

Coal India Limited

(A Maharatna Company)

Tender No. CIL/C2D/Bulk Explosives/2025-27/401

Dated: 17.10.2025

Notice Inviting Tender cum e-Reverse Auction

Open Domestic Tender

Tender Document

For

**Conclusion of Running Contracts (RCs) and empanelment
as Reserve RC holders for a period of two years for supply
of Bulk Explosives for WCL.**



**Coal India Limited
Coal Bhawan
Premises No. 4, Action Area 1A,
New Town, Rajarhat,
Kolkata – 700156
INDIA**

This Tender Document comprises the following Sections:

1	Section – I	Invitation for Bids (IFB)
2	Section – II	Instructions To Bidders (ITB)
3	Section – III	General Conditions of Contract (GCC)
4	Section – IV	Special Conditions of Contract (SCC)
5	Section – V	Schedule of Requirement (SOR)
6	Section – VI	Technical Section including Specifications
7	Section – VII	Sample Forms including LoB, Annexures & Checklist of documents to be uploaded.
8	Other Documents	Bill of Quantity (BoQ) and Technical Parameter Sheet (TPS) containing Commercial Parameter Sheet (CPS) available against this tender on CIL's e-procurement portal shall also be deemed part of this Tender Document

GM (MM/HOD)
For and on behalf of Coal India Limited

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Section I - Invitation for Bids (IFB)

Invitation for Bids (IFB)

Section I - Invitation for Bids (IFB)

- a. Coal India Limited, a Government of India Undertaking with its registered office at Coal Bhawan, Premises no. 04, Plot no AF-III, Action Area 1A, New Town, Rajarhat, Kolkata -700 156, West Bengal, hereinafter referred to as “the Purchaser”, invites online bids through its e-Procurement Portal <https://coalindiatenders.nic.in> from Indian manufacturers for conclusion of Running Contracts (RCs) and empanelment as Reserve RC holders for a period of two years for supply of Bulk Explosives to all the subsidiary companies of CIL as per requirement listed in Section – V, Schedule of Requirement (SOR).
- b. The complete tender document shall be available in the CIL’s e-procurement portal <https://coalindiatenders.nic.in> for downloading and submission of offer. The complete tender document shall also be available on Coal India’s website www.coalindia.in and Central Public Procurement Portal (<https://eprocure.gov.in>) for downloading only.
- c. There will be no physical/manual sale of tender document. There is no Tender Fee and the bidders can download tender document free of cost from any of the websites mentioned above.
- d. Details of tender:

1	Tender No.	CIL/C2D/Bulk Explosives/2025-27/401 dated 17.10.2025
2	Type of Tender	Two Bid System with Reverse Auction
3	Estimated value of Tender	Rs. 996.64 Crores (approx.)
4	Tender Fee	NIL
5	Earnest Money Deposit	Rs. 50 Lakhs
6	Subject of Tender	Conclusion of Running Contracts (RCs) and empanelment as Reserve RC holders for a period of two years for supply of Bulk Explosives for WCL
7	e-Publishing date of Tender	18.10.2025 At 18:55 hours
8	Downloading of Tender Document	
	(i) Starts on	18.10.2025 From 18.55 hours (IST)
	(ii) Closes on	12.11.2025 Upto 17.00 hours (IST)
9	Seeking Clarification	
	(i) Starts on	18.10.2025 From 18.55 hours (IST)
	(ii) Closes on	28.10.2025 Upto 17.00 hours (IST)
10	Pre-Bid Meeting	30.10.2025 At 11.00 hours (IST)

Section I - Invitation for Bids (IFB)

11	Online Submission of Offers	
	(i) Start Date and Time	31.10.2025 From 11.00 hours (IST)
	(ii) Last Date and Time	12.11.2025 Upto 17.00 hours (IST)
12	Due date and time of Opening of Techno-Commercial Bids of Tenders (Cover-I)	13.11.2025 At 11.00 hours (IST)
13	Due date and time of Opening of Price Bids of Tenders (Cover-II)	Will be done at a later date which will be communicated to the Techno-Commercially acceptable bidders through portal only
14	Start of Reverse Auction	Will be initiated normally within two hours after opening of Price-Bids (Cover-II) of Techno-Commercially acceptable bidders.

- e. There is no provision to take out the list of parties which have downloaded the tender document from the above referred website. As such, bidders are requested to visit the website frequently till the last date and time of online submission of offers to ensure that they have not missed out any corrigendum issued against the said tender after they have downloaded the tender document. The responsibility of downloading the corrigendum, if any, will be of the downloading party. No separate intimation in respect of corrigendum to the NIT (if any) will be sent to the bidders who have downloaded the tender document from website.
- f. In the event of the scheduled/extended due date of opening of bids being declared as a closed holiday for purchaser's office or a "bundh", the due date for opening of bids will be the following working day at the scheduled time.
- g. The bidders, in their own interest, are requested not to wait till the last moment for submission of bid to avoid last minute rush and local problems related to internet connectivity, law and order, strike, bundh etc. The Purchaser shall not be responsible, if bids could not be uploaded due to such local problems at the bidders' end.
- h. The interested bidders may obtain further information from the office of the Purchaser as per address given below:

GM(MM/HoD),
Coal India Limited,
Coal Bhawan, Premises No. 04,
Plot No. AF-III, Action Area 1A,
New Town, Rajarhat,
Kolkata -700 156, West Bengal.
Fax: 033-23244115
Phone: 033-23244127
Email address: gmmm.cil@coalindia.in

Section II – Instructions to Bidders (ITB)

Instructions to Bidders (ITB)

Section II – Instructions to Bidders (ITB)

1. Requirements for participation in e-tenders

In order to submit the online offer on CIL's e-Procurement portal, the bidders should meet the following requirements:

- a. PC with internet connectivity. It will be the bidder's responsibility to comply with the system requirement, i.e., hardware, software and internet connectivity at bidder's premises to access the e-Procurement website. Under no circumstances, CIL shall be liable to the bidders for any direct/indirect loss or damages incurred by them arising out of incorrect use of the e-Procurement system or internet connectivity failures.
- b. Online Enrolment/ Registration with CIL's e-Procurement portal with valid Digital Signature Certificate (DSC). The online enrolment/registration of the bidders on the portal is free of cost and one-time activity only. The registration should be in the name of bidder. The DSC of the person bidding online on behalf of bidder (the bidding firm) should be mapped / registered with the name of the bidding firm. It shall be the responsibility of the tenderer to ensure that they get registered with the CIL's e-Procurement portal well in advance and download the documents before the last date and time for the same.
- c. Class III Digital Signature Certificate (DSC).

2. Digital Signature Certificate (DSC)

Bidders may obtain Digital Signature Certificate from any Certifying Authority authorized by Controller of Certifying Authority (CCA) and which can be traced up to the chain of trust to the Root Certificate of CCA.

3. Help for participating in e-tender

The detailed method for participating in the e-procurement is available on links "Help for Contractor" and "Bidders Manual Kit" in CIL's e-Procurement portal. The bidders may also seek help from the 24 x 7 help-desk on 0120-4001002 and 0120-4001005. All queries will be answered in English / Hindi only.

4. Communication

All communication sent by the Purchaser as well as the e-procurement provider by post/fax/e-mail/SMS shall be deemed as valid communication. The bidder must provide complete address, fax number, corporate e-mail id and mobile number in the offer.

5. Cost of Bidding

The bidder shall bear all costs associated with the preparation and online submission of bid and the Purchaser will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

6. Eligible Bidders

A. In order to be eligible, the bidders shall have to fulfil all the terms and conditions under various sections of the tender document.

B. Purchase Preference under Make in India Policy

Under 'Make in India' policy of Government of India, Purchase Preference shall be given to 'Class-I Local Supplier' over 'Class-II Local Supplier' as per Public Procurement

Section II – Instructions to Bidders (ITB)

(Preference to Make in India), Order 2017 issued vide order No. P-45021/2/2017-B.E.-II dated 15th June 2017 (subsequently revised vide orders dated 28.05.2018, 29.05.2019, 04.06.2020, 16.09.2020 ,04.03.2021 and 19.07.2024) of Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, GoI.

- i. The definitions of ‘Class-I Local Supplier’, ‘Class-II Local Supplier’, ‘Non-Local Supplier’ and ‘Local Content’ are as follows:
 - a. ‘Class-I Local Supplier’ means a supplier or a service provider, whose goods and/or services offered for procurement, has local content of minimum 50%.
 - b. ‘Class-II Local Supplier’ means a supplier, whose goods and / or services, offered for procurement, has local content of minimum 20%.
 - c. ‘Non - Local Supplier’ means a supplier, whose goods and / or services, offered for procurement, has local content less than 20%.
 - d. ‘Local Content’ means the amount of value added in India which shall be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.

As per the OM dated 04.03.2021, it has been clarified by the Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry that bidders offering imported products will fall under the category of Non-Local Suppliers. They can’t claim themselves as Class-I Local Suppliers/Class II Local Suppliers by claiming the services such as transportation, insurance, installation, commissioning, training and after-sales service support like AMC/CMC etc. as local value addition.

In view of above, “Local content” will not include services such as transportation, insurance, installation, commissioning, training and after-sales service support like AMC/CMC etc. as local value addition.

As per OM dated 19.07.2024 it has been clarified, through explanatory notes for calculation of local content, by the Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, that: -

- i. Imported items sourced locally from resellers / distributors shall be excluded from calculation of Local content.
- ii. The license fees / royalties paid / technical charges paid out of India shall be excluded from local content calculation.
- iii. Procurement/Supply of repackaged/ refurbished/ rebranded imported products as understood commonly shall be treated as reselling of imported products and shall be excluded from calculation of local content. The definition of repackaged/refurbished/rebranded imported products is as follows;

‘Refurbishing’ means repair or reconditioning of an imported product does not amount to manufacture because no new goods come into existence.

Section II – Instructions to Bidders (ITB)

'Repackaging' means repacking of imported goods from bulk pack to smaller packs would not ordinarily amount to manufacture of a new item.

'Rebranding' means relabeling or renaming or change in symbol or logo/makes or corporate image of a company/organization/firm for an imported product would amount to rebranding.

- iv. To ensure that imported items sourced locally from resellers/distributors are excluded from calculation of local content, you are to provide, the cost of such locally-sourced imported items (inclusive of taxes) along with break-up on license/royalties paid/technical expertise cost etc. sourced from outside India. For items sold by bidder as reseller, OEM certificate for country of origin is to be submitted.
 - v. For contracts involving supply of multiple items, weighted average of all items to be taken while calculating the local content.
 - e. 'Margin of Purchase Preference' means the maximum extent to which the price quoted by a "Class-I Local Supplier" may be above the L1 for the purpose of purchase preference. The margin of purchase preference shall be 20%.
 - f. Special treatment for items covered in PLI Scheme (As per OM dated 19.07.2024 of Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry): The manufacturers manufacturing an item under PLI scheme shall be treated as deemed Class II local supplier for that item unless they have minimum local content equal to or higher than that notified for Class-I local supplier for that item, provided the manufacturer has received incentive from the concerned PLI Ministry for the item. The above shall be applicable for the specific time period only, as notified by concerned PLI Ministry.
- ii. Verification of local content:
- a. The 'Class-I local supplier' / 'Class-II local supplier' shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content. The certificate shall also indicate details of the location(s) at which the local value addition is made and also UDIN Number wherever mandated by respective statutory bodies.
Note: This certificate, as per format enclosed as Annexure-10, will have to be submitted for the company as a whole in respect of the offered product and uploaded in "COMMERCIAL DOCS".
 - b. At the time of execution, the supplier / contractor shall be required to give local content certification duly certified by cost / chartered account in practice. For cases where it is not possible to provide certification by Cost /Chartered Accountant at the time of execution, the supplier shall be permitted to provide the certificate for local content from Cost / Chartered Accountant after completion of the Contract, within time limit acceptable to CIL i.e. 3 months. In case the contractor / supplier does not meet the stipulated local content requirement and the category of the supplier changes from Class-I to Class II / Non-local or from Class-II to Non-Local, a penalty upto 10% of the contract value shall be imposed, However, contract once awarded shall not be terminated on this account.
 - c. Nodal Ministry /CIL may constitute committees with internal and external experts for independent verification of self-declarations / auditor's / accountant's

Section II – Instructions to Bidders (ITB)

certificates on random basis and in the case of complaints.

- d. The complaint fee of Rs. 15 Lakhs or 1% of the value of the local item being procured (subject to maximum of Rs. 15 Lakhs), whichever is higher, shall be paid in the form of Demand Draft, drawn in favour of Coal India Limited, Kolkata. In case the complaint is found to be incorrect, the complaint fee shall be forfeited. In case, the complaint is upheld and found to be substantially correct, the deposited fee of the complainant would be refunded without any interest.
 - e. False declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.
 - f. A supplier who has been debarred by any procuring entity for violation of above Order shall not be eligible for preference under this Order for procurement by any other procuring entity for the duration of debarment. The debarment for such other procuring entities shall take effect prospectively from the date on which it comes to the notice of other procurement entities.
- iii. In terms of the above said policy, purchase preference shall be given to ‘Class-I Local Supplier’ over ‘Class-II Local Supplier’. ‘Non-Local Suppliers’ are not eligible to participate in the tender.
- C. Special provisions regarding eligibility of bidders from the countries sharing land border with India as per extant guidelines of Department of Expenditure, Ministry of Finance, GoI, vide Order (Public Procurement No. 4) no. F/7/10/2021-PPD (1) dated 23.02.2023 (in case of any change prior to 15 days from the tender publishing date, the same will be applicable):-
- i. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority i.e. Registration Committee constituted by DPIIT, Ministry of Commerce and Industry, GoI. Further, any bidder (including an Indian bidder) having Specified Transfer of Technology (ToT) arrangement with an entity from a country which shares a land border with India, shall also require to be registered with the same Competent Authority.
- Further any bidder (including an Indian bidder) having Specified Transfer of Technology (ToT) arrangement with an entity from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with competent Authority i.e., registration committee constituted by DPIIT, Ministry of Commerce and Industry, GoI.
- ii. “Bidder” (including the term ‘tenderer’, ‘consultant’, ‘vendor’ or ‘service provider’ in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency, branch or office controlled by such person, participating in a procurement process.

Section II – Instructions to Bidders (ITB)

- iii. “Transfer of Technology” means dissemination and transfer of all forms of commercially usable knowledge such as transfer of know-how, skills, technical expertise, designs, processes and procedures, trade secrets, which enables the acquirer of such technology to perform activities using the transferred technology independently. (Matters of interpretation of this term shall be referred to the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade, and the interpretation of the Committee shall be final.)
- iv. “Specified Transfer of Technology” means a transfer of technology in the sectors and/or technologies, specified below:
 - a. Certain Sectors and Technologies have been identified as sensitive from the national security point of view. Mining and Extraction (including deep sea project) Sector which includes Coal India Ltd. and its subsidiaries, is considered as Category-II sensitive Sector. The technologies as below are considered sensitive technologies:
 - 1. Additive Manufacturing (e.g. 3D Printing)
 - 2. Any equipment having electronic programmable components or autonomous systems (e.g. SCADA systems)
 - 3. Any technology used for uploading and streaming of data including broadcasting, satellite communications etc.
 - 4. Chemical Technologies,
 - 5. Biotechnologies including Genetic Engineering and Biological Technologies.
 - 6. Information and Communication Technologies.
 - 7. Software
 - b. For Category-II sensitive Sectors, bidders with ToT arrangement in the sensitive technologies indicated above, with an entity from a country which shares a land border with India shall require registration.
 - c. In category II sensitive Sectors, the Secretary (or any officer not below the rank of Joint Secretary of GoI, so authorized by the Secretary) of the Ministry/Department of the GoI is empowered, after due consideration, to waive the requirement of registration for a particular item/application or a class of items/applications from the requirement of registration, even if included as Sensitive Technologies mentioned above. The Ministry/Department concerned shall intimate DPIIT and National Security Council Secretariat (NSCS) of their decision to waive the requirement of registration. Ministries/Departments of the GoI are not required to consult DPIIT / NSCS before deciding and are only required to intimate the decision to DPIIT/NSCS. If any point is raised by DPIIT/NSCS, it should be considered in future procurement; ongoing procurement for which such waiver was granted need not be interrupted or altered.
- v. “Bidder (or entity) from a country which shares a land border with India” for the purpose of the above Order means:
 - a) An entity incorporated, established or registered in such a country; or
 - b) A subsidiary of an entity incorporated, established or registered in such a country; or
 - c) An entity substantially controlled through entities incorporated, established or registered in such a country; or
 - d) An entity whose beneficial owner is situated in such a country; or
 - e) An Indian (or other) agent of such an entity; or
 - f) A natural person who is a citizen of such a country; or
 - g) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above
- vi. The beneficial owner for the purpose of (Clause-6.C.v.d) above will be as under:

Section II – Instructions to Bidders (ITB)

1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.
Explanation -
 - a) “Controlling ownership interest” means ownership of, or entitlement to, more than twenty-five per cent of shares or capital or profits of the company;
 - b) “Control” shall include the right to appoint the majority of the directors or to control the management or policy decisions, including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;
 2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
 3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
 4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
 5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
- vii. “Agent” is a person employed to do any act for another, or to represent another in dealing with third person.
- Note:
1. A person who procures and supplies finished goods from an entity from a country which shares a land border with India will, regardless of the nature of his legal or commercial relationship with the producer of the goods, be deemed to be an Agent.
 2. However, a bidder who only procures raw material, components etc. from an entity from a country which shares a land border with India and then manufactures or converts them into other goods will not be treated as an Agent.
- viii. The registration shall be valid at the time of submission of bid and at the time of acceptance of bid.
- ix. If the bidder was validly registered at the time of acceptance / placement of order, registration shall not be relevant consideration during contract execution.
- x. The above provisions will not apply to bidders (or entities) from those countries (even if sharing a land border with India) to which the Government of India has extended lines of credit or in which the Government of India is engaged in development projects. Updated lists of countries to which lines of credit have been extended or in which development projects are undertaken, are available on the website of the Ministry of External Affairs.
- D. All the bidders are required to confirm the following declaration in respect of countries sharing land border with India in the Commercial Parameter Sheet (CPS):

Section II – Instructions to Bidders (ITB)

“We have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; we certify that we are not from such a country.”

Or, if from such a country,

“We have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; we certify that we are from such a country and have been registered with the Competent Authority. We hereby also certify that we fulfil all requirements in this regard and are eligible to be considered [evidence of valid registration by the Competent Authority is attached]”

If the bidder fails to confirm either of the above declarations, i.e. if the bidder is from such a country which shares a land border with India, but is either not registered with the Competent Authority, or is registered but fails to submit evidence of valid registration, then the bid will be rejected.

- E. All the bidders are required to confirm the following declaration in respect of specified Transfer of Technology in the Commercial Parameter Sheet (CPS):

“We have read the clause regarding restrictions on procurement from a bidder having Transfer of Technology (ToT) arrangement; we certify that we do not have any ToT arrangement requiring registration with the competent authority.”

Or,

“We have read the clause regarding restrictions on procurement from a bidder having Transfer of Technology (ToT) arrangement; we certify that we have valid registration to participate in this procurement [evidence of valid registration by the Competent Authority is attached]”

If the bidder fails to confirm either of the above declarations, i.e. if the bidder has ToT arrangement requiring registration with competent authority, but is either not registered, or is registered but fails to submit evidence of valid registration, then the bid will be rejected.

7. Procurement from Micro and Small Enterprises (MSEs)

- (a) Minimum 25% of the item-wise tender quantity will be procured from MSEs in case they are participating in the tender, provided their quoted price is upto 115% of the L-1 eligible bidder and they agree to match the L-1 price.
- (b) Further, out of this 25%, sub-targets of 4% will be procured from MSEs owned by the SC/ST entrepreneurs and 3% from women owned MSEs.
- (c) Classification of Micro and Small Enterprise are as under:
 - i. Micro Enterprise -Enterprise where the investment in plant and machinery is not more than Rs. 2.5 crore and Annual Turnover not more than Rs. 10 crore.
 - ii. Small Enterprise- Enterprise where the investment in plant and machinery is Not more than Rs. 25 and Annual Turnover not more than Rs. 100 crore.
- (d) MSEs shall upload a copy of their Udyam Registration Certificate issued by Ministry of MSME. It is necessary for MSEs to upload copy of Udyam Registration Certificate in the folder

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“COMMERCIAL DOCS”, failing which such bidders will not get the benefits as per Public Procurement Policy for Micro and Small Enterprise (MSEs) Order, 2012.

- (e) The benefits to MSEs under Public Procurement Policy for Micro and Small Enterprise (MSEs) Order, 2012 shall be restricted to the unit(s) /plant(s) which are appearing in the registration certificate issued by the above-mentioned registering authority. For other units/ plants, no benefits under the above policy shall be given.

Further, the bidder will submit an undertaking in the “Commercial Docs” that it will supply the offered items to CIL from the unit/ plant for which it will avail benefits under the Public Procurement Policy for Micro and Small Enterprise (MSEs) Order, 2012.

