, by way of an amendment to the Contract/ Purchase Order.
- 19.3 Except as provided under Force Majeure clause, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of liquidated damages, unless an extension of time is agreed upon pursuant to relevant clause without the application of liquidated damages.

20 Liquidated Damages

- 20.1 In the event of failure to deliver or dispatch the equipment/stores within the stipulated date/period in accordance with the terms and conditions and the specifications mentioned in the supply order and in the event of breach of any of the terms and conditions mentioned in the supply order, the Purchaser shall have the right:
 - (a) To recover from the successful bidder as agreed liquidated damages, a sum not less than 0.5% (Half Percent) of the price of any equipment/ stores which the successful tenderer has not been able to supply as aforesaid for each week or part of a week during which the delivery of such stores may be in arrears limited to 10% (Ten Percent) of the total contract value, or
 - (b) To purchase elsewhere after due notice to the successful tenderer on the account and at the risk of the defaulting supplier, the equipment/stores not supplied or others of similar description without cancelling the supply order in respect of the consignment not yet due for supply, or
 - (c) To cancel the supply order or a portion thereof, and if so desired to purchase the equipment/ stores at the risk and cost of the defaulting supplier and also,
 - (d) To extend the period of delivery with or without penalty as may be considered fit and proper. The penalty, if imposed, shall not be more than the agreed liquidated damages referred to in clause (a) above.
 - (e) To forfeit the security deposit fully or in part.
 - (f) Whenever under this contract any sum of money is recoverable from and payable by the supplier, the Purchaser shall be entitled to recover such sum by appropriating in part or in whole by deducting any sum or which at any time thereafter may become due to the successful tenderer in this or any other contract. If this sum is not sufficient to recover the full amount recoverable, the successful tenderer shall pay the Purchaser the remaining balance on demand. The supplier shall not be entitled to any gain on any such purchase.
- 20.2 For the purpose of the calculation of the liquidated damages amount, the basic FOR

Destination price shall be considered. For direct imports, the CIP price at Final Place of destination will be considered. Taxes and duties shall not be taken into account for calculation of LD. However, when prices indicated in the order are inclusive of taxes and duties, such prices will be taken for calculation of LD.

21 Termination for Default and breach of contract

21.1 The Purchaser, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate the Contract in whole or in part:

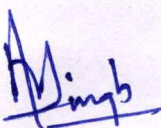
- (a) If the supplier fails to deliver any or all of the stores within the time period(s) specified in the contract, or any extension thereof granted by the Purchaser; or
- (b) If the supplier fails to perform any other obligation under the contract within the period specified in the contract or any extension thereof granted by the purchaser; or
- (c) If the Supplier, in the judgment of the Purchaser, has violated Code of Integrity for Public Procurement in competing for or in executing the Contract.

21.2 Code of Integrity for Public Procurement (CIPP):

The supplier shall observe the highest standard of ethics while competing for and during execution of contracts.

The following practices would amount to violation of CIPP:

- i. "Corrupt Practice" means making offers, solicitation or acceptance of bribe, rewards or gifts or any material benefit, in exchange for an unfair advantage in the procurement process or to otherwise influence the procurement process or contract execution;
- ii. "Fraudulent Practice" means any omission or misrepresentation that may mislead or attempt to mislead so that financial or other benefits may be obtained or an obligation avoided. This includes making false declaration or providing false information for participation in a tender process or to secure a contract or in the execution of a contract;
- iii. "Anti-competitive Practice" means any collusion, bid rigging or anti-competitive arrangement, or any other practice coming under the purview of The Competition Act 2002, between two or more bidders, with or without the knowledge of the Purchaser, that may impair the transparency, fairness and the progress of the procurement process or to establish bid prices at artificial, non-competitive levels;
- iv. "Coercive Practice" means harming or threatening to harm, directly or indirectly, at any stage, persons or their property to influence their participation in the procurement process or affect the execution of a contract;
- v. "Conflict of interest" means participation by a bidding firm or any of its affiliates that are either involved in the consultancy contract to which this procurement is linked; or if they are part of more than one bid in the procurement; or if the bidding firm or their personnel have relationships or financial or business transactions with any official of Procuring Entity who are directly or indirectly related to tender or execution process of contract; or improper use of information obtained by the (prospective) bidder from the Procuring Entity with an intent to gain unfair advantage in the procurement process or for personal gain; and
- vi. "Obstructive practice" means materially impede the Procuring Entity's investigation into allegations of one or more of the above mentioned prohibited practices either by

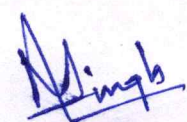


deliberately destroying, falsifying, altering; or by concealing of evidence material to the investigation; or by making false statements to investigators and/or by threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or by impeding the Procuring Entity's rights of audit or access to information.