- (f) The MSEs owned by SC/ST are classified as under:
- i) In case of proprietary MSE, proprietor(s) shall be SC/ST.
 - ii) In case of partnership MSE, the SC/ST partners shall be holding at least 51% shares in the unit.
 - iii) In case of Public Limited Companies, at least 51% share shall be held by SC/ST entrepreneurs at any given point of time.
 - iv) In case of Private Limited Companies, at least 51% share shall be held by SC/ST promoters.
- (g) In case MSE is an enterprise owned by Scheduled Caste (SC) or Scheduled Tribe (ST), then SC or ST will have to submit a copy of necessary caste certificate issued by State Authority as per Law, in the folder “Commercial Docs”.
- (h) Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017 shall be as per OM no. F.1/4/2021-PPD dated 18.05.2023 of Department of Expenditure, Ministry of Finance (**Annexure-7**).
- (i) All MSEs are to upload ‘Class-I Local Supplier’ or ‘Class-II Local Supplier’ certificate as per Clause-6.B.ii.a in “Commercial Docs” folder.
- (j) In case of an upward change in terms of investment in plant and machinery or equipment or turnover or both, and consequent re-classification, an enterprise shall continue to avail of all non-tax benefits of the category it was in before the re-classification, for a period of three years from the date of such upward change. Non-tax benefits include benefits of various schemes of the Government, including Public Procurement Policy, Delayed Payments, etc.

In such cases of upward revision in MSE status, the firm shall produce documentary evidence clearly indicating the date of such revision.

8. Contents of Bid / Tender Document

The Goods required, bidding procedures and Contract terms are prescribed in the Bid / Tender Document. In addition to the Invitation for Bids, the Bid Document includes:

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- a. Instructions to Bidders (ITB);
- b. General Conditions of Contract (GCC);
- c. Special Conditions of Contract (SCC);
- d. Schedule of Requirements;
- e. Technical Section including Specifications;
- f. Letter of Bid (LOB);
- g. Security Deposit Bank Guarantee Format;
- h. Pre-Contract Integrity Pact;
- i. Technical Parameter Sheet (TPS) including Commercial Parameter Sheet (CPS) in Excel Sheet in the e-procurement portal;
- j. Bill of Quantity (BOQ) in Excel Sheet in the e-procurement portal;
- k. Any Other document, information, instruction as specified in the Bid Document and / or specified in the e-procurement portal.

The bidder is expected to examine all instructions, forms, formats, terms and specifications in the Bid Document. Failure to furnish all information / documents/ certificates required by the Bid Document will be at the bidder's risk and it may result in rejection of its bid.

9. Clarification of Bid Document

A prospective bidder may seek clarification online through CIL's e-procurement portal after e-Publication of the NIT. The Purchaser will respond to such requests for clarification of the Bid Documents, which are received not later than 15 (fifteen) days prior to the last date of submission of bid. Purchaser's response (including an explanation of the query but without identifying the source of inquiry) shall also be put on the website of CIL, e-Procurement Portal and CPP Portal after holding Pre-Bid Conference as described below at least 7 (seven) days before the last date for online submission of bid. The clarifications shall be of explanatory nature only without altering the basic tenets of the tender documents.

10. Pre-Bid Conference

A Pre-Bid conference will be held at the office of the Purchaser / online on 30.10.2025 at 11.00 AM. The Bidder's authorized representative who can actively participate and contribute in the conference, is invited to attend the pre-bid conference. Number of persons permitted to attend the Pre-Bid conference shall be limited to a maximum of 2 (Two) persons per bidder. Failure to attend pre-bid conference does not restrict the intending bidders from submitting the bid.

Bidders are requested to send their questions online through CIL's e-procurement portal not later than 15 (fifteen) days prior to the last date of submission of bid. The purpose of the meeting will be to clarify issues and clearing doubts, if any, about the specifications of the items and other terms and conditions mentioned in the tender document.

The issues raised by the prospective bidders during the pre-bid conference will be examined by CIL. The clarifications/ modifications, if any, shall be made and communicated to all the intending bidders and shall also be hosted on CIL's website, e-Procurement Portal and CPP Portal. In case there is a modification in the tender document, corrigendum to tender enquiry shall be issued accordingly also extending the due date and time, if required, for submission/opening of bids suitably.

Bidders are advised that CIL expects the bidders to comply with the tender

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specifications/conditions which have been frozen after pre-bid conference, and hence non-conforming bids are liable for rejection.

11. Language of Bid

All correspondence and documents relating to the bid exchanged by the Bidder and the Purchaser, shall be written in English language. Supporting documents and printed literature furnished by the Bidder may be written in another language provided they are accompanied by a certified true translation of the relevant passages in English language in which case, for purposes of interpretation of the bid, the translation shall govern. All such translated documents should bear the signature and stamp of the authorized signatory of the bidder who has signed the LOB, as a token of authentication of the same.

12. User Portal Agreement

The bidders will have to accept unconditionally the online user portal agreement which contains the acceptance of all the Terms and Conditions of NIT including Commercial and General Terms & Conditions and other conditions, if any, along with an online undertaking in support of the authenticity of the declarations regarding facts, figures, information and documents furnished in its offer on-line in order to become an eligible bidder and if the same is found to be wrong or misleading at any stage, they will be liable for punitive action.

13. Methodology for online Submission of Bids

13.1 The offers are to be submitted online through CIL's e-procurement portal in two covers - Cover-I containing 'Techno-Commercial Bid' and Cover-II containing 'Price-Bid'.

13.2 **Techno-Commercial Bid (Cover-I):** The Cover-I of the offer shall contain bidder's response to the techno-commercial terms and conditions of the tender document, duly filled in the TPS including CPS (Templates in excel format) provided in e-procurement portal. It should be noted that the Cover-I should not contain the price. The Cover-I shall contain the following:

- i. **Letter of Bid (LOB):** The Letter of Bid (LOB) as per the format given at [Annexure-4] will be printed on Bidder's letter head (duly filled in, signed and stamped with the seal of the company) by a person competent and having the "Authority" / "Power of Attorney" to bind the bidder. Scanned copy of such a "Signed & Stamped with the Seal of the Company" LOB along with "Authority"/ "Power of Attorney" are to be uploaded during bid submission in Cover-I. This will be the covering letter of the bidder for his submitted bid. The contents of the "Letter of Bid" uploaded by the bidder must be the same as per the format downloaded from the website and it should not contain any other information. If there is any change in the contents of Letter of Bid uploaded by bidder as compared to the format of Letter of Bid of the NIT document, then the bid may be liable for rejection.

The date of document conferring Authority / Power of Attorney should not be later than the date of signing of LOB.

LOB along with "Authority"/ "Power of Attorney" documents are to be uploaded in the folder named "LOB DOCS" provided in the e-procurement portal.

Note:

- a. The person who has signed Letter of Bid physically should bid online while

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submitting the offer with his DSC mapped in the name of bidder. The physical signature of the person who has signed the LOB will be accepted without questioning the identity of person signing the LOB as the same person is DSC holder and himself is bidding online on CIL's e-Procurement Portal.

- b. In case the person who has signed LOB is not bidding himself and has authorized another person to bid online on his behalf, then the further authorization (as per Annexure-4B) by the person signing the LOB in favor of person bidding online is required to be uploaded. In such case the DSC of the person bidding online on behalf of bidder (the bidding firm) should be mapped / registered with the name of the bidding firm.
- c. Detailed notes mentioned in Annexure-4 may be referred.

ii. TPS and Technical Documents:

The “Technical Parameter Sheet” (TPS) containing the summarized Technical Specifications Parameters in Excel format will be available on e-procurement portal. This will be downloaded by the bidder who is required to put values under the column “BIDDER’S VALUE” in TPS.

The details of documents to be submitted in support of values in the TPS are given in Section-VI ‘Technical Section including Specifications’. Scanned copies of such documents shall be uploaded in folder named as “TECHNICAL DOCS”. Incomplete template or the templates not submitted as per the instructions given will be rejected.

iii. CPS and Commercial Documents:

TPS will also contain a separate sheet named as “Commercial Parameter Sheet” (CPS), which will also be filled-in by the bidder before uploading TPS. All related documents to CPS are to be uploaded by the bidder in “LOB DOCS”, “COMMERCIAL DOCS” and “PRE CONTRACT IP DOC” folders as stipulated in this document.

- A. The following documents are also to be uploaded in “COMMERCIAL DOCS” and “PRE CONTRACT IP DOC” folder:
 - a. In case of bidders seeking exemption from submission of EMD, the scanned copy of the Documentary evidence for exemption as per Clause-15, ITB, Section-II, as the case may be, will have to be uploaded by the bidder in the “COMMERCIAL DOCS” folder.
 - b. Commercial Documents towards bidder’s eligibility and qualifications as per Clause-2, Technical Section including Specifications, Section-VI, to be uploaded by the bidder in the “COMMERCIAL DOCS” folder.
 - c. Digitally Signed Pre-Contract Integrity Pact as per Clause-37, ITB, Section-II and as per Format given at [Annexure-6], Sample Forms, Section-VII to be uploaded in “PRE CONTRACT IP DOC” folder.
 - d. The bidder has to submit a certificate of “Local Content” from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or chartered accountant (in respect of suppliers other than companies) in the format given under Annexure-10, giving the percentage of local content along with details of the location(s) at which the local value addition is made.

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Note: This certificate will have to be submitted for the company as a whole in respect of the offered product and uploaded in “COMMERCIAL DOCS”.

- e. Evidence of valid registration by Competent Authority, in case of bidders from countries sharing land border with India, as per Clauses-6.D and/or 6.E, ITB, Section-II, to be uploaded by the bidder in the “COMMERCIAL DOCS” folder.
- f. Scanned copy of cancelled cheque to be uploaded in COMMERCIAL DOCS.

B. The confirmation/ declaration in respect of the following are to be given in CPS along with other information sought in the CPS:

- a. Banned or Delisted or Debarred or ‘Put on Holiday’ Suppliers as per Clause -40, ITB, Section-II.
- b. Undertaking for Price Fall Clause as per Clause-13, SCC, Section-IV
- c. Declaration for land border sharing as per Clause-6, ITB, Section-II
- d. Declaration for Transfer of Technology as per Clause-6, ITB, Section-II
- e. Bank Mandate form (Bidder shall upload scanned copy of cancelled cheque in COMMERCIAL DOCS)
- f. Code of Integrity for Public Procurement as defined in Clause-35, ITB, Section-II and transgression of this Code of Integrity with any entity in any country during last three years.
- g. Lowest Price Certificate as per Clause-16.a), SCC, Section-IV.

13.3 **Price Bid (Cover-II):** The Price-Bid containing the Bill of Quantity (BOQ) in Excel format (password protected) will be available on e-procurement portal for downloading. The bidder shall quote FOR destination prices inclusive of freight, insurance and all other charges but exclusive of CGST & SGST / IGST on this Excel file. Thereafter, the same shall be uploaded by the bidder during bid submission in Cover-II. The Price-bid of the bidder will consist of prices only and shall be unconditional. The Price Bid which is incomplete and not submitted as per instruction given above will be rejected.

13.4 Both the covers – Cover-I ‘Techno-Commercial Bid’ and Cover-II ‘Price-Bid’ are to be uploaded in e-procurement portal before the last date and time for submission of online bid.

13.5 The documents uploaded in the e-procurement portal through Digital Signature Certificate (mapped with the bidding firm) are digitally signed documents and legally enforceable under Indian IT Act 2000.

Scanned copies (PDF format) of the complete documents as per tender requirements (including copies of License from BIS and approval certificate issued by DGMS / PESO / other Independent Statutory Bodies of Govt. of India) shall be uploaded in relevant folders of Cover-I of the offer.

The bidders are advised to upload scanned copy of documents in 100DPI resolution for optimized clarity & fast upload.

13.6 **Submission of Forged/Tampered Documents:** Based on undertaking furnished by the bidder in its Letter of Bid, certifying the authenticity and statements made in the bid as well

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as documentary support of such statements submitted with online bid against the tender (with the DSC mapped in the name of bidder), CIL, while carrying out evaluation of the offer, shall consider the scanned copies of the documents as authentic documents without any verification with the original. However, CIL reserves the right to verify such documents with the original, if necessary, at a later stage, for which the bidder shall have to submit the original documents to CIL on demand.

If at any point of time during procurement process or subsequently, any information or document submitted by the bidder, is found to be false/incorrect /forged/tampered in any way, the total responsibility shall lie with the bidder and CIL reserves the full right to take penal action as may be deemed fit including rejection of the offer and / or banning the bidder in CIL for future tenders. The penal action may include termination of contract / forfeiture of all dues including EMD / Security Deposit / banning of the firm along with all partners of the firm as per provisions of tender document/Purchase Manual of CIL/Provisions of law in force. Further, suitable action may be taken for claiming damages from the bidder.

- 13.7 The offer should be submitted strictly as per the procedures, terms & conditions laid down in the tender document, failing which the offer may not be considered. Bids having terms and conditions which are in deviation to the tender terms are liable for rejection.
- 13.8 No offline bid shall be accepted. Offer received through Post, Courier, Fax, Telegram or E-mail will not be considered.

14. Period of Validity of Bids:

The bids shall remain valid for a period of 105 days from the day of opening of Techno-Commercial Bid. A bid valid for a shorter period may be rejected by the purchaser.

15. Earnest Money Deposit (EMD)

A. Submission of EMD :

The value of the Earnest Money (EMD) to be submitted by the bidder shall be [**Rs. 50.00 Lakhs** (Rupees Fifty Lakhs only)]. The amount of EMD has to be deposited within the last date and time for submission of online offer, failing which the online offer will not be considered.

Earnest Money can be deposited by following modes only:

- (a) Online fund transfer through Net banking using Payment Gateway available on portal.
- (b) NEFT/ RTGS from any Scheduled Bank to the Virtual Pool Account of the Purchaser strictly as per the challan generated by the bidder on e-procurement portal.

No other mode for payment is acceptable for submission of EMD in INR.

The EMD payment through NEFT/RTGS mode should be made well ahead of time to ensure that the EMD amount is transferred to the Purchaser's Bank account before bid submission, otherwise the bidder shall not be able to freeze bid in the portal. It is advised that the payment of EMD should be made at least 2 days prior to due date and time of submission of tender to avoid any complication in submitting online bid before the scheduled last date and time of submission. It is further advised that after successful payment, bidder should confirm receipt of EMD at Purchaser's A/C through "Payment

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Verification” Link available on the portal. Freezing of bid can be done only after completion of EMD submission process.

If the payment is made by the bidder within the last date and time of bid submission but is not received in Virtual Pool Account of the Purchaser within the specified period due to any reason, the bid will not be accepted by the System/ Purchaser. However, the EMD will be refunded to the bidder’s account automatically.

The Bank account used by the bidder for submission of EMD should remain available till the complete processing of the tender for refund of the EMD.

Notes:

- a) Bids submitted without full amount of Earnest Money Deposit (except for the firms which are specifically exempted from submission of EMD) will be summarily rejected. The net payment credited to the Purchaser’s bank account, should exactly be the same as EMD amount and if it is found to be less than the stipulated amount, the bid will not be accepted.
- b) Physical mode of payment, i.e., Banker cheques or Demand drafts are not acceptable.
- c) The Purchaser shall not be liable to pay any interest on the amount of Earnest Money Deposit.

B. Exemption from submission of EMD:

State/Central Government Organisations/PSUs, valid Ancillary Units of the Purchaser (irrespective of the stores for which they are registered), Micro and Small Enterprises [MSEs] having Udyam Registration Certificate (irrespective of the stores for which they are registered) and Startups are exempted from submission of EMD. Such bidders will have to upload the scanned copy of the documents as specified below in support of their claim for exemption of EMD during submission of bid [by selecting “yes” option and uploading scanned copy of the documentary evidence in EMD Exemption section provided in the portal]:

Sl. No.	Category of bidders	Documents required for exemption of EMD
1	State/Central Government Organizations/ PSUs	Self- declaration in their letter head
2	Ancillary Units of the Purchaser	Valid and Complete Ancillary status certificate (irrespective of the stores for which they are registered)
3	Micro and Small Enterprises [MSEs]	Copy of Udyam Registration Certificate issued by Ministry of MSME (irrespective of the stores for which they are registered)
4	Startups	Recognition certificate from Department for Promotion of Industry and Internal Trade [DPIIT]

C. Refund of EMD:

EMD of unsuccessful bidders (except the bidders whose EMD is to be forfeited) will be auto refunded as and when they are declared unsuccessful directly to the account from

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where it has been received. No claim from the bidders will be entertained for receipt of the refund in any account other than the one from where the money has been received.

In case the tender is cancelled, then EMD of all the participating bidders will be refunded unless it is forfeited by the Purchaser.

If the bidder withdraws its bid online before deadline for submission of tender, then the EMD will be refunded automatically after opening of the tender.

The EMD of the Successful Bidder will be refunded through e-payment on receipt of required Security Deposit (if applicable) from the bidder.

If the refund of EMD is not received by the bidder in the account from which the EMD has been paid due to any technical fault of the portal/system, then it will be paid through e-payment.

All such e-Payments shall be made as per banking details provided by the bidder in their offer.

D. Forfeiture of EMD:

The EMD shall be forfeited in the following cases:

- a) If the bidder withdraws or amends, impairs or derogates from the tender in any respect within the period of bid validity offered by the bidder; or
- b) If the bidder has caused the reverse auction not to trigger because of quoting of rates due to wrong interpretation of units; or

In above conditions a & b, if the bidder is exempted from payment of EMD, it will be asked to submit the EMD amount of the tender within 7 days failing which it will be debarred from participation in any tender for a period of 1 year for the same item(s).

- c) Refuses to accept/execute the contract which was placed within bid validity period and does not commence supplies;

16. Deadline for Submission of Bids

- a) Online bids must be uploaded by the bidders at CIL's e-Procurement portal by the last date and time as specified in Sec-I, IFB.
- b) The Purchaser may, at its discretion, extend the deadline for the submission of bids in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.
- c) In case, 03(three) bids are not received within the stipulated time, the due date of tender shall be extended once by 4 days automatically by the portal. In case no offer is received, tender will be cancelled. The information of cancellation of the tender will be uploaded on the e-procurement portal through corrigendum.

17. Late Bids

No bid will be accepted after the deadline for online submission of bid.

18. Modification and Withdrawal of Bids

- a) Modification of the submitted bid shall be allowed online only before the deadline of submission of tender and the bidder may modify and resubmit the bid online as many times as they wish, before the deadline of submission of tender.
- b) No bid can be modified after the deadline for submission of bids.

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- c) Bidders may withdraw their bids online within the last date and time of bid submission. However, the bids once withdrawn cannot be resubmitted again.
- d) No bid can be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity offered by the Bidder. Withdrawal of a bid during this interval shall result in forfeiture of EMD. In case the bidder is exempted from payment of EMD, it will be asked to submit the EMD amount of the tender within 7 days failing which it will be debarred from participation in any tender for a period of 1 year for the same item(s).

19. Purchaser's Right to Accept or Reject any or all Bids

The Purchaser reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for the Purchaser's action. No dispute of any kind can be raised against this right of the Purchaser in any court of law or elsewhere.

20. Registration under GST

- 20.1 The bidder should be registered under GST and furnish GST registration number in their offer unless they are specifically exempt from registration under specific notification / circular / section / rule issued by statutory authorities. The bidder claiming exemption in this respect shall submit supporting documents as well as certificate from Practicing CA/CMA/CS to the effect that Bidder is fulfilling all the conditions prescribed in notification to make it exempt from registration.
- 20.2 Composition Scheme: Where the bidder has opted for composition levy under Sec.10 of CGST, it should declare the fact while bidding.

21. Bid Prices

- 21.1 The price of Bulk Explosives shall be quoted subsidiary wise. The bidders are required to quote their lowest price for each subsidiary they are bidding for.
- 21.2 Price quoted shall be on FOR destination basis for supply down the hole at mine site inclusive of freight, insurance and all other charges except legally applicable GST.
- 21.3 The price quoted for a particular subsidiary shall be valid for all mines in that subsidiary.
- 21.4 Reverse Auction shall be conducted on the quoted FOR destination price of each subsidiary.

21.5 Price variation during Contract period:

The RC price for Bulk Explosives shall be revised on monthly basis based on the price variation formula indicated below:

$$P_r = P_o (0.10 + 0.10 \times CI_r/CI_o + 0.60 \times AN_r/AN_o + 0.20 \times HSD_r/HSD_o)$$

where,

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

P_o = Base price as on base date.

CI_r = 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).

CI_o = 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).

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

AN_o = 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).

HSD_r = 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.

HSD_o = 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.

- The base price for each Subsidiary for 1st revision shall be the RC price to be finalized against this tender
- The base date for 1st revision shall be date of the reverse auction.
- The revised price/indices of each month shall be the base price/indices for next monthly revision.
- For 1st price revision, the AN_o and HSD_o shall be as on date of Reverse Auction. For subsequent price revisions, the AN_o and HSD_o shall be as on date 5 days prior to base date.
- The 1st price revision shall take place on the 1st day of a month following completion of 1 month from the reverse auction date ignoring part of the month in which reverse auction conducted. Subsequent revision shall take place on the 1st day of the next month (Ex: If reverse auction date is 20.09.2023 then the first price revision will be on 01.11.2023).
- The price revision shall not have any ceiling.
- RC prices w.e.f. start date of RC till the first revision and also in between subsequent revisions shall remain firm.

21.6 Conditional discounts shall not be considered. If a bidder offers a discount unilaterally after submission of bid, the discount shall not be considered for evaluation of offers but shall be availed if order is placed on such tenderer.

22. Opening of Bids by Purchaser

- a) The Techno-Commercial Bids (Cover-I) will be decrypted on-line and will be opened on the pre-scheduled date and time of tender opening.
- b) Price-Bid (Cover-II) will be opened after evaluation of Cover-I. The Cover-II of only the techno-commercially acceptable bidders (qualified bidders against Cover-I) shall be decrypted and opened on the scheduled date & time for which separate intimation will be given to the techno-commercially acceptable bidders through the e-procurement portal.
- c) Upon opening of the Price Bid, system will allow for Auto Financial opening whereby no comparative statement will be generated but Reverse Auction Platform named “Auction BOQ” will be created. Reverse Auction process will follow as mentioned in Clause 26, ITB.

23. Techno-Commercial Evaluation of Tender

- a) Based on the response to TPS and CPS templates, the portal will initially evaluate eligible

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bidders. Subsequently, the bidder's response in TPS and CPS will be scrutinized/ verified and evaluated by the concerned departments with the documents uploaded by the bidders to determine whether they are in conformity with the tender document.

- b) Any bid which has not been submitted either with the requisite amount of EMD or the valid exemption document will not be considered for further evaluation.
- c) During evaluation of the uploaded documents, shortfall documents, if required, will be sought from the bidders. For this purpose, only 1(one) chance, of 7 x 24 hours duration shall be given to the bidders to upload these clarification / shortfall / confirmatory documents.
- d) Purchaser will determine the techno-commercial acceptability of the bidders on the basis of the original offer and subsequent clarifications/confirmation, if any. For the purpose of this determination, a techno-commercially acceptable bid is one, which conforms to all the terms and conditions of the Bid Document and the requirements of all commercial terms and mandatory technical specifications without deviations, exceptions, objections, conditionality or reservations.
- e) After techno-commercial evaluation of bids, price bids of the techno-commercially acceptable bidders will be opened. The Techno-commercial bid that is not meeting the NIT requirement will be rejected by the Purchaser.

24. Shortfall / Confirmatory Documents

During evaluation and comparison of bids, the purchaser may ask the bidder for clarifications on the bid. The request for clarification shall be communicated to the bidder via the purchaser's portal, asking the bidder to respond by a specified date. If the tenderer does not comply or respond by the specified date, their tender will be liable to be rejected. No change in prices or substance of the bid shall be sought, offered or permitted. No post-bid clarification at the initiative of the bidder shall be entertained.

The shortfall information/documents shall be sought only in case of historical documents which pre-existed at the time of the tender opening and which have not undergone change since then. (Example: if the Permanent Account Number, registration with Sales Tax/ VAT/ GST has been asked to be submitted and the tenderer has not provided them, these documents may be asked for with a target date as above).

So far as the submission of documents is concerned with regard to qualification criteria, after submission of the tender, only related shortfall documents shall be asked for and considered. For example, if the bidder has submitted a supply order without its linkage order(s) / completion / performance certificate, the linkage order(s) / certificate related to that supply order can be asked for and considered. However, no new supply order shall be asked for so as to qualify the bidder.

These documents are to be uploaded within the specified time period. The above documents will be specified on-line under the link 'Upload Shortfall / Confirmatory Documents', after scrutiny of bids, indicating the start date and end date giving only one chance of 7x24 hours duration for online submission by bidder. The bidders will get this information on their personalized dashboard under "Upload Shortfall/ Confirmatory Document/Information" link. Additionally, information shall also be sent by system generated email and SMS, but it will be the bidder's responsibility to check the updated status/ information on their personalized dashboard at least once daily after opening of bid.

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The Purchaser reserves the right to verify any of the documents uploaded by the bidder at any stage. All communication will be on e-mail and SMS basis and no separate communication will be made in this regard. Non-receipt of e-mail and SMS will not be accepted as a reason of non-submission of documents within prescribed time.

- 25. Evaluation of tender and L1 Status:** The evaluation of tender shall be done based on cost to company basis. The cost to company shall be ascertained by reducing the total value (including GST) quoted by the bidder by the amount of GST eligible for input tax credit. The L1 shall be decided based on cost to company ascertained in the manner suggested above.

Where the supplier is an unregistered one i.e. (exempt from registration under GST) supplying taxable item causing subsidiary company liable to deposit tax under reverse charge, the GST, as applicable and payable by respective subsidiary under reverse charge, shall be added to cost while ascertaining the landed price. However, in this case also, the L1 shall be decided based on cost to company ascertained after deducting the GST amount eligible for input tax credit, if any, from the total value including tax arrived as above.

The Tax Invoice raised by the supplier 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 goods shall be shown separately in tax invoice. In case the bidder has opted for composition levy, the Bill of Supply shall be raised by him in compliance of relevant GST Acts, rules & notifications made thereunder.

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.

If the ITC claimed is disallowed due to failure on the part of supplier 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 the current bills or any other dues of the supplier.

In the event of any additional tax liability accruing on the supplier 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 the supplier.

In addition to above, if any other tax/duties are levied over supply of such item in future, it shall be paid extra.

E-way Bill: The e-way bill, if any, required in connection with supply of goods or services shall be arranged by the supplier. However, the e-way bill will be arranged by the subsidiary company if the supplier is unregistered one.

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, the registered person, who has supplied the Bulk Explosives, shall issue to the recipient a credit note containing such particulars as may be prescribed.

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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, the registered person, who has supplied the Bulk Explosives, shall issue to the recipient a debit note containing such particulars as may be prescribed.

26. Reverse Auction

Reverse Auction process shall be as under:

- (a) Upon opening of the price bids of only techno-commercially acceptable bidders, system will allow for Auto Financial opening whereby no comparative statement will be generated but Reverse Auction platform will be created.
- (b) Reverse Auction will be initiated normally within 2 hours after opening of price bids and a multi auction template (in excel format) will be uploaded.
- (c) The multi auction template will display only the Subsidiary-wise L-1 price received, decrement value, starting time and end time. The number and name of bidders participating in the Reverse Auction shall not be made visible to other bidders.
- (d) The L-1 FOR Destination Price of each Subsidiary will be “Start Bid Price” for respective Subsidiary.
- (e) There will be no participation fees for e-Reverse auction.
- (f) During the reverse auction process, bidders shall not be allowed to bid equal to or higher than the lowest bid received till that time from any bidder.
- (g) The decrement value will be 0.5% of the start bid price with minimum of Rs.1.00, as the system does not have a provision of taking amounts less than Rs.1.00 as decrement value. The reduction shall have to be made as per decrement value or in multiple thereof. In order to have ease of submission of reverse auction bid by the bidders, the decrement value will be rounded off to nearest value as under:
 - i) For decrement values up to Rs. 10/-, rounding off will be made to nearest rupee;
 - ii) For decrement values from Rs. 11/- to Rs. 100/-, rounding off will be made to nearest 10;
 - iii) For decrement value from Rs. 101/- to Rs. 1,000/-, rounding off will be made to nearest 100;
 - iv) For decrement value from Rs. 1,001/- to Rs. 10,000/-, rounding off will be made to nearest 1,000;
 - v) For decrement value from Rs. 10,001/- to Rs. 1,00,000/-, rounding off will be made to nearest 10,000;
 - vi) For decrement value from Rs. 1,00,001/- to Rs. 10,00,000/-, rounding off will be made to nearest 1,00,000 and so on...
- (h) The maximum seal percentage in one go shall be fixed as 2% over and above the normal decrement of 0.5%, i.e., 2.5% of Start Bid price or the last quoted price during reverse auction, whichever is lower.

This shall be worked out as under:

$$DV1 = (DV + 2/100 \times L1)$$

Where,

DV = Decrement Value (fixed) as indicated in NIT

DV1 = Maximum range of decrement (Bidders can offer reduction in multiples of DV within this range)

L1 = Start Bid Price or Current Lowest Price as displayed during reverse auction

If the start bid price is Rs. 21000 and decrement value is Rs. 100, the maximum seal percentage will be 2% of 21000 i.e. Rs. 420 and upper range of reduction shall be Rs. 520 (100+420). However, as reduction has to be in multiples of decrement value,

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maximum reduction that can be offered by the bidder will be Rs. 500 only and hence, first reduced bid in reverse auction cannot be below Rs. 20500.

In the above scenario, the seal percentage for 2nd bid will be 2% of 20500 i.e. Rs. 410 and the upper range of reduction shall be Rs. 510 (100+410). Thus, maximum reduction that can be offered will again be Rs. 500 only in multiples of Rs. 100 (decrement value).

- (i) Initial period of reverse auction will be two hours. There will be auto extension of time every time by 30 minutes in case of any reduction recorded in the last 30 minutes. The reverse auction will come to a close only when there is no further reduction recorded in the last 30 minutes slot.
Since there are multiple Subsidiaries, auto extension will take place only for the Subsidiary for which any reduction has been recorded in last thirty minutes. For rest of the Subsidiaries for which no reduction has been recorded in the last thirty minutes, the Reverse Auction will close.
- (j) System protects bid and bidder information till auction gets over and displays current L-1 price to the bidders in the auction hall.
- (k) The log details of the entire reverse auction process will be generated by the system once the process of reverse auction is completed.
- (l) If a bidder does not submit his bid in the Reverse Auction, the price quoted by him in the price bid (BOQ) shall be considered as the valid price of that bidder. The status of the bidder (L1, L2 etc.) shall be evaluated considering either the bid price submitted in Reverse auction or the Price quoted in the price bid, whichever is lower.
- (m) Since, reverse auction is a sequel to e-tender, the process of finalizing the tender upon completion of reverse auction will be the same as the tender process without reverse auction.
- (n) The Auction bid history shall reflect only the total bid price.
- (o) All electronic bids submitted during the reverse auction process shall be legally binding on the bidder. The chronologically last bid submitted by the bidder till the end of the auction will be considered as the valid price bid offered by that bidder and acceptance of the same by CIL will form a binding contract between CIL and the bidder for entering into a running contract for supply of Bulk Explosives.
- (p) Server time shall be basis of start time and closing time for bidding and shall be binding for all.
- (q) On expiry of the closing of the auction, the bid history showing all the last valid bids offered along with name of the bidders shall be published in the portal. All bidders shall have the facility to see and get a print of the same for their record.
- (r) If the lowest price received during reverse auction is unreasonable or it is unacceptable on ground of being too high or too low compared with estimated price, LPP, etc., the management reserves right to seek justification of the price from lowest bidder. If the price is not considered reasonable, management may not accept such bid and go for another tender process.
- (s) In case of disruption of service at the service providers' end while the reverse auction process (RAP) is online, due to any technical snag or otherwise attributable to the system failure at the server end, the RAP will start over again. In such situation, the last recorded lowest price of prematurely ended RAP will be the 'Start Bid Price' for the restarted RAP. The prices quoted in the prematurely ended RAP will be binding on all the bidders for consideration, if the restarted RAP does not trigger within the stipulated time.
- (t) Disruption and restarting of RAP shall be intimated to all the bidders through system/SMS/e-mail through e-procurement portal. All the time stipulations of normal

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RAP will be applicable to the restarted RAP.

27. Computational Errors

Computational errors will be rectified on the following basis:

- (a) If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and the quantity, the unit price shall prevail, and the total price shall be corrected. If there is a mistake in addition / subtraction of the total of unit prices, the unit price shall prevail and the total price shall be corrected.
- (b) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- (c) If there is a discrepancy between words and figures, the amount in words shall prevail.

Such types of discrepancies in the offer shall be conveyed to the bidder asking it to respond by a target date and if the bidder does not agree to Purchaser's observation, the offer is liable to be rejected and EMD will be forfeited.

28. Contacting the Purchaser

1. Subject to ITB Clause-24, no bidder shall contact the Purchaser on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded.
2. Any effort by a bidder to influence the Purchaser in its decisions on bid evaluation, bid comparison or contract award may result in the rejection of the bidder's bid.

29. Distribution of quantity

The tendered quantity shall be distributed among 'N' number of bidders in the following manner:

29.1 N' shall be 5 for WCL.

29.2 Distribution among bidders shall be as follows:

1. If 1 bidder, 100% quantity to L-1 bidder.
2. If 2 bidders, quantity to be distributed among L-1 and L-2 bidders in the ratio of 60:40.
3. If 3 bidders, quantity to be distributed among L-1, L-2 and L-3 bidders in the ratio of 50:30:20.
4. If 4 bidders, quantity to be distributed among L-1, L-2, L-3 and L-4 bidders in the ratio of 40:30:20:10.
5. If 5 bidders, quantity to be distributed among L-1, L-2, L-3, L-4 and L-5 bidders in the ratio of 35:25:20:10:10.
6. If 6 bidders, quantity to be distributed among L-1, L-2, L-3, L-4, L-5 and L-6 bidders in the ratio of 35:20:15:10:10:10

29.3 Distribution shall be at L-1 prices among 'N' bidders as defined by Clauses-29.1 and 29.2 above (limited by their offered quantities), only if it results in atleast 25% quantity allocation to MSE Suppliers (whether Class-I Local Supplier or not) and atleast 50% quantity allocation to 'Class-I Local Suppliers' (whether MSE or not).

29.4 If above (Clause-29.3) distribution does not result in atleast 25% quantity allocation to MSE Suppliers or does not result in atleast 50% quantity allocation to 'Class-I Local Suppliers', then distribution shall be as per OM no. F.1/4/2021-PPD dated 18.05.2023 (Annexure-7) of Department of Expenditure, Ministry of Finance providing clarification on concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to 'Make in India') Order, 2017.

Note: If MSE Suppliers are provided purchase preference, then remaining quantity shall be distributed among 'N-1' bidders by considering all MSE Suppliers availing purchase

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preference as a single MSE unit. However, if any MSE supplier is eligible for distribution by virtue of their position being L-1 to L-4/L-5, they will not be considered as part of the single MSE unit for determining 'N-1'.

- 29.5 If there is shortfall after distributing among 'N' bidders and the total offered quantity of the 'N' bidders is more than the total tendered quantity for that subsidiary, then the shortfall quantity should be distributed among the bidders having surplus (i.e. allocated quantity < offered quantity) proportionate to their initial allocation.
- 29.6 If in any of the above cases, if the offered quantity of 'N' bidders is less than the total tendered quantity for that subsidiary, then the balance quantity shall be distributed to the next lowest bidder after allocating full offered quantity on the 'N' bidders.

Note: A bidder having PESO license “for tender purpose only” for the plant, shall ensure that name of the particular subsidiary is included/endorsed in the PESO license within 30 days of date of issue of contract failing which the supply order shall stand cancelled and EMD shall be forfeited. The cancelled ordered quantity shall be re-distributed amongst other suppliers, including Reserve RC holders, as the case may be, within that subsidiary company.

30. Reserve RC

- 30.1 Apart from conclusion of RCs with the tenderers found eligible as per terms and condition listed in the NIT, all other firms, who are techno-commercially acceptable and accept the counter offered L-1 rate for the item would be empaneled as “Reserve RC holder” for supply of Bulk Explosives during the contract period by entering into a suitable contract with them. They would be contractually bound to supply Bulk Explosives with the same price and terms and conditions as awarded to successful tenderers at any point of time during the contract period. However, they shall be given 15 days' time to commence supplies from the date of issue of first allocation by the Subsidiaries.

Accordingly, all the techno-commercially acceptable bidders will be given an opportunity to match the acceptable L-1 prices against each item and if they agree, such bidders will be empaneled as Reserve RC holders as above.

- 30.2 Allocation to Reserve RC(s) will be made by the subsidiary companies in any or both of the following cases:
- In case of non-supply of the ordered/allocated quantities as per RCs by the Regular RC holder(s) even after having served 15 days' notice in this regard;
 - In case requirement of a subsidiary company exceeds the 140% of the quantity of the Regular RC holders and Regular RC holders are not willing to supply extra quantity.
- The distribution of the quantity amongst the Reserve RC holders will be done by the subsidiary companies preferably in an equitable manner, but supplies shall not be delayed on this ground.

- 31. Quantity variation:** 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. The unused quantity of 1st year will be lapsed on the expiry of first year period. In exigencies, the quantity may be increased even beyond (+) 40% (Forty percent), limited to the PESO License capacity, with the specific approval from CIL. 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.

Note: Since CIL / subsidiaries reserve the right to increase the ordered / allocated quantity to

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the extent of (+) 40% (Forty percent) of the RC quantity, the bidders shall ensure PESO license capacity to meet 140% of their RC quantity during the currency of the RC (If not already available).

32. Supply of extra quantity

- 32.1 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.
- 32.2 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.
- 32.3 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.
- 32.4 The subsidiaries shall give at least 15 days' time to Reserve RC holders to commence supplies. Allocation should be issued accordingly.

33. Award of Contract

The Purchaser shall award 'Running Contract' / 'Reserve Running Contract' on the successful bidders as per the provisions of the NIT. The 'Running Contract' / 'Reserve Running Contract' shall be legally binding on the bidder.

34. Security Deposit

As per provisions of Clause – 6 of Section-III GCC and Clause – 2 of Section IV SCC.

35. Code of Integrity for Public Procurement:

CIL, its subsidiaries as well as bidders, contractors, suppliers and consultants under contract with CIL or its subsidiaries shall observe the highest standard of ethics during the procurement and/or execution of such contracts.

In pursuit of this policy, for the purpose of this provision, the terms set forth below are defined as follows:

1. "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;
2. "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;
3. "Anti-competitive Practice" means any collusion, bid rigging or anti-competitive arrangement, or any other practice coming under the purview of The Competition Act

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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;

4. "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;
5. "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

Note: *As the bids shall be evaluated subsidiary wise, participation of a bidding entity and its affiliate(s) in the bidding/procurement process for the same subsidiary shall be treated as a conflict of interest and may lead to disqualification of all such bids.*

6. "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.

Procuring authorities, as well as bidders, suppliers, contractors and consultants, are obliged under Code of Integrity for Public Procurement to suo moto proactively declare any conflicts of interest (coming under the definition mentioned above – pre-existing or as and as soon as these arise at any stage) in any procurement process or execution of contract. Any bidder must declare in LoB any previous transgressions of such a code of integrity with any entity, in any country, during the last three years, or of being debarred by any other Procuring Entity. Failure to do so would amount to violation of this code of integrity.

Punitive Provisions: A particular violation of code of integrity may span more than one of the above mentioned unethical practices. Without prejudice to and in addition to the rights of the Procuring Entity to other penal provisions as per the bid documents or contract, if the Procuring Entity comes to a conclusion that a (prospective) bidder/supplier, directly or through an agent, has violated this code of integrity in competing for the contract or in executing a contract, the Procuring Entity may take appropriate measures including one or more of the following:

1. If his bids are under consideration in any procurement
 - i. Forfeiture or encashment of bid security / EMD;
 - ii. Calling off of any pre-contract negotiations; and
 - iii. Rejection and exclusion of the bidder from the procurement process.
2. If a contract has already been awarded
 - i. Cancellation of the relevant contract and recovery of compensation for loss incurred by the Procuring Entity;
 - ii. Forfeiture or encashment of any other security or bond relating to the procurement;
 - iii. Recovery of payments including advance payments, if any, made by the Procuring Entity along with interest thereon at the prevailing rate. The due

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amount may be recovered from the bills of the supplier against any existing/future contract(s) with CIL and/or any of its subsidiaries.

3. Provisions in addition to above:
 - i. Removal from the list of registered suppliers and banning/debarment of the bidder from participation in future procurements of the Procuring Entity for a period not less than one year;
 - ii. In case of anti-competitive practices, information for further processing may be filed under the signature of a General Manager level officer, with the Competition Commission of India; and
 - iii. Initiation of suitable disciplinary or criminal proceedings against any individual or staff found responsible.

36. Banning of Business

The banning of business shall also be considered in the following cases:

- (i) If the Directors, Proprietors, Employees, Partners or any Representative of the firm is/are found guilty of offences involving any security consideration including loyalty to the State, in connection with business dealings with CIL or its Subsidiaries.
- (ii) If the Director, Proprietor or Partner, Manager or any Representative of the firm is convicted by a court of law
 - a) under the Prevention of Corruption Act, 1988 or under the Indian Penal Code or any other law for the time being in force for offences involving moral turpitude in business dealings; or
 - b) under the Indian Penal Code or any other law for the time being in force, for causing any loss of life or property or causing a threat to public health as part of execution of a public procurement contract.
- (iii) Violation / transgression of Integrity Pact.
- (iv) If there are strong reasons to believe that the Directors, Proprietors, Managers or any Representative of the firm has/have been guilty of or found to be indulging in malpractices/ unethical commercial practices such as bribery, corruption, fraud, substitution of tenders, interpolation, etc.
- (v) If there is strong justification for believing that the proprietor or employee or representative of the firm has been guilty of evasion or habitual default in payment of any tax levied by law; etc.
- (vi) Willful suppression of facts or furnishing of wrong information, false declaration or manipulated or forged documents by the firm or using any other illegal/unfair means.
- (vii) Drawing double payment or submitting invoice for double payment for the supply of same materials or carrying out the same job/work.
- (viii) Supplying defective materials and failure to replace the defective materials even after reasonable extension is given to the firm for rectification/ replacement of the defective materials or carrying out defective/poor quality job, not conforming to specifications of the contract and failure to rectify it within the stipulated time.
- (ix) If the firm repeatedly and/or habitually resorts to revision of price and terms of offer within the validity period of the tender and/or submission of ambiguous and misleading offers, post tender modifications in order to undermine the decision-making process.
- (x) Failure to pay legitimate dues to CIL/Subsidiary Companies including dues arising out of Risk Purchase and when CIL and/or its Subsidiary Companies are satisfied that this is not due to any reasonable dispute which would attract proceedings in arbitration or a Court of Law.
- (xi) Continued and repeated failure to meet contractual obligations.
- (xii) Canvassing and lobbying to get undue favor from the Company.