22 Force Majeure

- 22.1 Force Majeure means an event beyond the control of the supplier and not involving the supplier's fault or negligence and which is not foreseeable. Such events may include, but are not restricted to, acts of the purchaser either in its sovereign or contractual capacity, wars or revolutions, hostility, acts of public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes, lockouts, freight embargoes and act of God.
- 22.2 If there is delay in performance or other failures by the supplier to perform its obligation under the contract due to an event of a Force Majeure and the contract is governed by Force Majeure Clause, the supplier shall not be held responsible for such delays/failures.
- 22.3 In such a situation, the supplier shall promptly notify the purchaser in writing of such conditions and the cause thereof, duly certified by the local Chamber of Commerce or Statutory authorities, the beginning and end of the causes of the delay, within twenty one days of occurrence and cessation of such Force Majeure Conditions. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as reasonably practical and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
- 22.4 If the performance in whole or in part or any obligation under this contract is prevented or delayed by any reason of Force Majeure for a period exceeding sixty days, either party may at its option terminate the contract without any financial repercussion on either side.
- 22.5 For delays arising out of Force Majeure, the supplier will not claim extension in completion date for a period exceeding the period of delay attributable to the causes of Force Majeure.
- 22.6 There may be a Force Majeure situation affecting the purchaser also. In such a situation, the purchaser is to take up with the supplier on similar lines as above for further necessary action.
- 22.7 The contract shall be governed by the following Force Majeure Clause:

"If at any time, during the continuance of this contract, the performance in whole or in part by either party of any obligation under this contract shall be prevented or delayed by reason of any wars or revolutions, hostility, acts of public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes, lockouts, freight embargoes or act of God (hereinafter referred to "events") provided, notice of the happening of any such event is given by either party to the other within 21 days from the date of occurrence thereof, neither party shall by reason of such event, be entitled to terminate this contract nor shall either party have any claim for damages against the other in respect of such non-performance or delay in performance, and deliveries under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist, PROVIDED FURTHER that if the performance in whole or part or any obligation under this contract is



prevented or delayed by reason of any such event for a period exceeding 60 days, either party may at its option terminate the contract provided also that if the contract is terminated under this clause, the purchaser shall be at liberty to take over from the contractor at a price to be fixed by the CIL/Subsidiary Company, which shall be final, all unused, undamaged and acceptable materials, bought out components and stores in course of manufacture in the possession of the contractor at the time of such termination or such portion thereof as the purchaser may deem fit excepting such materials, bought out components and stores as the contractor may with the concurrence of the purchaser elect to retain."

23 Termination for Insolvency

The Purchaser may at any time terminate the Contract by giving written notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Purchaser.

24 Termination for Convenience

- 24.1 The Purchaser, by written notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.
- 24.2 The Goods that are complete and ready for shipment within thirty (30) days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:
- a) to have any portion completed and delivered at the Contract terms and prices; and/or
 - b) to cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and Services and for materials and parts previously procured by the Supplier.

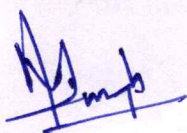
25 Governing Language

The Contract shall be written in English language. All correspondence and other documents pertaining to the Contract which are exchanged by the Parties shall be written in the same language.

26 Taxes and Duties

- 26.1 A foreign Supplier shall be entirely responsible for all taxes, duties, license fees and other such levies imposed outside the Purchaser's country. The foreign supplier shall also be responsible for all taxes & duties in Purchaser's country legally applicable during execution of the contract other than those which are to be paid by purchaser, as specified in as per relevant clause of NIT.
- 26.2 A Domestic Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until the execution of the contract, other than those which are to be paid by purchaser, as specified in as per relevant clause of NIT.