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- (xiii) Formation of price cartels with other suppliers/contractors with a view to artificially hiking the prices.
- (xiv) Non-supply of material, abandonment of works, etc.
- (xv) Any other misdeed, which may cause financial loss or commercial disadvantage to the Company.

The period of banning shall be decided based on the gravity of the offence and/or quantum of loss suffered by CIL or the Subsidiary Companies. In case of banning under sub-clauses (i), (ii) & (iii) above, the banning period shall not be exceeding three years. In case banning under other sub-clauses, banning period shall not exceed two years.

The debarment done by Department of Expenditure (Govt. of India) / Ministry of Coal shall be applicable in CIL and its subsidiaries. No contract of any kind whatsoever shall be placed on debarred firm after issue of a debarment order by Department of Expenditure (Govt. of India) / Ministry of Coal / CIL, **during the period of debarment**, if such debarment has been done before the last date of bid submission.

- 37. Pre-Contract Integrity Pact:** The bidders will have to upload along with their offer, digitally signed Pre-Contract Integrity Pact as per format enclosed as Annexure-6, failing which offer may not be considered. The bidders will have to download this Pre-Contract Integrity Pact and shall have to upload it at “Pre Contract IP DOC” folder only while uploading their offer. The digitally signed Pre-Contract Integrity Pact with Digital Signature Certificate mapped with the bidder shall be considered to be physically signed by the bidder.

In terms of the Integrity Pact, the Independent External Monitors (IEMs) nominated for this tender are as follows:

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@g mail.com	9205175050

In case of any grievance, bidders may approach Independent External Monitors (IEMs).

- 38. Conflict of Interest:** A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practices to the detriment of Procuring Entity's interests. The bidder found to have a conflict of interest shall be disqualified. A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:

- a. they have controlling partner (s) in common; or
- b. they receive or have received any direct or indirect subsidy/financial stake from any of them; or
- c. they have the same legal representative/agent for purposes of this bid; or
- d. they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another bidder; or

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- e. bidder participates in more than one Bid in the bidding process. Participation by a bidder in more than one bid will result in the disqualification of all bids in which the parties are involved.
- f. in case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/common business/ management units in same/similar line of business.

Note: *As the bids shall be evaluated subsidiary wise, participation of a bidding entity and its affiliate(s) in the bidding/procurement process for the same subsidiary shall be treated as a conflict of interest and may lead to disqualification of all such bids.*

- 39. Anti-Cartelization:** The IP address logged in the e-Procurement Portal during submission of each Bid or during Reverse Auction by the participating Bidders shall be reflected in the 'Bid Acknowledgement' and 'Auction Hall Summary' respectively. In case two or more bidders are found to bid from the same IP address, it shall be treated as circumstantial evidence for cartelization or collusion in bidding.

Based on the above circumstantial evidence or on any material, the matter of cartelization / collusive bidding or otherwise would be finalized as per recommendations of IEM(s) nominated for this tender.

In case of cartelization or apparent cartel formation, CIL reserves the right to:

- (i) ban or suspend business with the suspect bidders and cancel their bids without assigning any reason thereof; and
- (ii) place order on one or more firms with exclusion of the rest without assigning any reason thereof.

- 40. Banned or Delisted or Debarred or 'Put on Holiday' Suppliers:**

The bidders will have to give a declaration that they have not been banned or de-listed or debarred or 'Put on Holiday' by any Government or quasi-Government agencies or PSUs. If a bidder and/or manufacturer has been banned or delisted or debarred or 'Put on Holiday' by any Government or quasi-Government agencies or PSU, this fact must be clearly stated and it may not necessarily be a cause for disqualifying them. If this declaration is not given, the bid will be rejected as non-responsive. This declaration has to be given by the bidders in the CPS.

- 41.** CIL reserves the right to issue Running Contract only for the quantities actually required by the subsidiary companies, even if lower than tender quantity.
- 42.** CIL shall not be obliged to accept the lowest tender and reserve the right to accept or reject the whole or any portion of any tender and/or divide the work among successful bidders without assigning any reason whatsoever and may even procure outside this tender, if such situation warrants.
- 43.** Bidders shall offer quantity and price for the tendered item only in terms of the unit as indicated in tender. Offers made with wrong units shall not be considered for those items for which wrong units have been quoted.
- 44.** Information/documents are to be furnished serial wise of the respective annexures of the NIT. If no information or document is applicable against any serial number, please mention - Not Applicable.

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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.

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- 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

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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.

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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

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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

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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.

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9 Packing and Marking

- 9.1 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.
- 9.2 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.
- 9.3 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'.
- 9.4 The marking of the Goods must comply with the requirements of the law relating to Merchandise Mark, in force in India.
- 9.5 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;
- 9.6 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

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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

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- 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

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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

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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

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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:

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- 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

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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

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Supplier under the Contract is terminated, and the date upon which such termination becomes effective.

- 242 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 willful 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

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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.

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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.

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The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions contained herein shall prevail over those in the General Conditions of Contract. The corresponding Clause number of the General Conditions is indicated in parentheses. Further, there are some additional clauses in SCC.

1. Duration of contract

- 1.1 The contract shall be valid for two (2) years, from the effective date indicated in the Running Contract. However, CIL reserves the right to shorten/extend the duration of the contract while concluding the contract.
- 1.2 CIL reserves the right to extend the duration of the concluded Running Contract, if required, with the consent of RC holder at same terms & conditions. CIL also reserve the right to rescind/ short close the contract in case of breach of terms and conditions of the contract by the bidder.

Note - Requisition can be issued upto the last date of validity of the RC for next-day delivery. The RC holder is bound to supply against all such requisitions. No extension of validity period of the RC itself is required in such cases.

2. Security Deposit Bank Guarantee (SDBG) [Section III – GCC: Clause – 6 is modified as follows]

- 2.1 RC holders shall be required to deposit Bank Guarantee 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-3).

The average value of contract shall be arrived as follows:

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

RC holders may submit either a single SDBG covering all subsidiaries of CIL or submit SDBGs for different Subsidiaries based on subsidiary-wise allocated value. The average value of both the years of contract will be as worked out and indicated in the RCs. All the SDBGs, if submitted subsidiary-wise, are to be submitted simultaneously.

- 2.2 15 days' time from the date of conclusion of RC shall be given to the successful bidder to furnish the security deposit.
- 2.3 In case the successful bidder does not deposit the security money within stipulated time, payment of their 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.
- 2.4 The Security Deposit Bank Guarantee (SDBG) submitted by the RC Holder shall be released within 30 days of receipt of :-
 - a. "No Claim Certificate" issued by the respective Nodal Officer for Explosives (GM of the respective subsidiary company in charge of production / explosives) from all the subsidiary companies, if a single SDBG had been submitted. However, if subsidiary-wise SDBGs are submitted, then each SDBG shall be released within 30 days of receipt of "No Claim Certificate" from that subsidiary company. For contractual failure, the security money shall be forfeited.

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b. on receipt of “No Claim / No Dispute Certificate” from the supplier as per format provided in Annexure- 9.

Note - It shall be clearly mentioned in the No Claim Certificate issued by the respective Nodal Officer for Explosives that “There is no claim pending against the RC Holder as per terms and conditions of this RC”.

- 2.5 In case a successful tenderer does not have the required License for storage of Ammonium Nitrate (at a time), additional SDBG for the 10% of the contract value is to be submitted to CIL(HQ) as per Clause-2.5.3, TSS, Sec-VI.

In case a successful tenderer does not have the required PESO License capacity for manufacturing of SME at the time of submission of bid, additional SDBG for **5% of the value for the shortfall quantity for which PESO license is not available** is to be submitted to CIL(HQ) as per Clause-2.3.8, TSS, Sec-VI.

- 2.6 All State/Central Govt. Organizations/PSUs are exempted from submission of Security Deposit.
- 2.7 Security deposit will not fetch any interest.
- 2.8 The Security Deposit if submitted in the form of Bank Guarantee shall be issued by a 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) shall be sent by the issuing bank to MM Department, CIL.

However, if the original copy of the BG is handed over to the supplier 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, the supplier shall also submit a copy of the SFMS message as sent by the issuing bank branch along with the original Bank Guarantee.

- 2.9 The SDBG 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.
3. **Performance Bank Guarantee (PBG) [Section III – GCC: Clause-7]**
Section III – GCC: Clause-7 is deleted.
4. **Inspections and Tests [Section III – GCC: Clause-8 is modified as follows]**

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As per Section VI – Technical Section including Specifications: Clause-5 ‘Random Test’ and Annexure-2.

5. Packing and Marking [Section III – GCC: Clause-9 is modified as follows]

The Supplier shall provide such packing and marking of the Goods as is required by applicable Explosive Rules, Acts and PESO Guidelines.

6. Delivery and Documents [Section III – GCC: Clause-10 is modified as follows]

6.1 The materials should be supplied duly secured.

6.2 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 shall be mentioned in the RC)
- Manufacturer’s Batch no. of Explosives (if applicable)

6.3 Invoice relating to the RC should not include supplies made against any other supply order or orders.

6.4 Supply of explosives against the RC shall be accompanied by self-attested copy of valid PESO license and valid DGMS certificate, wherever applicable.

6.5 The following certificate, whichever is applicable, should be given on each invoice:

a) 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.”

b) 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.

7. Transportation [Section III – GCC: Clause-12 is modified as follows]

The Supplier shall 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.

8. Warranty

Section III – GCC: Clause-13 is deleted.

9. Delivery Schedule

9.1 Year wise and subsidiary wise RC quantity shall be indicated in the RC itself.

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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.

- 9.2 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.
- 9.3 The supplies of explosives is to be made by the RC holders 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

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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%

- 9.4 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-9.7 below.
- 9.5 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
- 9.6 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".
- 9.7 Calculation of monetary penalty in terms of clauses-9.5 and 9.6 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

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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.

- 9.8 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.

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

11. Risk Purchase

- 11.1 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.
- 11.2 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.

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12. 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.

13. Price Fall clause

13.1 If the contract holder 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) The bidder is to submit a copy of the last (latest) purchase order for the tendered / similar item(s) received by them from 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, along with the offer (The bidder may opt to mask the priced portion and shall submit an undertaking that priced copy will be submitted on being L1 after opening of Price Bid / Reverse Auction).
- (iii) It shall be responsibility of the supplier 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.
- (iv) The supplier shall submit a certificate along with the bill(s) that it has 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.

A declaration on the Price Fall Clause shall be undertaken in the CPS.

13.2 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.

13.3 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).

13.4 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

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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.

14. Paying Authority: GM (Fin.) of the consignee Subsidiary Company or their authorized representative.

15. RC Prices

15.1 The rate at which RC will be concluded 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.

15.2 RC prices will be subject to Price Variation Clause as provided in Clause – 21.5 Section II, ITB.

16. Lowest Price Certificate: The bidder shall submit the following certifications:

a) Along with the offer in CPS :

“We certify that the prices quoted in the tender are the lowest and not higher than as applicable to any other private organization or Govt. Organization or PSU (excluding CIL and its Subsidiaries) from the same manufacturing unit.”

b) Along with the invoices:

“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.”

Section V – Schedule of Requirements

Schedule of Requirements

Section V – Schedule of Requirements

Requirement of Bulk Explosives for Two (2) years.

Sl. No.	Subsidiary	Tender Quantity 1st Year (MT)	Tender Quantity 2nd Year (MT)
1	WCL	111401.50	111262.95
	Total	111401.50	111262.95

Technical Section including Specifications (TSS)

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1. Eligibility to offer

The bidder(s) whose offered item(s) along with the Manufacturing Plants/Silos/Support Plants are Included / Enlisted / Relisted / Renewed in CIL's approved product list of Explosives and Accessories as per the Revised SOP for enlistment of Products of explosive manufacturer in CIL's approved Product List of Explosives & Accessories (Annexure-15)

The offered item(s) along with the Manufacturing Plants/Silos/Support Plants Included / Enlisted / Relisted / Renewed in the CIL's Portal for Enlistment of Explosives Products upto the date of opening of Cover-I shall be considered under the eligibility criteria in the tender.

2. Documents Establishing Bidder's Eligibility and Qualifications

2.1 Item Offered:

- 2.1.1 Bidder shall indicate the item offered by them along with brand name. In case more than one brand of Bulk Explosives is approved by CMPDIL/CIL, the bidder shall quote only one brand.
- 2.1.2 Bidders offering approved items listed in the NIT (Annexure-I) or applied in CIL Enlistment Portal have to confirm that offered items have not been delisted by CMPDIL or any subsidiary of CIL or PESO or DGMS.

2.2 Offer quantity

- 2.2.1 The annual offer quantity of bulk explosives offered by the bidder for each subsidiary must be indicated separately for each year of the tender period i.e. 1st year & 2nd Year.
- 2.2.2 N.A.
- 2.2.3 The subsidiary-wise yearly offer qty. for 1st year and 2nd year shall be at least 10% of the subsidiary-wise yearly tender quantity of 1st year and 2nd year respectively.
- 2.2.4 The subsidiary-wise offer quantity cannot be reduced at any stage till the conclusion of RC and any attempt to reduce/restrict the offer quantity at any stage before conclusion of RC shall be construed as withdrawal of offer and shall be treated as per terms of this NIT including cancellation of offer and forfeiture of EMD, except in case of counter offer.

2.3 PESO license

- 2.3.1 Details of PESO license i.e. license number, date, validity period, license capacity, list of consignees covered, etc. shall be indicated by the bidders.
- 2.3.2 A bidder shall quote for a subsidiary, only if the PESO license for the plant includes the name of that particular subsidiary even if the PESO license for the plant is for "tender purpose only".
A bidder having PESO license "for tender purpose only" for the plant, shall ensure that name of the particular subsidiary is included/endorsed in the PESO license within 30 days of date of issue of contract failing which the supply order shall stand cancelled

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along with forfeiture of EMD. The cancelled ordered quantity shall be re-distributed amongst other suppliers, including Reserve RC holders, as the case may be, within that subsidiary company.

- 2.3.3 A bidder offering for a particular subsidiary company, shall be bound to supply anywhere within that subsidiary company.
- 2.3.4 Copy of the valid license of PESO shall be submitted along with offer.
- 2.3.5 If the PESO license is not valid on the date of tender opening, copy of application duly receipted by PESO (Nagpur/Regional office) or acknowledgement of online application submitted for revalidation of license, shall be submitted along with offer.
- 2.3.6 Offers without PESO license (valid/applied for revalidation) shall not be accepted. Further, application for new license/ enhancement (even receipted by PESO) will not be considered.
- 2.3.7 Supply of explosives against RCs shall be accompanied by self-attested copy of valid PESO license.
- 2.3.8 Since CIL / subsidiaries reserve the right to increase the ordered/allocated quantity to the extent of (+) 40% (Forty percent) of the RC quantity, the bidders shall ensure PESO license capacity to meet 140% of their RC quantity during the currency of the RC (If not already available).

In case the bidder does not have the required PESO License capacity to meet 140% of their quoted quantity at a time of submission of bid, the bidder will have to submit an undertaking along with the offer that in the event of conclusion of RC with them, they will obtain the required PESO license capacity for 140% of RC quantity from the concerned authority within 6 months from the date of issue of RC. In such case, the successful bidder/ RC holder shall have to provide additional SDBG for 5% of the value for the shortfall quantity for which PESO license is not available within 21 days of issuance of RC with validity of minimum 9 months which shall be released after submission of the documentary evidence of the required PESO License.

The provision of deduction in lieu SDBG shall not be applicable for this additional 5% SDBG.

In case the bidder is not able to obtain the required PESO license capacity for 140% of RC quantity from the concerned authority within 6 months from the date of issue of RC, the said additional BG of 5% shall be encashed with due notice of 15 days to the RC holder. However, the RC for the said item shall not be short closed.

2.4 ISO Certificate

- 2.4.1 ISO 9001 certificate number, date, validity period shall be indicated by the bidders.
- 2.4.2 A copy of ISO 9001 certificate, valid as on the date of tender opening, specifying the name and location of the plant shall be submitted along with the offer.
- 2.4.3 Firms not having valid ISO 9001 certification and certificate without required details as in 2.4.2, as on the date of tender opening will be disqualified.

2.5 Ammonium Nitrate Storage Capacity

- 2.5.1 Bidders shall have the valid PESO License for storage of Ammonium Nitrate at a time,

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equivalent to 50% of the total offered quantity (each year) for all subsidiaries taken together, divided by twelve (i.e. total yearly offered Qty. / 24), rounded off to the nearest integer.

However, MSE bidders shall have the valid PESO License for storage of Ammonium Nitrate at a time, equivalent to 25% of the total offered quantity (each year) for all subsidiaries taken together, divided by twelve (i.e., total yearly offered Qty/48), rounded off to the nearest integer.

2.5.2 The total storage license of Ammonium Nitrate (at a time) for the whole company will be considered.

2.5.3 In case the bidder does not have the required License for storage of Ammonium Nitrate (at a time), the bidder will have to submit an undertaking along with its offer that in the event of conclusion of RC with them, they will obtain the required license for storage of Ammonium Nitrate from the concerned authority within 6 months from the date of issue of RC.

In such case, the successful bidder/ RC holder shall have to provide additional SDBG for 10% of the contract value with a validity of 9 months, within 30 days from date of issue of RC.

If documentary evidence (PESO License) for storage of required quantity of Ammonium Nitrate is not submitted within 6 months from the date of issue of RC, the SDBG will be forfeited and CIL shall reserve the right to rescind / short close the RC for the subsequent period and distribute the balance quantity among any of the existing RC / Reserve RC Holders.

3. Technical specifications

- 3.1 Bidder shall furnish technical specifications of offered item i.e. Brand name, emulsion/slurry, velocity of detonation (VOD) (unconfined) (fresh and after sleepage), density (fresh and after sleepage), Absolute Weight Strength (AWS), Relative Weight Strength (RWS), Absolute Bulk Strength (ABS) & Relative Bulk Strength (RBS), booster sensitivity (fresh and after sleepage), Water Resistance and applicability for explosives, Temperature Sensitivity and Impact Sensitivity. All information shall be furnished in tabular form.
- 3.2 Details of acceptable technical specification are listed in NIT under Annexure-2 titled 'Product Specifications & Random Test Parameters' and offers for items not meeting acceptable technical limits shall not be considered.

4. Testing facilities

- 4.1 The bidder shall confirm that essential equipment required for testing of explosives as detailed below are possessed and maintained by them for the required purpose. If a bidder does not confirm the same, the offer shall not be accepted.

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.

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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

- 4.2 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.
- 4.3 The RC holders are required to submit manufacturer's test certificate of different quality parameters as specified in NIT/RC of CIL along with supply as per the attached Standard Formats (Refer Annexure 13). They shall also keep a record of all tests of raw material and finished product being supplied by them at their end which may be inspected by representative of CIL/Subsidiary Company.

5. Random test

A) TESTING BY CMPDIL

- 5.1 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.
- 5.2 The limits of technical parameters for random test are given in the NIT under Annexure-2 titled 'Product Specifications and Random Test Parameters' and shall also be mentioned in the RC.
- 5.3 The testing charges shall be borne by CIL/ Subsidiaries for carrying out the testing.
- 5.4 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.
- 5.5 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-2. 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

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concerned subsidiary company in every month.

- 5.6 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 5.7 mentioned below, shall be tested for that particular year for particular supplier.
- 5.7 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.
- 5.8 Explosives of same BMD Vehicle will not be tested more than once in a day.
- 5.9 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.
- 5.10 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.

6. Technical service

- 6.1 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.
- 6.2 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 representatives (who is minimum a Diploma in Mining) shall mandatorily be posted in each subsidiary.

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.

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- 6.3 The technical representative of a supplier shall report to user within 48 hours of call (letter/fax/mail), including calls regarding 6.4 and 6.5 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 6.6 to 6.7 mentioned below will also attract a penalty of Rs 50,000/- in each case.
- 6.4 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.
- 6.5 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.
- 6.6 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.

- 6.7 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-14
7. 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.
8. The bidder shall give list of users, other than CIL, of their offered brand during the period 2023-25.

9. Compliance with Statutory Requirements

The suppliers 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.

10. POWDER FACTOR

- 10.1 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 in NIT as Annexure-5 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,

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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

- 10.2 Benchmark powder factor for the 1st financial year **2025-26** (Annexure-5) 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 Benchmark 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
*** '2025-March'2026	Average Achieved PF of FY-2024-25
April'26 to March'27	Average Achieved PF of FY-2025-26
April'27 to ***'2027	Average Achieved PF of FY-2026-27

*** Start of RC period and end of RC period

Benchmark 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.

10.2(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.

10.2 (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-12.

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.

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- 10.3 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.
- 10.4 Bidder shall confirm that explosives supplied by them shall achieve the mine-wise BMPF indicated in the RC and informed as per Clause-10.2. Failure to achieve the benchmark powder factors individually by the RC holder shall attract penalty as detailed in 'Performance and Penalty' clause of NIT.
- 10.5 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.

- 10.6 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

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immediately after completion of the relevant year.

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

- 10.7 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.

11. 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.

12. Any cartridge booster to be used with bulk explosives shall be indicated by the bidder in terms of quantity. Minimum use of such cartridge booster will be preferred and the equivalent of cast booster is to be adjusted.

13. Any increase in the usage of cast Booster and cartridge Booster over and above the stipulated percentage will be at the suppliers' cost.

14. Performance & penalty

- 14.1 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.

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- 14.2 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% x 6 x 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% x 6 x Price of the explosives (without GST).

- 14.3 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.
- 14.4 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.
- 14.5 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

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done provisionally on quarterly basis against their achieved PF in that mine with respect to defined BMPF as per Clause-10.2 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.

14.6 Deduction due to non-achievement of powder factor shall be made from the price of explosives only and not from accessories prices.

14.7 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 10.1 (Note) or deal with shortfall by other RC holders or otherwise.

15. Stability Period

Bulk Loading Explosives should be suitable for varying sleeping times (Must be stable for minimum 10 days).

16. Verification of Infrastructure & Transport Facilities

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

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Sample Forms including LoB & Annexures

Section VII – Sample Forms including LoB & Annexures

Annexure-1

Tentative product list of Bulk Explosives

Product Type	Manufacturer	Brand name
Bulk	AKS EXPO-CHEM PVT. LTD.	BENGEL PLUS
Bulk	NAVBHARAT EXPLOSIVE COMPANY LIMITED	BHARAT SHAKTI
Bulk	BLACK DIAMOND EXPLOSIVES PVT LTD	BULKSTAR
Bulk	CDET EXPLOSIVE INDUSTRIES PRIVATE LIMITED	EBS-300 (SME)
Bulk	IDL EXPLOSIVES LIMITED	EMULKING-100, EMULKING-200, SUPERMIX-100
Bulk	HIRALAL INDUSTRIES PRIVATE LIMITED	HIL POWERBLAST
Bulk	IDEAL INDUSTRIAL EXPLOSIVES LIMITED	IDEAL COLUMN E/S
Bulk	IDEAL INDUSTRIAL EXPLOSIVES LIMITED	IDEAL COLUMN S
Bulk	KELTECH ENERGIES LIMITED	KELBASE
Bulk	M/S. MARS INDUSTRIES LIMITED	MARS BULK-S2 (SME)
Bulk	SRI KRISHNA EXPLOSIVES AND ACCESSORIES COMPANY	MARUTI COLUMN - SME
Bulk	SBL ENERGY LIMITED	NEO BULK 901
Bulk	ORISSA EXPLOSIVES	NITRA MIX
Bulk	NAVBHARAT FUSE COMPANY LIMITED	NOVA SHAKTI
Bulk	PREMIER EXPLOSIVES LIMITED	SAFEX-1 BULK/DYNEX-2 BULK
Bulk	SALVO INDUSTRIES PRIVATE LIMITED	SALVO BULK
Bulk	SPECIAL BLASTS LIMITED	SHAKTI BULK 101
Bulk	SOLAR INDUSTRIES INDIA LIMITED	SOLAR BE-101 / SOLAR BE-201
Bulk	REGENESIS INDUSTRIES PRIVATE LIMITED	VEEJAY BULK / SUPER BLAST - 2000

Note:-

1. The final list is to be retrieved from the Enlistment portal at the time of opening of Cover-I as per Clause 1 of Section VI of TSS.

Section VII – Sample Forms including LoB & Annexures

Annexure-2

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 Sleepage in water(24 hrs)	Sample should fire with Cast Booster (PETN) 100 gm / Cast Booster (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.

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Annexure-3

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/2023-25/_____ dated
**.10.2023 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

Section VII – Sample Forms including LoB & Annexures

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 of20.....

Place.....

Signature of the authorized person(s)

For and on behalf of the

For and on behalf of the Bank

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Annexure-4

Letter of Bid

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

Dear Sirs,

Sub: Tender No. ----- dated --.

1. Having examined the Tender Document including Addenda/Corrigenda, if any (insert numbers), we, M/s. (..... name of the bidder firm.....) represented by the undersigned, Mr/Ms..... Employee/ Partner /Legal Attorney / Proprietor /Accredited Representative, offer to supply and deliver (description of Goods and Services) vide our offer No.....dated..... in conformity with the said Tender Document.
2. We confirm to accept all terms and conditions contained in the tender document unconditionally. We also confirm that after if contract is awarded, this tender document (including Addenda/Corrigenda, if any) shall become part of the Contract.
3. We agree to abide by this bid for a period of 105 days from the date of bid opening and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
4. We confirm that until a formal contract is prepared and executed, this bid together with your written acceptance thereof shall constitute a binding Contract between us.
5. We understand that you are not bound to accept the lowest or any bid you may receive.
6. We confirm that the contents of the offer are given after fully understanding and all information furnished by us are correct and true and complete in every respect.
7. We confirm that all information/ documents / credentials submitted along with the offer are genuine, authentic, true and valid.
8. We confirm that if any information or document submitted is found to be false/incorrect/ forged/tampered in any way, the said offer shall be considered absolutely null & void and action as deemed fit may be taken against us including termination of the contract, forfeiture of all dues including EMD / Security Deposit and Banning of our firm along with all partners of the firm as per provisions of tender document/Purchase Manual of CIL/Provisions of law in force.
9. We certify that there is no Conflict of Interest with any of the Bidders/Agents as defined in Clause 38, ITB.
10. We confirm that we have uploaded the digitally signed Pre-Contract Integrity Pact, as per Annexure - 6, Sample Forms, Section VII without any change in the format.
11. We confirm that we have quoted for the Bulk Explosives exactly as per the NIT requirement; otherwise our offer may be liable for rejection.

Dated this _____ day of _____ 20—

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Signature_____

Name_____

Designation_____

Seal _____

Duly Authorised to sign bid for and on behalf of _____

Note:

1. This letter should be on the letterhead of the Bidder and should be signed by a person competent and having the authority to bind the Bidder. The said document conferring authority upon the person should be submitted by the Bidder along with the LOB. If the said document conferring the authority is Article of Association of Company, Partnership Deed of a Registered Firm or any resolution of the company, then the copy of the same should be uploaded. In other cases, the letter of authority should be a Power of Attorney sufficient to bind the bidder.
2. Power of Attorney should be on non-judicial stamp paper and sufficiently stamped as per the laws of India.
3. The document conferring authority / Power of Attorney should be dated not later than the date of signing the LOB.
4. In case the person who has signed LOB is not bidding himself and has authorized another person whose DSC is mapped in the name of bidder, to bid online on his behalf, then the further authorization on non-judicial stamp paper (as per [Annexure-4B]) by the person signing the LOB in favour of person bidding online is required to be uploaded.

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Annexure – 4B

Format for Authorisation to DSC holder Bidding Online by the person who has signed Letter of Bid

(On NON JUDICIAL STAMP PAPER)

We do hereby authorise M/s. /Mr..... Address
..... whose DSC is mapped in the name of the bidder, for online
bidding on behalf of us for Tender No. Dated invited by CIL on
<https://coalindiatenders.nic.in>.

Name, Signature & Seal of the person who has signed Letter of Bid

And is Authorising the DSC Holder for online bidding.

Name, Signature & Seal of the DSC Holder having DSC mapped in the name of the bidder,
Authorised for online bidding

Signature & Seal of the PUBLIC NOTARY

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Annexure-5

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

WCL

AREA	Name of Mine	PF		OB PF	
		Dept.	HOE	Deptl.	HOE
	UNIT	Te/Kg	Te/Kg	Cum/kg	Cum/kg
Chandrapur	HOCM		5.87		2.15
	Durgapur OCM	4.60		1.45	1.56
	Bhatadi OCM	6.02		2.58	2.69
Ballarpur	Ballarpur OCM		5.00		2.61
	Dhoptala		5.75		2.04
	Sasti OCM			2.00	1.95
	Gauri Deep/ Central OCM	5.25		2.77	
	Gauri Pauni(A) OCM	5.17		2.04	2.13
	Pauni II OCM		4.24		2.07
Majri	NMOC- II A	4.36			
	NMUG to OC	4.82			1.99
	Yekona (Amalg)		6.00		2.25
Wani	Naigoan OCM	5.12		1.54	1.57
	Neejai Deep OCM	6.94		2.04	1.89
	Mungoli OCM	5.99		2.58	2.14
	Kolgoan OCM		5.11		1.97
	Penganga OCM	4.77		2.25	2.00
Wani North	Ukni OCM	4.90		1.93	2.43
	Kolarpimpri OCM		6.51		2.45
	Junnad OCM	4.75		1.80	1.77
	Ghonsa OCM		4.90		2.04
Nagpur	AIK Deep OCM	6.25	5.69	2.57	2.03
	Gondegoan OCM	6.38	5.96	2.27	2.61
	Bhanegoan OCM		6.73		2.39
	Shingori OCM		5.99		1.86
	Adasa UG to OCM		6.72		1.86

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AREA	Name of Mine	PF		OB PF	
		Dept.	HOE	Deptl.	HOE
	UNIT	Te/Kg	Te/Kg	Cum/kg	Cum/kg
Umrer	Umrer OCM	6.42	5.02	2.85	
	MKD-1 OCM		6.74		2.03
	Gokul OCM		7.66		1.79
	Mkd-3 OCM		7.86		1.98
Pench	Urdhan OCM		6.09		1.64
	Chinda COM		6.96		1.87

Section VII – Sample Forms including LoB & Annexures

Annexure-6

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

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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

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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.

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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

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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.

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(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.

(For & On behalf of Bidder)

This document is digitally signed

Section VII – Sample Forms including LoB & Annexures

Annexure-7

No.F.1/4/2021-PPD
Government of India
Ministry of Finance
Department of Expenditure
Public Procurement Division

264-C, North Block, New Delhi.
18.05.2023.

OFFICE MEMORANDUM

Subject: Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017.

The undersigned is directed to refer two Preferential Procurement Orders mandated for the Public Procurement in India, namely:

- i. Public Procurement Policy for Micro and Small Enterprises (MSEs) Order dated 23.03.2012 (PPP-MSE Order) issued by Ministry of Micro, Small and Medium Enterprises (MoMSME) in exercise of the powers conferred in Section 11 of the MSME Development Act, 2006. (Last revised on 09.11.2018)
- ii. Public Procurement (Preference to Make in India) Order, 2017 (PPP-MII order), under Rule 153(iii) of the General Financial Rules (GFRs) 2017, approved by the Cabinet. Implementation of this PPP-MII order is monitored by Department for Promotion of Industry and Internal Trade (DPIIT). (Last revised on 16.09.2020.)

2. It has been brought to the notice of this Department that concurrent application of these two orders are creating confusion to the procuring entities and different procuring entities interpret them differently. In order to bring predictability both to the procuring entities as well as bidders, following guidelines are being issued.

Guidelines

3. The Class-I local suppliers, under PPP-MII Order, participating in any government tender, may or may not be MSEs, as defined under the MSME Act. Similarly, MSEs participating in any government tender, may or may not be Class-I local suppliers. Suppliers may be categorised in following four broad categories for consideration or applicability of purchase preference:

Category	Terminology
Supplier is both MSE & Class-I local supplier.	"MSE Class-I local supplier"
Supplier is MSE but not Class-I local supplier.	"MSE but non-Class-I local supplier"
Supplier is not MSE but is Class-I local supplier.	"Non-MSE but Class-I local supplier"
Supplier is neither MSE nor Class-I local.	"Non-MSE non-Class-I local supplier"

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4. The applicability of PPP-MSE Order and PPP-MII Order in various scenarios, involving simultaneous purchase preference to MSEs and Class-I local suppliers under PPP-MSE Order and PPP-MII Order respectively, shall be as under:

- a) *Items covered under Para 3(a) of PPP- MII Order, 2017 for which Nodal Ministry has notified sufficient local capacity and competition:* For these items, only Class-I local suppliers are eligible to bid irrespective of purchase value. Hence, Class-II local suppliers or Non-local suppliers, including MSEs which are Class-II local suppliers/ Non-local suppliers, are not eligible to bid. Possible scenarios can be as under:
 - (i) L-1 is “MSE Class-I local supplier” - 100% of the tendered quantity is to be awarded to L-1.
 - (ii) L-1 is “Non-MSE but Class-I local supplier” - Purchase preference is given to MSEs as per PPP-MSE Order. Balance quantity is to be awarded to the L-1 bidder.
- b) *Items reserved exclusively for procurement from MSEs as per PPP-MSE Order:* These items are reserved exclusively for purchase from MSEs. Hence, non-MSEs are not eligible to bid for these items. Possible scenarios can be as under:
 - (i) L-1 is “MSE Class-I local supplier” - 100% of the tendered quantity is to be awarded to L-1.
 - (ii) L-1 is “MSE non-Class-I local supplier” - Purchase preference is to be given to Class-I local supplier as per PPP-MII Order. Balance quantity, is to be awarded to L-1 bidder.
- c) *If items are neither notified for sufficient local capacity nor reserved for MSEs, then the process will be as follows:*
 - c (a) Items covered under Para 3A(b) of PPP-MII Order are divisible items and both MSEs as well as Class-I local suppliers are eligible for purchase preference. Possible scenarios can be as under:
 - (i) L-1 is “MSE Class-I local supplier” - 100% of the tendered quantity is to be awarded to L-1.
 - (ii) L-1 is “Non-MSE but Class-I local supplier” - Purchase preference is to be given to MSEs, if eligible, as per PPP-MSE Order. Balance quantity is to be awarded to L-1 bidder.
 - (iii) L-1 is “MSE but non-Class-I local supplier” - Purchase preference is to be given to Class-I local suppliers, if eligible, as per PPP-MII Order. Balance quantity is to be awarded to L-1 bidder.
 - (iv) L-1 is “Non-MSE non-Class-I local supplier” - Purchase preference is to be given to MSEs as per PPP-MSE Order. Thereafter, purchase preference is to be given to Class-I local suppliers for “50% of the tendered quantity minus quantity allotted to MSEs

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Section VII – Sample Forms including LoB & Annexures

above” as per PPP- MII Order. For the balance quantity, contract is to be awarded to L-1 bidder. *(Kindly refer to the illustrative example in the annexure).*

- c (b) Items covered under Para 3A(c) of PPP-MII Order, 2017 are non-divisible items and both MSEs as well as Class-I local suppliers are eligible for purchase preference. Possible scenarios can be as under:
- (i) L-1 is “MSE Class-I local supplier” - Contract is awarded to L-1.
 - (ii) L-1 is not “MSE Class-I local supplier” but the “MSE Class-I local supplier” falls within 15% margin of purchase preference - Purchase preference is to be given to lowest quoting “MSE Class-I local supplier”. If lowest quoting “MSE Class-I local supplier” does not accept the L-1 rates, the next higher “MSE Class-I local supplier” falling within 15% margin of purchase preference is to be given purchase preference and so on.
 - (iii) If conditions mentioned in sub paras (i) and (ii) above are not met i.e. L-1 is neither “MSE Class-I local supplier” nor “MSE Class-I local supplier” is eligible to take benefit of purchase preference, the contract is to be awarded/ purchase preference to be given in different possible scenarios as under:
 - A. L1 is “MSE but non-Class-I local supplier” or “Non-MSE but Class-I local supplier” – Contract is awarded to L1.
 - B. L1 is “Non-MSE non-Class-I local supplier” - First purchase preference to be given to MSE as per PPP-MSE Order. If MSE not eligible/ does not accept - purchase preference to be given to Class- I Local supplier as per PPP-MII Order. If Class-I Local supplier also not eligible/ does not accept – contract to be awarded to L-1.
- d) *Items reserved for both MSEs and Class-I local suppliers:* These items are reserved exclusively for purchase from MSEs as well as Class-I local suppliers. Hence, only “MSE Class-I local supplier” are eligible to bid for these items. Non-MSEs/Class-II local suppliers/ Non-local suppliers cannot bid for these items. Hence the question of purchase preference does not arise.
- e) Non-local suppliers, including MSEs falling in the category of Non-local suppliers, shall be eligible to bid only against Global Tender Enquiry.


(Kanwalpreet)
Director

Tel.: -223093811; email: - kanwal.irss@gov.in

To

1. Secretaries of all Central Government Ministries/ Departments.
2. Secretary Department of Public Enterprises with a request for issuing suitable instructions to all Central Public Sector Enterprises in this regard.

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Annexure

Example explaining applicability in scenario explained in para 4 c (a)(iv)

(Scenario: Divisible items, both MSEs as well as Class-I local suppliers eligible for purchase preference and L-1 is “Non-MSE non-Class-I local supplier”)

Item – Desktop computer

Qty – 50 Nos.

Details of bids received

Sr. No.	Name of bidder	Rates quoted	Price Ranking	Status of bidder
1.	A	100	L1	“Non-MSE non- Class-I local supplier”
2.	B	110	L2	“Non-MSE but Class-I local supplier”
3.	C	112	L3	“MSE but non- Class-I local supplier”
4.	D	115	L4	“Non-MSE but Class-I local supplier”
5.	E	118	L5	“MSE but non- Class-I local supplier”
6.	F	120	L6	“MSE Class-I local supplier”

1. In this case, first purchase preference is to be given to MSEs as per PPP-MSE Order for 25% of tendered quantity of 50 Nos. i.e. 12.5 Nos. (rounded off to the next whole number say 13 Nos). Accordingly, invite L3 (bidder C), whose quoted rates falls within 15% margin of purchase preference to match L1 price i.e. Rs. 100/- for quantity of 13 Nos. Bidder “E” and “F”, although MSEs, will not get purchase preference since their quoted rates don’t fall within 15% margin of purchase preference. Bidder C will be considered for order of 13 Nos. on confirmation of reduction of price.
2. For 50% of balance quantity of 37 number (tendered quantity of 50 – 13 awarded to bidder C; assuming bidder C has confirmed to accept L1 rates), purchase preference will be given to lowest Class-I local supplier as per PPP-MII Order. Accordingly, bidder B will be invited to match L-1 price for 50% of 37 Nos i.e. 18.5 (say 19 Nos of computers). If bidder “B” does not accept the L1 price i.e. price of Rs. 100/- per unit, next higher Class-I local supplier falling within 20% margin of purchase preference, i.e. bidder “D”, may be invited to match L-1 price for 19 Nos. of computers and so on.
3. For remaining quantity i.e. 18 Nos (50-13-19), the contract will be awarded to lowest quoting bidder i.e. Bidder “A”, who is L-1 in the example.

Section VII – Sample Forms including LoB & Annexures

Annexure-8

Number of Subsidiary-wise Parallel Running Contracts to be concluded against this tender:

Subsidiary	No. of Parallel RCs
WCL	5

Section VII – Sample Forms including LoB & Annexures

Annexure–9

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: _____

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Annexure-10

Format for Local Content Certificate

.....

Date:.....

Certificate of Local Content as per Public Procurement (Preference to Make in India) Order, 2017
(as amended from time to time)

Tender No. ----- dated -----.

I/We the Statutory Auditor/ the Cost Auditor/ Practicing Cost Accountant/ Practicing Chartered Accountant (strike-off which is not applicable) of M/s, having registered office at hereby confirm that the percentage of local content in the offered product [**Brand Name....**] of M/s is -----% and meets the local content requirement for 'Class-I local supplier' as prescribed under Public Procurement (Preference to Make in India) Order, 2017(as amended from time to time).

OR

I/We the Statutory Auditor/ the Cost Auditor/ Practicing Cost Accountant/ Practicing Chartered Accountant (strike-off which is not applicable) of M/s, having registered office at hereby confirm that the percentage of local content in the offered product [**Brand Name....**] of M/s is -----% and meets the local content requirement for 'Class-II local supplier' as prescribed under Public Procurement (Preference to Make in India) Order, 2017(as amended from time to time).

The details of the location(s) at which the local value addition is made, is/are as under:

- 1.
- 2.
- 3.

For.....(Name of the firm)

Name of the Statutory Auditor/ the Cost Auditor (in case of companies)/Practicing Cost Accountant/
Practicing Chartered Accountant (other than companies)

Official Stamp ...

UDIN No.....

Place:

Date:

Note: This certificate shall be issued by the Statutory Auditor/ the Cost Auditor (in case of companies) or by the Practicing Accountant/ Chattered Accountant (in cases other than companies).