27 Limitation of Liabilities



Except in cases of criminal negligence or wilful misconduct;

- 27.1 Notwithstanding anything herein to the contrary, no party shall be liable for any indirect, special, punitive, consequential or exemplary damages, whether foreseeable or not, arising out of or in relation to this contract, loss of goodwill or profits, lost business however characterized, any/ or from any other remote cause whatsoever.
- 27.2 The supplier shall not be liable to the purchaser for any losses, claims, damages, costs or expenses whatsoever arising out of or in connection with this contract in excess of the contract value of the goods and services supplied hereunder which caused such losses, claims, damages, costs or expenses.
- 27.3 However, the limitation of liability of the supplier indicated above shall not apply to Liquidated damages.

28 Dispute Resolution

- 28.1 In case of contract with a Public Sector Enterprise or Govt. Dept., the following Arbitration Clause shall be incorporated in the contract:

“Administrative Mechanism for Resolution of CPSEs Disputes (AMRCD), in the Department of Public Enterprises:

In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contract(s) between Central Public Sector Enterprises (CPSEs)/ Port Trusts inter se and also between CPSEs and Government Departments/ Organizations (excluding disputes concerning Railways, Income Tax, Customs & Excise Departments), such dispute or difference shall be taken up by either party for resolution through AMRCD as mentioned in DPE OM No. 05/0003/2019-FTS-10937 dated 14.12.2022 and the decision of AMRCD on the said dispute will be binding on both parties.”

- 28.2 In case of contract with parties other than above Agencies, the following Arbitration & Conciliation Clause and Sole Arbitration Clause shall be incorporated in the contract:

“Arbitration & Conciliation:

In the event of any dispute or difference relating to the interpretation and application of the provisions of the contract, such dispute or difference shall be taken up by either party for conciliation first. The party initiating conciliation shall send a written invitation to the other party to conciliate, and proceedings shall commence when the other party accepts the initiations to conciliation. There shall be only one conciliator who would be appointed by Chairman, CIL/ CMD of Subsidiary Company (as the case may be) as the conciliator. The conciliation shall assist the parties to reach an amicable settlement of their dispute. When the parties sign the settlement agreement, it shall be final and binding on the parties. The conciliator shall authenticate the settlement agreement and furnish a copy thereof to each party.

If differences still persist, the settlement of the dispute shall be resolved through arbitration.

The party initiating arbitration shall send a written notice to the other party of its intention to commence arbitration. The applicable arbitration procedure will be as per the Arbitration and Conciliation Act, 1996 as amended by Amendment Act of 2015.”

"Sole Arbitration Clause:

In the event of any question, dispute or difference arising under these terms & conditions or any condition contained in this contract or interpretation of the terms of, or in connection with this Contract (except as to any matter the decision of which is specially provided for by these conditions), the same shall be referred to the sole arbitration of a person, appointed to be the arbitrator by the Chairman, CIL/ CMD of Subsidiary Company (as the case may be). The award of the arbitrator shall be final and binding on the parties of this Contract.

Note:

a. In the event of the Arbitrator dying, neglecting or refusing to act or resigning or being unable to act for any reason, or his/her award being set aside by the court for any reason, it shall be lawful for the Chairman, CIL / CMD of Subsidiary Company (as the case may be) to appoint another arbitrator in place of the outgoing arbitrator in the manner aforesaid.

b. It is further a term of this contract that no person other than the person appointed by the Chairman, CIL / CMD of Subsidiary Company (as the case may be) as aforesaid should act as arbitrator and that, if for any reason that is not possible, the matter is not to be referred to Arbitration at all. The venue of arbitration shall be the place from which the contract is issued or such other place as the Chairman, CIL / CMD of Subsidiary Company (as the case may be) at his discretion may determine."

29 Progress Reports

- 29.1 The Supplier shall from time to time render such reports concerning the progress of the contract and/or supply of the stores in such form as may be required by the Purchaser.
- 29.2 The submission, receipt and acceptance of such reports shall not prejudice the right of the Purchaser under the contract nor shall operate as an estoppel against the Purchaser merely by reason of the fact that he has not taken notice of or objected to any information contained in such report.