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Annexure - 11

Check list of Documents to be uploaded in Techno- Commercial Bid

The bidder shall upload the scanned copies of the following documents in suitable folders / spaces in Techno-Commercial Bid as mentioned below:

Sl. No.	Document	NIT Clause Ref. No.	Folder Name
1	Letter of Bid (LOB) in the bidder's letter head as per format given at Annexure – 4	Section-II, ITB, Clause-13.2.i & Section-VII, Sample Forms, Annexure-4	LOB DOCs
2	Document conferring Authority/ Power of Attorney (document should be dated not later than the date of signing the bid.)	Section-II, ITB, Clause-13.2.i & Section-VII, Sample Forms, Annexure-4	LOB DOCs
3	In case the person who has signed LOB is not bidding himself and has authorized another person to bid online on his behalf, then the further authorization on non-judicial stamp paper duly notarized (as per Annexure-4B) by the person signing the LOB in favour of person bidding online.	Section-II, ITB, Clause-13.2.i. Note & Section-VII, Sample Forms, Annexure-4 (Note) & Annexure-4B	LOB DOCs
4	Certificate of Local Content as per format enclosed as Annexure-10, will to be submitted separately in respect of each of the quoted items	Section-II, ITB, Clause-6.C.ii.a	COMMERCIAL DOCs
5	Evidence of valid registration by the Competent Authority , if applicable	Section-II, ITB, Clause-6. D & E	COMMERCIAL DOCs
6	Certificates towards being MSE	Section-II, ITB, Clause-7.d & f	COMMERCIAL DOCs
7	In case of bidders seeking exemption from submission of EMD, the scanned copy of the Documentary evidence for exemption as per Clause-15, ITB, Section-II, as the case may be.	Section-II, ITB, Clause-15.B	Instructions given at Clause-15.B of the ITB is to be followed.
8	Pre-Contract Integrity Pact - The bidders will have to download the Pre-Contract Integrity Pact and shall have to upload the same, digitally signed	Section-II, ITB, Clause-37 & Annexure-6	PRE CONTRACT IP DOC
9	Commercial Documents towards bidder's eligibility and qualifications.	Section-VI, Technical Section including Specifications, Clause-2	COMMERCIAL DOCS
10	Documents towards Technical Section including Specifications.	Section-VI,	TECH DOCs

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

Section VII – Sample Forms including LoB & Annexures

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 (m³/kg) for OB = (Sum of total volume (m³) of overburden for all available benches in OB) / (Sum of total quantity of explosives used in all above blasts in OB benches)

PF (Te/kg) for Coal = (Sum of total tonne of coal of all benches) / (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

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: <ul style="list-style-type: none">• Schmidt Hammer• Digital VOD Meter• Software for fragmentation assessment.

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		<ul style="list-style-type: none"> • 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.

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

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:

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Annexure -15

Revised SOP for enlistment of products of explosive manufacturers in CIL's approved product list of Explosives and Accessories.

A. Background:

CIL is the largest consumer of commercial explosives in India. The procurement of explosives and accessories in CIL is done through a centralized tendering process for all the subsidiaries of CIL.

CIL maintains an approved product list of explosives and accessories as per specific requirements of mines of CIL. To participate in the tendering process of explosives and accessories, for the prospective bidders, it is a prerequisite to get their product included/enlisted in the CIL's approved product list. In order to broaden its vendor base, CIL allows manufacturers to include/enlist their products in CIL approved product list following specific guidelines/SOP. This SOP provides the guidelines for the inclusion of the new products of explosive and accessories manufacturers to CIL approved list.

B. Process of New Product inclusion/enlistment:

1. Only explosives and accessories products that are enlisted in CIL's approved product list shall be eligible for consideration for procurement.
2. Procurement of Explosives by Subsidiaries: In exceptional cases, if a Subsidiary has been permitted to procure Explosives directly, it shall procure only the items that are on CIL's approved Product List.
3. For inclusion of new explosives and accessories products in CIL's approved product list, the PESO authorized explosives manufacturers shall apply to ED (Prod.), CIL along with the notarized copies of documents mentioned in **Annexure- A** with copy to GM (Prod.), CIL. (Copy of Annexure – A enclosed)

The applications for enlistment can be made in any month of the year*. However, in the year when tenders for regular Rate Contracts are published, in such cases:

- (i) The applications for enlistment of Bulk Explosives should be received by the month of April of the same calendar year (i.e., tender publishing year) and
- (ii) The applications for Cartridge Explosives and Accessories should be received by the month of January month of the same year as above (i.e., tender publishing year).

If any application received beyond this period for relevant product/ year, the same will be considered after the conclusion of the relevant tender.

For this purpose advertisement on CIL's website will be published suitably 6-8 months in advance, so that the exercise is completed before closing date of the concerned tender.

***Note:** Regular Rate Contracts are normally for 2 year period and the current/ ongoing RC is from 2023-25 i.e., in this case the year means 2025.

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4. The application made by the manufacturer shall be initially examined by the Production Division associated with MM and the Finance Division for shortfall of documents if any.
5. After the receipt of complete documents, approval of DT, CIL shall be taken for processing the application and for constitution of a multi- disciplinary committee consisting of one executive each from Production Division, MM Division, Finance Division, CIL and Blasting Division, CMPDI.
6. The committee constituted as above will physically inspect the explosives manufacturers' plant/factory/silo/support plant and will verify the documents submitted by the manufacturers/applicant with that of the original ones. The committee shall assess the infrastructure and financial capability of the firm and clearly recommend the same in the inspection report for further processing for field trials and tests.
7. The committee/team will then submit the inspection report of the explosive plant /factory visit to ED (Production), CIL / GM (Prod), CIL.
8. Based on the report/recommendations of the committee and if agreed by ED(Prod),CIL /GM(prod), CIL, as the case may be, communication will be sent to the explosive manufacturers through email/letter to contact GM/HOD (Business Development), CMPDI for further field trial and testing. A copy of this communication will also be sent to GM (Blasting) CMPDI by ED (Prod.), CIL /GM (Prod.), CIL, as the case may be.
9. Upon receipt of the communication from CIL as above, the manufacturer shall contact GM/HOD (Business Development) CMPDI and shall pay the requisite fee amount for test and trial of their products as prescribed by CMPDI. All the communications made to the manufacturer/applicant by CMPDI shall also be marked to ED (Production), CIL, GM (Prod.), CIL and GM (Blasting), CMPDI.
10. Upon receipt of communication from GM/HOD (Business Development) CMPDI regarding the compliance by manufacturer/applicant, GM (Blasting), CMPDI shall identify a suitable mine for field test and trial of the product in consultation with GM/HOD of Production/Explosives Dept. of CIL & Subsidiary Companies.

GM (Blasting), CMPDI shall communicate the name of the mine to the manufacturer/applicant along with the conditions/ statutory requirements to be followed during the test & trial process. It will be the responsibility of Explosive manufacturers to make available the requisite quantity of new product and services at the trial-blasting site, free of cost.

11. After the completion of field test and trial of the new products, GM (Blasting), CMPDI will submit the report to ED (Prod.), CIL / GM (Prod.), CIL with recommendation ***as "The Product is Recommended/Not recommended for use in Mines of CIL"***. A copy of the report shall also be sent to the applicant by CMPDI.
12. Based on the recommendation of CMPDI, the new product will be included/enlisted in CIL's approved Product list of explosives, with the approval of Director (Technical), CIL. Accordingly, the communication shall also be sent to the manufacturer/applicant and the date of communication shall be considered as date of enlistment in CIL's approved product list.
13. If the new product tested is not recommended by CMPDI for use in mines of CIL, then the manufacturer/applicant can apply for retest of the same product within 30 days of the receipt of the test report giving details of results of tests. The application shall be made

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to ED (Prod.), CIL with a copy to GM (Blasting), CMPDI and retest shall be allowed only once with the approval of competent authority. Application for retest received beyond 30 days will not be accepted and in such cases, the applicant needs to apply afresh and all above procedures will be followed.

If considered for retest, the below mentioned procedure shall be followed:

- a) Further document verification and plant inspection is not required if the application is made within 30 days of the recommendation of CMPDI.
 - b) The requisite documents like PESO licenses and DGMS certificates, if required, shall be submitted during the retest for ascertaining the validity of certificates/ licenses.
 - c) Complete field trials and tests to be conducted afresh as per SOP, without any bearing on the earlier tests & trials. The selection of the mine for retest will be at the discretion of the CIL/CMPDI, considering the extant statutory provisions.
 - d) Fees as prescribed by CMPDI shall be submitted for retest of the products by the applicant. The product and services for retest shall be supplied free of cost by the applicant at the assigned and communicated mine.
 - e) After such retest, a fresh report shall be submitted by CMPDI and procedures listed at Points -10, 11 & 12 will be complied.
14. In case of enlistment of Bulk explosives products, the manufacturing plants including Silos/support plant attached to mother plant/main plant should also be considered for the site inspection. For new entrants/applicants of bulk explosives, the details of Silos/support plant shall be included with the application for bulk explosives. While communicating the product approval to the applicant, the details of Plant/Silos/Support Plant should also be mentioned. Only such approved Plants/ Silos/support plant shall be considered during the tender evaluation. The documents related to existing Plants/Silos/support plant or additions of Plants/Silos/support plant, as the case may be, shall be submitted while renewal/relisting of the products.

C. Relisting/Renewal of approved products-

15. All the manufacturers of the products appearing on CIL's approved product list, shall submit the documents as per SOP every four years from the date of enlistment/renewal/relisting, as the case may be, for renewal/re-listing of the products in CIL's approved product list.
16. If any new Plant/Silos/support plant have been undertaken during the intervening period, the same need to be submitted with renewal/relisting application and all such new additions will be inspected by duly constituted committee and after recommendation, the product shall continue to be in the CIL's approved Product list. The continuation of the product in the CIL's approved Product list will be communicated to the manufacturer post approval.
17. No fresh test & trials of the product will be conducted in renewal/relisting cases as above. Only the relisted products during the last four years as above, shall be considered during the tender evaluation.
18. In the cases, where the authorization of the product has been suspended due to any reasons, the manufacturers shall immediately inform regarding the same.

And

In the cases, where the authorization of the product has been withdrawn by PESO/DGMS

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in the intervening period of re-enlistment on account of Indian and other Standards Revisions incorporating various changes including testing and quality control systems or any other reasons, then in such cases, fresh application and complete procedure for enlistment of product will be applicable.

19. Permission of DGMS is required to be submitted if the plant/factory/silo/support plant is located in the premises of mine.
20. Financial and commercial documents are to be excluded if the firm applies for enlistment of another product in the same financial year. However, other documents shall be submitted along with the application and the inspection of the team shall be as per the documents submitted in this case.
21. SOP for field trials and tests of the explosives and accessories product is enclosed as

Annexure – B.

22. The product approval granted for enlistment/renewal/relisting, as the case may be, in CIL's approved product list, among others shall be subject to the applicable provisions of the Explosive Act' 1884 and allied legislations, Mines Act, 1952 and allied legislations, DGMS Circulars, guidelines, instructions, etc. issued there under. The explosives product enlisted/renewed/relisted, as the case may be, in CIL's approved product list, may be withdrawn, if at any point of time, it is observed that the manufacturer has concealed any information which has resulted in contravention of the aforesaid statutory stipulations or the information shared for enlistment/renewal/relisting, as the case may be, as per relevant annexure, is fabricated/forged/manipulated.
23. The amended approved SOP for product enlistment/re-enlistment supersedes all the earlier approved SOPs of CIL for product enlistment of explosives and accessories.
24. In case of any dispute arises on the provisions of the SOP, the interpretation and decision of the Director (Technical), CIL will be final. Further, any proposed changes/addition/modification/revision in the SOP/guidelines will be effected with the approval of the Director (Technical), CIL.
25. CIL reserves the right to alter, amend or withdraw partly or fully any of the provisions of the SOP/guidelines, as and when needed

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Annexures of SOP

Annexure – A

List of Documents for enlistment/re-enlistment of Explosives & Accessories

Products

Sl. no	List of Documents	Remarks
1	Name of the Firm/Company/Organization	
2	(a) Address of Head/Registered office	
	(b) Phone no	
	(c) Fax no	
	(d) Location of Factory/Plant/Silos/Support Plants with details manufacturing facility	For new entrants-details of /Silos/Support Plants shall be included, only the inspected /Silos/Support Plants shall be considered during the Tender evaluation.
	(e) Details of Contact Persons 1. Name: Mobile no: Email id: 2. Name: Mobile no: Email id:	
3	Name of the product applied/request for enlistment/renewal/re-enlistment	
4	License/Approval of CCE/PESO	All licenses of Product /Factory/Plant /Silos/Support plant with latest updation and validity to be submitted
5	Production capacity as per PESO/CCE License	
6	Factory Layout with detail of plant/silo/support plant & machinery duly approved by PESO	Valid PESO approved Factory layout should contain the details of PESO license manufacturing details, plant details and the details of explosives products.
7	Test report of PESO for the product applied	
8	Authorization of PESO for manufacturing the product applied.	Final authorization to be submitted. <i>(Authorizations for trial manufacturing shall not be considered)</i>
9	Lab test reports of CIMFR	To be submitted for Accessories and for explosives used in UG mines.
10	DGMS approval of the product, if any.	
11	DGMS permission if the factory/plant/silo /support plant is located in the premises of the mine.	
12	Environment/Pollution Clearance	EC/PC should clearly mention the Explosives product category in the certificate.

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Sl. no	List of Documents	Remarks
13	Facility of transportation of explosives (with documentary evidence of PESO approval, RC, fitness certificate, PUC and Insurance)	Explosives vans and BMDs details with statutory documents
14	Plant & Machinery facilities for quality testing of product	All the details of the plant and Machinery with the details of quality testing being done.
15	List of Quality testing employees, their qualification and experience	Complete list
16	List of Mining Personnel's ,their qualification and experience	Complete list
17	Product Literature and Technical Data sheet of the product applied	
18	Production of the product applied , in last 3 years including current year, as applicable	
19	List of Existing Customer, if any, for the product applied , order copies, supply proof and performance certificate by Customer	
20	Municipality Tax/ Panchayat Tax Electric Bill/Lease Rent Documents	All applicable to be submitted
21	Facility for Alternative Source of Power Supply/Back up source of supply (with relevant documentary evidence)	
22	ISO certificate	The applied product should be mentioned in the certificate
23	Certificate of Incorporation along with Memorandum and Articles of Association (in case of companies)	
24	Partnership Deed and extracts from Registrar of firms. If available (in case of partnership firms)	
25	Udyam Certification in case of MSME's	
26	Copy of GST Registration	
27	Copy of PAN no	
28	Audited Balance sheet & P&L A/c for the last three years, as applicable	
29	Present Credit facility with Bank(Banker's Certificate)	Proforma for Bankers Certificate Enclosed as Annexure – A(1)
30	Sanctioned Credit Limit Certified by the banker.	
31	Certificate from banker regarding regularity of repayment of loan	
32	Whether Banker is ready to provide sufficient loan for the business for expansion of present project/starting of new project (Banker's Certificate)	

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Annexure - A (1)

PROFORMA FOR BANKER CERTIFICATE

(To be submitted on the banker's letterhead)

**ED (Production)
CIL, Kolkata**

Subject: Financial credibility certificate in respect of M/s... (Name of the firm with address) for the purpose of enlistment of a new product of explosives and accessories with Coal India Limited, Kolkata.

Sir/Madam,

This is to certify that M/s.....(Name of the firm with address) are maintaining Current/Saving Account No.....with this bank branch for the last Years. The firm has been provided with a credit limit of Rs.....

This is certified that the regularity in repayment of loan by the firm is satisfactory.

This is further certified that the bank is ready to provide sufficient loans for business expansion of the present project/starting of a new project.

Yours faithfully

()

Designation with seal

STANDARD OPERATING PROCEDURE FOR EVALUATING THE PERFORMANCE OF NEW CORD RELAY DURING BLASTING TRIALS BY CMPDI IN MINES OF COAL INDIA LIMITED

The steps to be followed during performance evaluation of new Cord Relay supplied by any manufacturer during blasting trials are enumerated below:

- 1) Verification of Necessary Documents submitted by the manufacturer pertaining to
 - Valid Manufacturing License of the product granted by PESO
 - DGMS Permission, if applicable
 - Product Literature
- 2) Taking up the matter with the concerned subsidiary requesting to provide suitable mine / mines for carrying out the field trials where Cord Relay of other manufacturers are already in use so that, the performance of new Cord Relay product can be comparatively assessed with the performance of existing Cord Relay used by the mines where Blasting trials will be conducted. Testing should be carried out in all possible scenarios viz. dry face condition, watery face condition containing mud and broken rock.
- 3) Quantity to be tested
A minimum quantity of 300 No's is to be supplied free of cost by the manufacturer for carrying out Blasting trials. A minimum of 6 to 7 rounds of blasting trials are required for evaluation of a new product of Cord Relay.
- 4) The following Technical Parameters should be examined on the surface before putting it to actual blasting trials to ascertain the quality of the new product. The test results of the new product must lie within the limiting range in respect of all technical parameters specified in the Running contract under the head "Technical parameters for Random Testing".

If any of the test results falls outside the range, the product shall not be recommended for use in the mines of Coal India Limited and if re-testing is required for the failed product, the procedure as specified in "Revised SOP for inclusion of new products of Explosive manufacturers in CIL approved product list of Explosives & Accessories" shall be followed.

a. Verification of Physical Condition:

By visual inspection of the new product of Cord Relay.

b. Transmission Test:

Under this test, a minimum quantity of 25 No's of Cord Relay should be connected in series using detonating fuse / cord and fired. All the 25 No's of Cord Relay should be fired without any misfire.

c. Delay Timing Test:

The delay timing should be determined by firing the Cord Relay after connecting it with the Digital Delay timer to precisely determine the delay time.

d. Quantities to be Tested:

For each batch, only one Cord Relay shall be tested.

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e. Sensitivity:

The sensitivity test should be determined by firing the cord relays in different lines (either in the main line or in the branch line) with a detonating fuse. All Cord- relays shall fire.

The test results of the new product of Cord Relay shall be properly documented and should be duly signed by representative of mine, representative of respective manufacturer and representative of CMPDI and shall be enclosed in the Final report as Annexure-I.

There should not be any **Misfire** during blasting trials. If there takes place any **Misfire** during blasting trials, the product should not be recommended for use in the mines of Coal India Limited *and if re-testing is required for the failed product, the procedure as specified in “Revised SOP for inclusion of new products of Explosive manufacturers in CIL approved product list of Explosives & Accessories” shall be followed.*

- 5) Records of blasting trials should be properly documented along with observations, if any and should be duly signed by representative of mine, representative of respective manufacturer and representative of CMPDI and should be enclosed in the Final Report as Annexure-II.

Checklist to be followed during Blasting trials of New Cord Relay

Sl. No.	Particulars	Yes	No
1	Necessary documents i.e., License of the product granted by PESO and DGMS permission, if applicable, were available and examined.		
2	Blasting trial were carried out in all possible scenarios viz. dry face/ hole condition, watery face / hole condition containing mud and broken rock.		
3	A Minimum Quantity of 300 No's of New Cord Relay was supplied free of cost by the manufacturer.		
4	A minimum of 6 - 7 rounds of Blasting trials were conducted.		
5	Physical Conditions of the Cord Relay were examined.		
6	Transmission Test of New Cord Relay was carried out.		
7	Delay Time Test of New Cord Relay was carried out.		
8	Sensitivity Test of New Cord Relay was carried out.		
9	Were there any misfire observed during blasting trials?		
10	Record of Blasting trials was properly documented along with observations.		

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Annexure – I

TEST RESULTS OF NEW CORD RELAY

1	Name of the manufacturer	:	
2	Name of the product	:	
3	Batch no. / Case no.	:	
4	Date of manufacturing	:	
5	Date of sampling	:	
6	Date of testing	:	
7	Name of mine / magazine from where samples were drawn	:	

8	Test Conducted	Specified limit as per RC	Results	Remarks
(i)	Physical Condition	Shall be good		
(ii)	Transmission Test	As per 4 (b) of SOP		
(iii)	Delay Timing Test	± 5 ms as specified by manufacturer		
(iv)	Sensitivity Test	As per 4 (e) of SOP		

9. Final result:

Signature of
CMPDI Representative

Signature of
Mine Representative

Signature of Cord Relay
Manufacturer

Section VII – Sample Forms including LoB & Annexures

Annexure-II

RECORD OF BLASTING TRIAL OF NEW CORD RELAY

Blasting Trial no:			
Sl. no.	Particulars		
A	Details of Mine		
	1	Name of mine	:
	2	Bench	:
	3	Nature of strata	:
	4	Face condition	:
	5	Date of blasting trial	:
B	Blast Geometry		
	1	Pattern of holes	:
	2	Dia. of holes (mm)	:
	3	Average depth of holes (m)	:
	4	Average burden (m)	:
	5	Average spacing (m)	:
	6	No. of holes	:
	7	No of rows	:
C	Volume Of Block		
	1	Average height (m)	:
	2	Average width (m)	:
	3	Average length (m)	:
	4	Total volume of block (m3)	:
	5	In-situ Powder Factor (m3 /kg)	:
D	Explosives		
	1	Type and Quantity of Explosive, Manufacturer, Batch no. & Date of Manufacturing	:
	2	Type & Quantity of cast booster, Manufacturer, Batch no. & Date of Manufacturing	:
	3	Charge per hole (kg)	:
	4	Charge per round (kg)	:
	5	Type of stemming material used	:
	6	Height of stemming column (m)	:
E	Blasting Accessories Used		
	1	Type of Cord Relay used	:
		Name of Manufacturer	
		Batch No. / Case No.	
		Date of Manufacturing	
	2	No. of Cord relay used	:
	3	Delay	:
	4	Type & Detail of detonator used	:
	5	Length of DF used	:
	6	Detail of DF used	:
		Name of Manufacturer	
		Batch No. / Case No.	
		Date of Manufacturing	
F	Evaluation of Blasting Performance		
	1	Fragmentation	:
	2	No. & volume of boulder (m3)	:
	3	Percentage of boulders	:

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	4	Volume of toe (m3)	:	
	5	Muck-pile profile	:	
	6	Throw	:	
	7	Ease of digging	:	
	8	Misfire (if any)	:	

G Sketch Showing the Pattern of Holes, Placement of Cord Relay and Sequence of Delay

Sketch Showing the Pattern of Holes, Placement of Cord Relay and Sequence of Delay

Signature of
CMPDI Representative

Signature of
Mine Representative

Signature of Cord Relay
Manufacturer

Section VII – Sample Forms including LoB & Annexures

STANDARD OPERATING PROCEDURE FOR EVALUATING THE PERFORMANCE OF NEW BULK EXPLOSIVE DURING BLASTING TRIALS BY CMPDI IN MINES OF COAL INDIA LIMITED

The steps to be followed during performance evaluation of New Bulk explosives supplied by any manufacturer during blasting trials are enumerated below:

- 1)** Verification of Necessary Documents submitted by the manufacturer pertaining to
 - Valid Manufacturing License of the product granted by PESO
 - DGMS Permission, if applicable
 - Product Literature
- 2)** Taking up the matter with the concerned subsidiary requesting to provide suitable mine / mines for carrying out the field trials where bulk explosives are already in use so that the performance of new bulk explosives can be comparatively assessed with the performance of existing bulk explosives used by the mines where blasting trials will be conducted. Testing should be carried out in all possible scenarios viz. dry hole condition, watery hole condition containing mud and broken rock. The bulk explosives should be used in mine having bench height at least up to 9m, so that the explosives can be loaded in blast holes as top and bottom charge column. The Cast Booster (Emulsion) or Cast Booster (PETN/TNT) may be used, however the Cast Booster (Emulsion) should be preferably used during blasting trials, if available in mine.
- 3)** Quantity to be tested

A minimum quantity of 30 MT shall be supplied free of cost by the manufacturer for carrying out blasting trials. A minimum of 6 to 7 rounds of blasting trials are required for evaluation of new product of bulk explosives.
- 4)** The following Technical Parameters should be examined on the surface under unconfined condition before putting it to actual blasting to ascertain the quality. The test results of the new product must lie within the limiting range in respect of all technical parameters specified in the Running contract under the heading “Technical parameters for Random Testing”.