30 Provisions of CIL's Purchase Manual

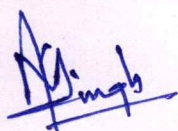
The provisions of CIL's Purchase Manual and its subsequent amendments (Available on CIL's website, www.coalindia.in) shall also be applicable, if not specified otherwise in this Bid document.

31 Applicable Law

The Contract shall be governed by the laws of the Republic of India, unless otherwise specified in the bid document.

32 Jurisdiction of Courts

- 32.1 Irrespective of the place of delivery, the place of performance or place of payment under



the contract, the contract shall be deemed to have been made at the place from where the acceptance of tender or supply order has been issued.

- 32.2 The courts of the place from where the acceptance of tender has been issued shall alone have jurisdiction to decide any dispute arising out of or in respect of the contract.

33 Notices

- 33.1 Any notice given by one Party to the other pursuant to this Contract shall be sent to the other Party in writing or facsimile to be confirmed in writing, to the other Party's address. For the purpose of all notices, the following shall be the addresses of the Purchaser and the Supplier:

Purchaser:

Executive Director (M&C),
Coal India Limited,

Coal Bhawan, Premises No. 04,

Plot No. AF-II, Action Area 1A,

New Town Rajarhat,

Kolkata -700 156, West Bengal, India

Phone: +9133 - 23244127]

Supplier:

[.....]

Fax No.:+91

Phone: +91.....]

- 33.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.
- 33.3 In case of change in address, the Supplier shall immediately notify the same to the Purchaser in writing. The supplier shall be solely responsible for the consequences of omission to notify the change of address to the Purchaser.



Improved Methodology for Determination of Bench Mark Powder Factor

1. Scope of Work

- i. Study of mine plans, inspection of mine site, Geo- Mining condition, GR/PR of Mine/Project/block
- ii. Method of Mining.
- iii. Study of previous record of achieved Powder Factor of the mine.
- iv. Designing of blast pattern based on the technical parameters with consultation with mine management before trial Blast.
- v. Conducting trial blasts in each bench of OB/Coal and evaluation of blast performance.
- vi. Fragmentation analysis of each trial blast using WipFrag/ dedicated software.
- vii. Measurement of the actual volume of Blasted material by determining of Initial RL of OB/Coal bench before blasting & final RL of the same after mucking.
- viii. Explosive used in each trial blast.
- ix. Determine the achievable optimum benchmark Powder Factor.
- x. Designing of blast pattern after correlating the all blast results.

2. Base-line Study

- i. Prediction of Hardness of Strata.
- ii. Testing of Bulk/ cartridge Explosives used.
- iii. Fragmentation assessment of each Blast.
- iv. Estimation of PPV due to blasting.
- v. Measurement the actual volume (with the pre and post survey) after blasting as well as mucking.
- vi. To estimate the Powder Factor of each Blast.
- vii. Design of blast Patten based on analysis of blast results & Hardness of Strata.

3. Instruments & Software Used

Methodology for determination of Bench Mark Powder Factor has incorporated Velocity of Detonation, actual measurement of the blasted material pre & post survey, Compressive Strength of the rock, Fragmentation analysis. The following instruments have been used:

- Seismograph / Vibrometer
- VOD Meter and Delay Timer
- Schmidt Hammer
- Fragmentation Analysis Software
- Digital Weighing Machine
- Other Equipment

4. Methodology

i. Compressive Strength measurement of Rock

Compressive strength is the resistance that the rock can withstand before failure. Based on the compressive strength, the rocks can be classified as hard, medium hard or soft. Rebound hammer test using Schmidt Hammer will be used for calculating the compressive strength of the rock. Hardness of Rock is considered while deciding blast design parameters like burden, spacing, stemming and amount of explosive to be used for good fragmentation.

ii. Blast Geometry



Scientific Formulae has been considered while deciding given Parameters and these formulae for Blast design is modified if needed based on local geological condition which varies mine to mine. Different parameters are:

- Burden
- Stemming Height
- Stemming Material
- Sub-drilling
- Spacing
- Blast Hole depth
- Delay Interval

iii. Intrinsic Properties and Functional Requirement of the Explosives

Velocity of detonation (VOD) of explosives plays an important role for desired fragmentation. Soft strata require lesser VOD and more gas formation for breakage while the hard strata requires high VOD in order to get optimum fragmentation. Density of the explosive is a very important factor that can be measured by water displacement method. Relative Bulk Strength (RBS) is the measure of the energy available per unit volume of explosive as compared to an equal volume of bulk ANFO at 0.81gm/cc density.

iv. Fragmentation Analysis by Using WipFrag Software

The fragmentation study of the blast will help us in determining the percentage of % of oversize Blasted Material & mean Fragment Size as well as muck pile profile formed in a blast. The allowable boulder size depends upon the type of equipment used for mucking of the material. Fragmentation analysis software like Fragblast, WipFrag can be gainfully used for fragmentation analysis to obtain both the fragment size distribution, boulder percentage calculation and the muck profile analysis. If the fragmentation is not satisfactory then such blast will not be considered for determination of powder factor.

v. Blast Induced Ground Vibration

The use of explosives to execute blasting activities will always lead to concern as to its effects on the environment. The ground vibration induced due to blasting impact the nearby localities & surrounding of the mines. In order to determine the induced ground vibration, measurement of PPV was carried out with seismograph at different distances from SME charged blasting sites.

vi. Pre & Post Blast Survey

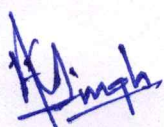
In order to determine the powder factor of the mine, the actual amount of blasted rock that has been removed from the blast is necessary for measurement. It can be achieved by carrying out pre (before blasting) and post blast (After material is mucked) survey of the location. It will bring accuracy in the measurement of amount of material removed in a blast. This excavated blasted volume divided by explosives consumed will give us the actual powder factor that can be achieved in the mine under present geo-mining conditions.

5. Benchmark Powder Factor for a Mine

The following formulae to be used for determination of powder factor:

$$PF \text{ (m}^3\text{/kg) for OB} = (\text{Sum of total volume (m}^3\text{) of overburden for all available benches in OB}) / (\text{Sum of total quantity of explosives used in all above blasts in OB benches})$$

$$PF \text{ (Te/kg) for Coal} = (\text{Sum of total tonne of coal of all benches}) / (\text{Sum of total quantity of explosives (kg) used in all the above blasts in coal benches})$$



6. Designing of blast pattern based on correlating the all blast results and Hardness of Strata

Blast design will be given after correlating of all blast results and Hardness of Strata, so that optimum fragmentation can be achieved at desired Powder Factor.

7. Existing Methodology vis-à-vis Proposed Improved Methodology

Sl. No.	Existing Methodology	Proposed Improved Methodology
a.	For subsequent year, the average PF achieved in previous financial year shall be fixed as Bench Mark PF.	Benchmark determined with improved methodology and will be fixed with an allowable Range of (+/- 2%). Once fixed the BMPF range will remain the same for subsequent years until reviewed.
b.	As per NIT of Coal India Limited, bench Mark PF shall be fixed in notional manner through a committee.	The Bench Mark PF (BMPF) shall be fixed by proposed improved methodology through a committee.
c.	Limited Instruments used.	Numerous Scientific instruments such as: • Schmidt Hammer • Digital VOD Meter • Software for fragmentation assessment. • High resolution camera for Fragment photograph and its analysis. • Vibration Monitor • Digital Weighing Machine • GPS etc.
d.	Hardness of Strata is not measured.	Hardness of Strata has been considered for fixation of BMPF. Hardness of strata is measured by Schmidt Hammer.
e.	Fragmentation is visually Analyzed.	Fragmentation assessment is done by WipFrag Software. Mean Fragment Size and over size fragmented material is analyzed by dedicated software.
f.	VOD & Density of Explosive is not measured.	VOD and Density of Explosive has been considered.
g.	Mine Surveyor for measuring depth, spacing and burden of each hole at the blast site. Measured In-situ Volume of the rock. Actual volume of Blasted material is not Measured.	Mine Surveyor for measuring depth, spacing and burden of each hole at the blast site and additionally measure the actual volume of Blasted material by determining of Initial RL of OB bench before blasting & final RL of the same after mucking.
h.	Blast design is given.	Blast design is given as per analysis of trial blast as well as Harness of Strata.