If any of the test results falls outside the range, the product shall not be recommended for use in the mines of Coal India Limited and if re-testing is required for the failed product, the procedure as specified in “Revised SOP for inclusion of new products of Explosive manufacturers in CIL approved product list of Explosives & Accessories” shall be followed.

a. Verification of Physical Condition:
By visual inspection of Bulk explosives.

b. Velocity of Detonation (VOD)

- Fresh
- After 24 hrs.- Sleepage

Velocity of detonation should be determined with a Digital / Electronic VOD meter under unconfined conditions.

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c. Density of Explosive

- Fresh
- After 24 hrs Sleepage

Density of the explosive should be determined by the water displacement method.

d. Booster Sensitivity (BS)

- Fresh
- After 24 hrs. Sleepage

The sensitivity of the explosive should be checked by employing a 100g cast booster along with the bulk explosive encapsulated in cartridge form to perform the test.

The procedure of testing is given in appendix-1

The test results of the new product shall be properly documented and should be duly signed by representative of mine, representative of respective manufacturer and representative of CMPDI and shall be enclosed in the final report as Annexure-I.

- 5) Blast design and Initiation patterns should be suggested by the technical representatives of the manufacturer according to Hardness of the strata and height of the bench. Hardness of the strata of the corresponding bench is determined with dedicated instruments.
- 6) Performance evaluation of new explosive should be ascertained on the basis of blast performance achieved during blasting trials by observing Powder Factor, Fragmentation, Throw, Muck-pile profile, Percentage of oversized boulders w.r.t. loading equipment deployed at the bench. A new explosive must meet the Benchmark Powder Factor (BMPF) criterion set by Subsidiary/Coal India Limited for the mine/patch/bench/method of production, as the case may be.

After each blasting trial the mucking operation should be observed and analyzed using Digital Image Analysis Technique. There should not be any **Misfire** during blasting trials. If there takes place any **Misfire** during blasting trials. During the trial period the electronic counter, which is an integral part of the BMD system must function accurately and reliably. Any malfunctioning in the electronic counter will lead to termination of the blasting trials and the product should not be recommended for use in the mines of Coal India Limited the product should not be recommended for use in the mines of Coal India Limited and if re-testing is required for the failed product, the procedure as specified in “Revised SOP for inclusion of new products of Explosive manufacturers in CIL approved product list of Explosives & Accessories” shall be followed.

In order to determine the actual / exact quantity of explosives loaded / poured into all the blast holes during charging operation, the following methodology should be practiced during blasting trials.

- a) The Pump truck / BMD vehicle should be weighed at the weigh bridge of the respective mine before charging operation and after completion of charging operation in presence of the representative of mine, representative of respective manufacturer and representative of CMPDI to ascertain the quantity of the explosives consumed during charging operation and after completion of charging operation. The difference of the weighment before charging operation and after completion of charging operation will indicate the explosives quantity used during the charging operation. While finalizing the Weight of the Explosive, the water left in the water tank shall also be deducted.

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b) The counter fitted to the body of the BMD vehicle should be checked before start of the charging operation and at the end of charging operation during each blasting trial. The difference in the counter reading showing the cumulative quantity discharged from the pump truck / loaded into all the blast holes should be computed accurately.

c) The total quantity of explosives consumed during the charging operation will be the **Higher** value obtained by observing the methodology mentioned at point no. a) and b) and should be used for determination of the powder factor. This methodology will be applicable only during introduction of new bulk explosives product.

In order to record the explosives quantity along with the accessories consumed during charging operation during blasting trial, the loading sheet appearing at Annexure-II should be used.

7) Blasting trials record should be properly documented along with observations, if any and should be duly signed by representative of mine, representative of respective manufacturer and representative of CMPDI and should be enclosed in the final report as Annexure-III.

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Check List to be followed during Blasting trials of
New Bulk Explosive

Sl. No.	Particulars	Yes	No
1	Necessary documents i.e., License of the product granted by PESO and DGMS permission, if applicable, were available and examined.		
2	Blasting trial were carried out in all possible scenarios viz. dry face / hole condition, watery face / hole condition containing mud and broken rock.		
3	Bulk explosive was used at bench height at least up to 9m.		
4	A Minimum Quantity of 30 MT of New Bulk Explosive was supplied free of cost by the manufacturer.		
5	A minimum of 6 - 7 rounds of Blasting trials were conducted.		
6	Physical Conditions of the New Bulk Explosive were examined.		
7	VOD of both the fresh sample and after sleepage sample of the New bulk explosive were measured under unconfined conditions.		
8	Densities of both the fresh sample and after sleepage sample of the explosive were measured.		
9	Booster-sensitivity of both the fresh sample and after sleepage Sample of the explosive were examined.		
10	Hardness of strata was measured by any dedicated instruments.		
11	Powder factor, fragmentation, throw, muck pile profile and percentage of oversized boulder w.r.t. loading equipment were observed during mucking operation.		
12	Were there any misfires observed during blasting trials?		
13	Was the counter of the BMD vehicle / pump-truck working satisfactorily?		
14	Was the blasting trial record properly documented along with observation?		

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Annexure-I

TEST RESULTS OF NEW BULK EXPLOSIVE

1.	Name of the manufacturer:	
2.	Name of the product:	
3.	Colour of product:	
4.	Sample no.:	
5.	Date of sampling:	
6.	Date of testing:	
7.	Type of density modifier:	
8.	Name of mines/magazines from where samples were drawn:	

9.	Test Conducted	Specified limit as per RC	Results	Remarks
(i)	Physical Condition	Shall be Good		
(ii)	Velocity of detonation (m/sec)	a) Fresh	≥ 3500	
		b) After sleepage	≥ 3500	
(iii)	Density (g/cc)	a) Fresh	1.15 ± 0.05	
		b) After sleepage	1.15 ± 0.05	
(iv)	Booster sensitivity	a) Fresh	As per 4 (d) of SOP	
		b) After sleepage	As per 4 (d) of SOP	

10. Final result:

Signature of
CMPDIL Representative

Signature of
Mine Representative

Signature of
Explosive Manufacturer

Annexure – II

1	Manufacturer Name	:
2	Product Name	:
3	Project Name	:
4	Location of Blast	:
5	Pump Truck No:	:
6	Date:	:
7	Hole Dia	:
8	Total no. of holes:	:
9	Length of Block	:
10	Width of Block	:
11	Block of Volume	:
12	Total Quantity of SME	:
13	Cup Density	:
14	Date of Blast	:

[illegible]

Signature of
Explosive Manufacturer

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Annexure–III

RECORD OF BLASTING TRIAL OF NEW BULK EXPLOSIVE

Blasting Trial no:			
Sl. no.	Particulars		
A	Details of Mine		
	1	Name of mine	:
	2	Bench	:
	3	Nature of strata	:
	4	Face condition	:
	5	Date of blasting trial	:
B	Blast Geometry		
	1	Pattern of holes	:
	2	Dia of holes (mm)	:
	3	Average depth of holes (m)	:
	4	Average burden (m)	:
	5	Average spacing (m)	:
	6	No. of holes	:
	7	No of rows	:
C	Volume Of Block		
	1	Average height (m)	:
	2	Average width (m)	:
	3	Average length (m)	:
	4	Total volume of block (m3)	:
	5	Powder Factor (m3 /kg)	:
D	Explosives		
	1	Type of explosive	:
		Name of Manufacturer	:
		Pump Truck No.	:
	2	Type & Quantity of cast booster	:
	3.	Detail of cast Booster (Manufacture, Batch no, date of manuf.)	:
	4	Charge per hole (kg)	:
	5	Charge per round (kg)	:
	6	Type of stemming material used	:
	7	Height of stemming column (m)	:
E	Blasting Accessories Used (with all the details, like manufacturer, batch no., date of manufacturing etc.)		
	1	Type of Initiation System used	:
	2	No. of Nonel / Cord relay used	:
	3	Delay	:
	4	Type of detonator used	:
	5	Length of DF used	:
F	Evaluation of Blasting Performance		
	1	Fragmentation	:
	2	No. & volume of boulder (m3)	:
	3	Percentage of boulders	:
	4	Volume of toe (m3)	:
	5	Muck-pile profile	:
	6	Throw	:
	7	Ease of digging	:
	8	Misfire (if any)	:

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- G Sketch Showing the Pattern of Holes, Placement of Nonel / Cord Relay / Electronic Detonator/DF and Sequence of Delay

Sketch Showing the Pattern of Holes, Placement of Nonel / Cord Relay / Electronic Detonator/DF and Sequence of Delay

- H Section of Holes Showing the Charge Distribution and the Height of Stemming Column

Section of Holes Showing the Charge Distribution and the Height of Stemming Column

Signature of
CMPDIL Representative

Signature of
Mine Representative

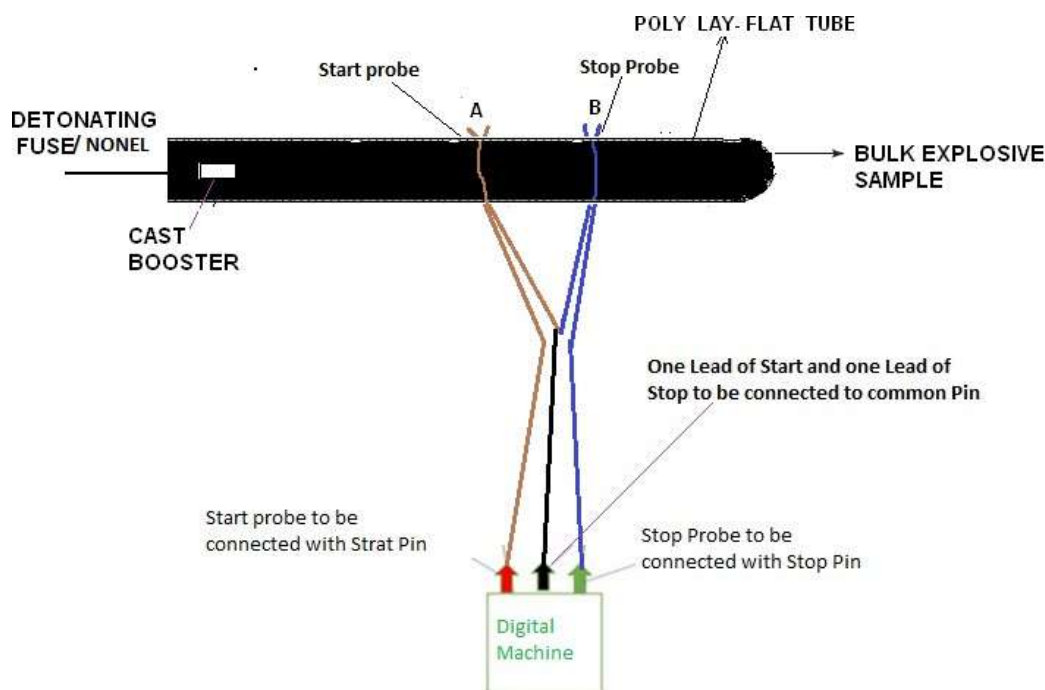
Signature of Explosive
Manufacturer

1. STEPS TO MEASURE VOD OF BULK EXPLOSIVES WITH DIGITAL/ ELECTRONIC VOD METER

- a. Take the Bulk Explosives of unknown VOD into the 83 mm poly lay flat tube in a cartridge form.
- b. Take a pair of twisted cables (Preferably Green and Red). Green cable as Start Probe and Red Cable as Stop Probe and keep both the probes (Start & Stop Probe) in open circuit as shown in figure. (enclosed)
- c. Now tie two of these cables to bulk explosives cartridge at a distance of 10cm/15 cm/20 cm (Probe Distance) as per given figure.
- d. After Binding cables on Explosive sample, measure the distance between the cables and make sure that the distance should not increase or decrease as per the distance set for the Explosive sample to be tested.
- e. There will be 2 ends for Start Probe (Green) and 2 ends for Stop Probe (Red) as shown in Figure.
- f. Take a 3 core (Preferably one green, one red and one black) Cable (1.5mm Square copper wire) in required length to safeguard Operator and instrument (Preferably 100m)
- g. One end of the Start Probe (Green) and One End of the Stop Probe (Red Cables) are to be joined and make 4 cores to 3 core
- h. The Probes taken from cartridge (Start, Stop and Common) are to be connected to 100m, 3 core cable (Green to Green, Red to Red and remaining Green and Red to Black)
- i. Other end of the 3-core cable has to be connected to the Digital/ Electronic VOD Meter, Start probe to Start Pin, Stop Probe to Stop Pin and Common Probe to Common Pin. By this, the total circuit will be in open condition.
- j. Now put on the unit by pressing the “ON” button and input the required data to the Digital/ Electronic VOD meter.
- k. Finally, the Bulk Explosive Sample has to be connected with the Nonel /Detonating Fuse with cast Booster to initiate it.
- l. The cast Booster has to be inserted into the Bulk sample towards the start probe (Green Probe) and to be inserted in such a fashion that the Cast Booster should not be very near to the start probe (a little far from it) and the other end of the detonator will be connected to Exploder.
- m. Now, press the Test Button on the unit.
- n. After taking proper shelter, blaster shall initiate the sample.
- o. After blasting the result will be displayed on the screen.

Section VII – Sample Forms including LoB & Annexures

- p. Note down the reading of measured VOD shown in the screen in presence of Manufacturer's Representatives and subsidiary's representatives.
- q. After testing of VOD by Digital/Electronic VOD meter, the display result shall be captured by screenshot.



2. PRECAUTIONS

- In case of misfire wait at least for 10 min.
- In case of incomplete detonation, collect all fragments of the explosives.
- In case of no reading or error in the instrument, repeat the VOD measurement exercise.

3. MEASUREMENT OF DENSITY OF BULK EXPLOSIVE BY WATER DISPLACEMENT METHOD

- Take a well graduated beaker of 500-1000 ml volume preferably.
- Fill the water up to the 100 ml mark preferably in the beaker.
- Measure the weight of the beaker plus water by a reliable and duly calibrated weighing machine.
- Take a pinch of Bulk explosives sample and measure the mass using a duly calibrated weighing machine and drop the explosives sample into the beaker containing water.

Section VII – Sample Forms including LoB & Annexures

- e. Also measure the volume of water displaced by explosives sample. Divide the mass of explosives sample (in gm) by the volume of explosives sample (in ml) to obtain density. The generalized formula is mentioned below.

Density of explosives sample (ρ) in gm/cc = m / v

Where,

m = mass of explosives sample (in gm) v =
volume of explosives sample (in ml)

4. MEASUREMENT OF BOOSTER/CAP SENSITIVITY (BS)

The explosive sample was collected in a poly lay flat tube of 83mm dia. from the BMD vehicle in the field. The Bulk explosive sample should fire with 100 gm cast booster (PETN)/ 150gm cast booster (Emulsion) in bulk explosive sample encapsulated in cartridge form.

Section VII – Sample Forms including LoB & Annexures

STANDARD OPERATING PROCEDURE FOR EVALUATING THE PERFORMANCE OF NEW NON-PERMITTED LARGE DIA (NPLD) EXPLOSIVE DURING BLASTING TRIALS BY CMPDI IN MINES OF COAL INDIA LIMITED

The steps to be followed during performance evaluation of new NPLD explosives supplied by any manufacturer during trial Blasting are enumerated below:

- 1) Verification of Necessary Documents submitted by the manufacturer pertaining to
 - Valid Manufacturing License of the product granted by PESO
 - DGMS Permission, if applicable
 - Product Literature
- 2) Taking up the matter with the concerned subsidiary requesting to provide suitable mine/ mines for carrying out the field trial where NPLD explosives are already in use so that the performance of new NPLD explosives can be comparatively assessed with the performance of existing NPLD explosives used by the mines where trial Blasting will be conducted. Testing should be carried out in all possible scenarios viz. dry hole condition, watery hole condition containing mud and broken rock. The NPLD Explosives should be used in mines having bench height at least up to 9m so that the explosives can be loaded in blast holes as top and bottom charge column. Drilling, blasting and initiation patterns should be technically suggested by the technical representatives of the manufacturer. The cartridge should contain the weight as claimed by the manufacturer.
- 3) Quantity to be tested
A minimum of 30 MT of NPLD Column Explosive & 10 MT of NPLD Booster Explosive shall be supplied free of cost by the manufacturer for carrying out blasting trials. A minimum of 6 to 7 rounds of blasting trials are required for evaluation of new product of NPLD Explosives.
- 4) The following Technical Parameters should be examined on the surface under unconfined condition before putting it to actual blasting to ascertain the quality. The test results of the new product must lie within the limiting range in respect of all technical parameters specified in the Running contract under the heading “Technical parameters for Random Testing”.

If any of the test results falls outside the range, the product shall not be recommended for use in the mines of Coal India Limited and if re-testing is required for the failed product, the procedure as specified in “Revised SOP for inclusion of new products of Explosive manufacturers in CIL approved product list of Explosives & Accessories” shall be followed.

a. Verification of Physical Condition: By visual inspection of NPLD Explosives.

b. Velocity of Detonation (VOD)

Velocity of Detonation should be determined with Digital / Electronic VOD meter under unconfined conditions.

c. Density of Explosive

Density of Explosive should be determined by Water Displacement Method.

d. Air Gap Sensitivity (AGS): Air Gap sensitivity is checked by maintaining a gap of 2 cm between the donor and receiver cartridge. In order to Pass the AGS test, the receiver cartridge should be able to get initiated in the specific gap of 2 cm from the donor cartridge.

Section VII – Sample Forms including LoB & Annexures

e. Cap Sensitivity & Booster Sensitivity

Cap Sensitivity should be ascertained by firing the cartridge with Electric / Electronic Detonator. The Column Explosive cartridge shall be able to get initiated by Booster cartridge with Detonator inserted within, when initiated.

The procedure of testing is given in appendix-1

The test results of the new product shall be properly documented and should be duly signed by representatives of mine officials, respective manufacturer's representatives and CMPDI representatives and shall be enclosed in the Final report as Annexure-I.

- 5) Blast Design and Initiation patterns should be suggested by the technical representatives of the Manufacturer according to Hardness of the strata and Height of the Bench. Hardness of the strata of Blasting Bench is determined with dedicated instruments.
- 6) Performance Evaluation of new explosive should be ascertained on the basis of blast performance achieved during trial blasting by observing Powder Factor, Fragmentation, Throw, Muck pile Profile, Percentage of oversized boulders w.r.t. loading equipment deployed at the bench. A new explosive must meet the benchmark Powder Factor criterion set by Subsidiary/Coal India Limited for the mine/patch/bench/method of production, as the case may be.

After each last the mucking operation should be observed and analyzed using Digital Image Analysis Technique. There should not be any **Misfire** during trial blasting. If there takes place any **Misfire** during blasting trial, the product should not be recommended for use in the mines of Coal India Limited and if re-testing is required for the failed product, the procedure as specified in "Revised SOP for inclusion of new products of Explosive manufacturers in CIL approved product list of Explosives & Accessories" shall be followed.

In order to determine the actual / exact quantity of explosives loaded / poured into all the blasting trial records should be properly documented along with observations, if any and should be duly signed by representatives of mine officials, representative of respective manufacturer and representatives of CMPDI and should be enclosed in the final report as Annexure-II.

- - - x - - -

Checklist to be followed during Blasting trials of New NPLD Booster / Column Explosive

Sl. No.	Particulars	Yes	No
1	Necessary documents i.e., license of the product granted by PESO, and DGMS permission, if applicable, were available and examined at the time of blasting trial		
2	Blasting trial was carried out in all possible scenarios viz. dry hole condition, watery hole condition containing mud and broken rock.		
3	NPLD Explosive was used at bench height at least upto 9 m.		
4	Was the cartridge containing the weight as claimed by the manufacturer?		

Section VII – Sample Forms including LoB & Annexures

5	A minimum of 30 MT of NPLD Column Explosive & 10 MT of NPLD Booster Explosive was supplied free of cost by the manufacturer.		
6	A minimum of 6 to 7 rounds of blasting trials were conducted.		
7	Physical conditions of the cartridge were examined.		
8	Velocity of detonation of the explosive was measured.		
9	Density of the explosive was measured.		
10	Air-gap sensitivity of the explosive was examined.		
11	Cap-sensitivity of explosive was examined.		
12	Booster Sensitivity of explosive was examined.		
13	Powder factor, fragmentation, throw, muck pile profile and percentage of oversized boulder w.r.t. loading equipment were observed during mucking operation.		
14	Was there any misfire observed during blasting trial?		
15	Blasting trial record was properly documented along with observation.		

Section VII – Sample Forms including LoB & Annexures

Annexure – I (a)

TEST RESULTS OF NEW NPLD BOOSTER EXPLOSIVE

1	Name of the manufacturer	:	
2	Name of the product	:	
3	Batch no. / Case no.	:	
4	Date of manufacturing	:	
5	Date of sampling	:	
6	Date of testing	:	
7	Name of mine / magazine from where samples were drawn	:	

8	Test Conducted	Specified limit as per RC	Results	Remarks
(i)	Physical Condition	Shall be good		
(ii)	Velocity of detonation (m/sec)	≥ 4000		
(iii)	Density (g/cc)	1.15 ± 0.05		
(iv)	Air Gap Sensitivity Test	As per 4 (d) of SOP		
(v)	Cap Sensitivity Test	As per 4 (e) of SOP		

9. Final result:

Sign. of CMPDI
Representative

Sign. of Mine
Representative

Sign. of Explosive
Manufacturer

Section VII – Sample Forms including LoB & Annexures**Annexure – I (b)****TEST RESULTS OF NEW NPLD COLUMN EXPLOSIVE**

1	Name of the manufacturer	:	
2	Name of the product	:	
3	Batch no. / Case no.	:	
4	Date of manufacturing	:	
5	Date of sampling	:	
6	Date of testing	:	
7	Name of mine / magazine from where samples were drawn	:	

8	Test Conducted	Specified limit as per RC	Results	Remarks
(i)	Physical Condition	Shall be good		
(ii)	Velocity of detonation (m/sec)	≥ 3500		
(iii)	Density (g/cc)	1.15 ± 0.05		
(iv)	Air Gap Sensitivity Test	As per 4 (d) of SOP		
(v)	Booster Sensitivity Test	As per 4 (e) of SOP		

9. Final result:

Sign. of CMPDI
RepresentativeSign. of Mine
RepresentativeSign. of Explosive
Manufacturer

Section VII – Sample Forms including LoB & Annexures

Annexure-II

RECORD OF BLASTING TRIAL OF NEW NPLD EXPLOSIVE

Blasting Trial no:			
Sl. no.	Particulars		
A	Details of Mine		
	1	Name of mine	:
	2	Bench	:
	3	Nature of strata	:
	4	Face condition	:
	5	Date of blasting trial	:
B	Blast Geometry		
	1	Pattern of holes	:
	2	Dia of holes (mm)	:
	3	Average depth of holes (m)	:
	4	Average burden (m)	:
	5	Average spacing (m)	:
	6	No. of holes	:
	7	No of rows	:
C	Volume Of Block		
	1	Average height (m)	:
	2	Average width (m)	:
	3	Average length (m)	:
	4	Total volume of block (m3)	:
	5	Powder Factor (m3 /kg)	:
D	Explosives		
	1	Type & Quantity of Column Explosive	:
		Name of Manufacturer	:
		Batch No. / Case No.	:
		Date of Manufacturing	:
	2	Type & Quantity of Booster Explosive	:
		Name of Manufacturer	:
		Batch No. / Case No.	:
		Date of Manufacturing	:
	3	Charge per hole (kg)	:
	4	Charge per round (kg)	:
	5	Type of stemming material used	:
	6	Height of stemming column (m)	:
E	Blasting Accessories Used (with all the details, like manufacturer, batch no., date of manufacturing etc.)		
	1	Type of Initiation System used	:
	2	No. of Nonel / Cord relay used	:
	3	Delay	:
	4	Type of detonator used	:
	5	Length of DF used	:
F	Evaluation of Blasting Performance		
	1	Fragmentation	:
	2	No. & volume of boulder (m3)	:
	3	Percentage of boulders	:
	4	Volume of toe (m3)	:
	5	Muck-pile profile	:
	6	Throw	:
	7	Ease of digging	:
	8	Misfire (if any)	:

Section VII – Sample Forms including LoB & Annexures

- G Sketch Showing the Pattern of Holes, Placement of Nonel / Cord Relay /DF Electronic Detonator and Sequence of Delay

Sketch Showing the Pattern of Holes, Placement of Nonel /DF Cord Relay / Electronic Detonator and Sequence of Delay

- H Section of Holes Showing the Charge Distribution and the Height of Stemming Column

Section of Holes Showing the Charge Distribution and the Height of Stemming Column

Signature of
CMPDI Representative

Signature of
Mine Representative

Signature of Explosive
Manufacturer

Section VII – Sample Forms including LoB & Annexures

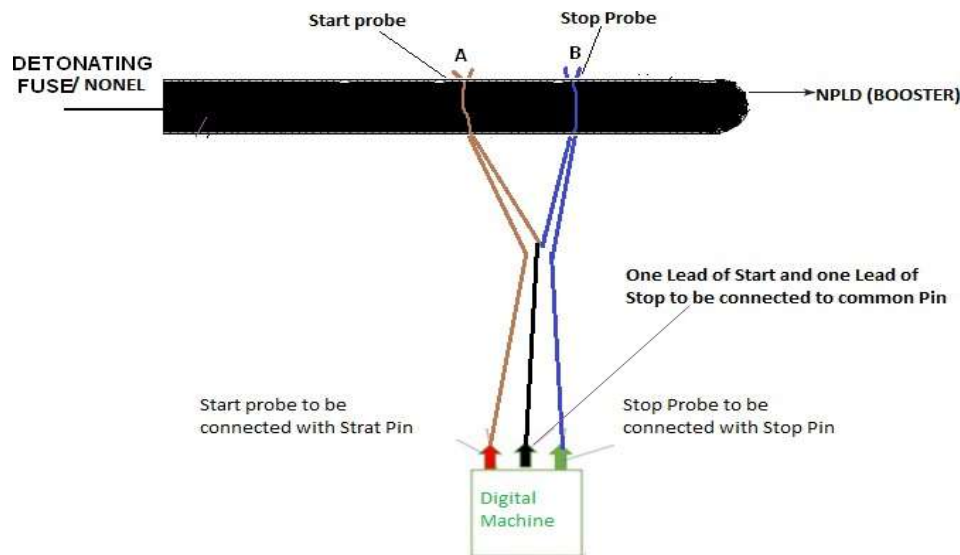
Appendix-1

1. STEPS TO MEASURE VOD OF NPLD BOOSTER/ PRIME WITH DIGITAL/ ELECTRONIC VOD METER

- a. Take the NPLD BOOSTER/ PRIME of unknown VOD.
- b. Take a pair of twisted cables (Preferably Green and Red). Green cable as Start Probe and Red Cable as Stop Probe and keep both probes (Start & Stop Probe) in open circuit as shown in figure (enclosed).
- c. Now tie two of these cables to NPLD BOOSTER/ PRIME explosives cartridge at a distance (Exactly) of 10cm/15 cm/20 cm (Probe Distance) as per given figure
- a. After binding cables on the NPLD BOOSTER/ PRIME cartridge, measure the distance between the cables and make sure that the distance should not increase or decrease as per the distance set for the explosive sample to be tested.
- d. There will be 2 ends for Start Probe (Green) and 2 ends for Stop Probe (Red) as shown in Figure.
- e. Take a 3 core (Preferably one green, one red and one black) Cable (1.5mm Square copper wire) in required length to safeguard Operator and instrument (Preferably 100m)
- f. One end of the Start Probe (Green) and one end of the Stop Probe (Red Cables) are to be joined and make 4 cores to 3 cores.
- g. The Probes taken from NPLD BOOSTER/ PRIME explosives (Start, Stop and Common) are to be connected to 100m, 3 core cables (Green to Green, Red to Red and remaining Green and Red to Black).
- h. Other end of the 3-core cable has to be connected to the Digital/ Electronic VOD Meter, Start probe to Start Pin, Stop Probe to Stop Pin and Common Probe to Common Pin. By this, the total circuit will be in open condition.
- i. Now put on the unit by pressing the “ON” button and input the required data to the Digital/ Electronic VOD meter.
- j. Finally, the NPLD Booster/Prime cartridge has to be connected with the Nonel/ Detonating Fuse to initiate it.
- k. The Nonel/ Detonating Fuse has to be inserted into the NPLD Booster/ Prime cartridge towards the start probe (Green Probe) and to be inserted in such a fashion that the Nonel/ Detonating Fuse should not be very near to the start probe (a little far from it) and the other end of the detonator will be connected to Exploder.
- l. Now press the Test Button on the Unit.
- m. After taking proper shelter, the blaster shall initiate the sample.
- n. After blasting, the result will be displayed on the screen.

Section VII – Sample Forms including LoB & Annexures

- o. Note down the reading of measured VOD shown in the screen in presence of Manufacturer's Representatives and subsidiary's representatives.
- p. After testing of VOD by Digital/Electronic VOD meter, the display result shall be captured by screenshot.

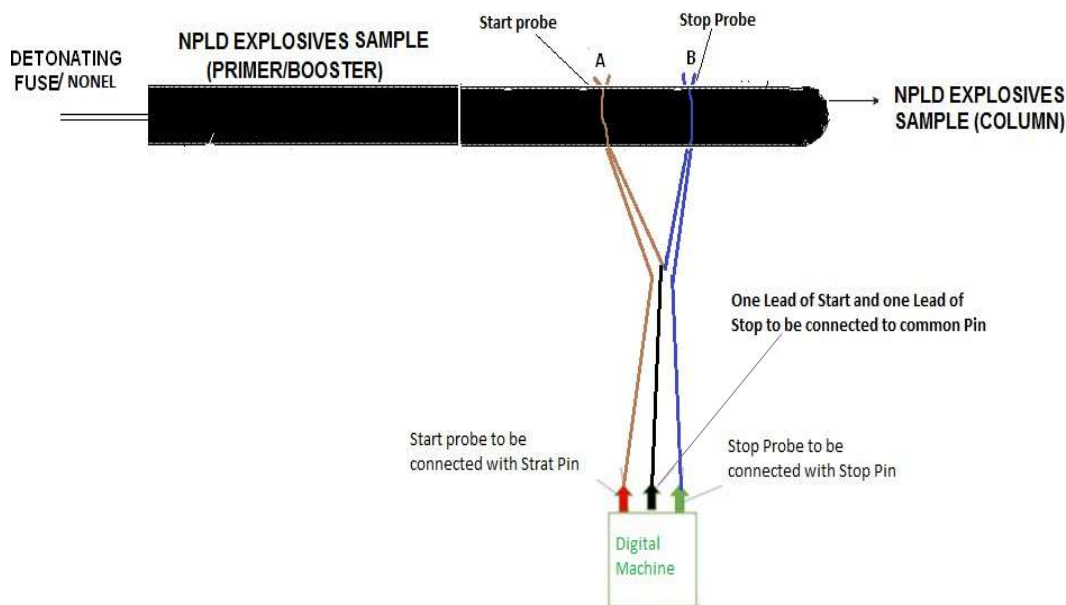


2. STEPS TO MEASURE VOD OF NPLD COLUMN WITH DIGITAL/ ELECTRONIC VOD METER

- b. Take the NPLD (COLUMN) of unknown VOD and one Booster/Prime NPLD explosives for initiation of NPLD column explosives
- c. Take a pair of twisted cables (Preferably Green and Red). Green cable as Start Probe and Red Cable as Stop Probe and keep both probes (Start & Stop Probe) in open circuit as shown in figure. (enclosed).
- d. Now tie two of these cables to NPLD Column explosives cartridge at a distance (Exactly) of 10cm/15 cm/20 cm (Probe Distance) as per given figure.
- e. After binding cables on the NPLD Column cartridge, measure the distance between the cables and make sure that the distance should not increase or decrease as per the distance set for the explosive sample to be tested.
- f. There will be 2 ends for Start Probe (Green) and 2 ends for Stop Probe (Red) as shown in Figure.
- g. Take a 3 core (Preferably one green, one red and one black) Cable (1.5mm Square copper wire) in required length to safeguard the Operator and instrument (Preferably 100m).
- h. One end of the Start Probe (Green) and one end of the Stop Probe (Red Cables) are to be joined and make 4 cores to 3 cores.

Section VII – Sample Forms including LoB & Annexures

- i. The Probes taken from NPLD Column cartridges (Start, Stop and Common) are to be connected to 100m, 3 core cable (Green to Green, Red to Red and remaining Green and Red to Black).
- j. Other end of the 3-core cable has to be connected to the Digital/ Electronic VOD Meter, Start Probe to Start Pin, Stop Probe to Stop Pin and Common Probe to Common Pin. By this, the total circuit will be in open condition.
- k. Now put on the unit by pressing the “ON” button and input the required data to the Digital/ Electronic VOD meter.
- l. Finally, the NPLD Column cartridge has to be kept in close contact with NPLD Booster/ Prime to initiate it.
- m. The Nonel/ detonating Fuse has to be inserted into the NPLD Booster/ Prime cartridge.
- n. Now press the Test Button on the Unit.
- o. After taking proper shelter, the blaster shall initiate the sample.
- p. After blasting, the result will be displayed on the screen.
- q. Note down the reading of measured VOD shown in the screen in presence of Manufacturer’s Representatives and subsidiary’s representatives.
- r. After testing of VOD by Digital/Electronic VOD meter, the display result shall be captured by screenshot.



Section VII – Sample Forms including LoB & Annexures

3. MEASUREMENT OF DENSITY OF NPLD (BOOSTER/COLUMN) EXPLOSIVE BY WATER DISPLACEMENT METHOD

- a. Take a well graduated beaker of 500-1000 ml volume preferably.
- b. Fill the water up to the 100 ml mark preferably in the beaker.
- c. Measure the weight of the beaker plus water by a reliable and duly calibrated weighing machine.
- d. Take a pinch of NPLD booster/column explosives sample and measure the mass using a duly calibrated weighing machine and drop the explosives sample into the beaker containing water.
- e. Also measure the volume of water displaced by explosives sample. Divide the mass of explosives sample (in gm) by the volume of explosives sample (in ml) to obtain density. The generalized formula is mentioned below.

$$\text{Density of explosives sample } (\rho) \text{ in gm/cc} = m / v$$

Where,

$$m = \text{mass of explosives sample (in gm)} \quad v = \text{volume of explosives sample (in ml)}$$

4. MEASUREMENT OF AIR GAP SENSITIVITY

Air gap sensitivity was checked by maintaining a gap of 2 cm for emulsion explosives between the donor and receiver cartridge. In order to pass the AGS the receiver cartridge should get initiated in the specified gap of 2 cm for emulsion explosives from the donor cartridge.

Section VII – Sample Forms including LoB & Annexures

STANDARD OPERATING PROCEDURE FOR EVALUATING THE PERFORMANCE OF NEW PERMITTED SMALL DIA (PSD) DURING BLASTING TRIALS BY CMPDI IN MINES OF COAL INDIA LIMITED

The steps to be followed during performance evaluation of new PSD explosives supplied by any manufacturer during trial Blasting are enumerated below:

- 1) Verification of Necessary Documents submitted by the manufacturer pertaining to
 - Valid Manufacturing License of the product granted by PESO
 - Lab Test Results of CIMFR, Dhanbad
 - DGMS Permission, if applicable
 - Product Literature
- 2) Taking up the matter with the concerned subsidiary requesting to provide suitable mine/ mines for carrying out the field trial where PSD explosives are already in use so that the performance of new PSD explosives can be comparatively assessed with the performance of existing PSD explosives used by the mines where blasting trials will be conducted. Testing should be carried out in all possible scenarios viz. dry hole condition, watery hole condition containing mud and broken rock. The cartridge should contain the weight as claimed by the manufacturer. In case of any permitted explosive product having valid PESO and DGMS approval for degree one and included under the proven list of CIL for degree one gassiness, it should not be treated as new product for evaluating the performance of explosive if there is no change in the chemical composition. In case of any change / modification / alteration in the chemical composition of the product or introduction of any new formulation duly approved by PESO and DGMS, it should be treated as new product.
- 3) **Quantity to be tested**
Minimum 200 Kg shall be supplied free of cost by the manufacturer for carrying out blasting trials. A minimum of 15 to 16 rounds of blasting trials are required for evaluation of a new product of Permitted Small Dia. Explosive (PSD).
- 4) The following Technical Parameters should be examined on the surface under unconfined condition before putting it to actual blasting to ascertain the quality. The test results of the new product must lie within the limiting range in respect of all technical parameters specified in the Running contract under the heading “Technical parameters for Random Testing”.

If any of the test results falls outside the range, the product shall not be recommended for use in the mines of Coal India Limited and if re-testing is required for the failed product, the procedure as specified in “Revised SOP for inclusion of new products of Explosive manufacturers in CIL approved product list of Explosives & Accessories” shall be followed.

a. Verification of Physical Condition: By visual inspection of PSD Explosives.

b. Velocity of Detonation (VOD):

Velocity of Detonation should be determined with Digital / Electronic VOD meter under unconfined condition.

c. Density of Explosive

Density of Explosive should be determined by Water Displacement Method.

d. Air Gap Sensitivity (AGS):

Air Gap sensitivity should be checked by maintaining a gap of 2 cm between the donor and receiver cartridge. In order to Pass the AGS the receiver cartridge should be initiated in the specific gap of 2 cm from the donor cartridge.

Section VII – Sample Forms including LoB & Annexures

e. Continuity of Detonation (COD):

Continuity of detonation should be checked by rolling the cartridge inside a manila paper and a train of 1m length of explosive column is fired with electric / electronic detonator. For passing the continuity of detonation (COD) the entire explosive column should get fired.

f. Cap-Sensitivity:

Cap-sensitivity should be ascertained by firing the cartridge with electric / electronic detonator.

g. Water Resistance Test:

Waterproofness should be ascertained by immersing the cartridge in the bucket full of water after making small holes in the cartridge in all directions with a pin. Then the same shall be taken out after 24 hrs. and fired with an electric / electronic detonator.

The procedure of testing is given in appendix-1

The test results of the new product shall be properly documented and should be duly signed by representative of mine, representative of respective manufacturer and representatives of CMPDI and shall be enclosed in the final report as Annexure-I.

5) Post Detonation Fume Characteristics

After Blasting, the post detonation fumes like CO and NO should be measured in terms of PPM. As per DGMS safety standards, the CO and NO should not exceed 50 PPM and 5 PPM respectively after 5 minutes of blasting trials at the working place.

6) Performance Evaluation of new explosives should be ascertained on the basis of blast performance achieved during blasting trial by observing Benchmark powder factor (BMPF). A new explosive must meet the BMPF criterion set by Coal India Limited.

Then after each blasting trial, the mucking operation should be observed and analyzed using Digital Image Analysis Technique. There should not be any **Misfire** during trial blasting. If there takes place any **Misfire** during blasting trial, the product should not be recommended for use in the mines of Coal India Limited and if re-testing is required for the failed product, the procedure as specified in “**SOP for inclusion of new products of Explosive manufacturers in CIL approved product list of Explosives & Accessories**” shall be followed.

7) In order to determine the actual / exact quantity of explosives loaded into all the blasting trials, the records should be properly documented along with observations, if any and should be duly signed by representatives of mine officials, representatives of respective manufacturer and representatives of CMPDI and should be enclosed in the final report as Annexure-II.

---X---

Section VII – Sample Forms including LoB & Annexures

Checklist to be followed during Blasting trials of New Permitted Small Dia. (PSD) Explosive

Sl. No.	Particulars	Yes	No
1	Necessary documents i.e., License of the product granted by PESO, Lab Test Result of CIMFR, Dhanbad and DGMS permission, if applicable, were available and examined.		
2	Blasting trial were carried out in all possible scenarios viz. dry face / hole condition, watery face / hole condition containing mud and broken rock.		
3	Was the cartridge containing the weight as claimed by the manufacturers?		
4	A minimum of 200 Kg of the PSD Explosive was supplied free of cost by the manufacturer.		
5	A minimum of 15 to 16 rounds of blasting trials were conducted.		
6	Physical condition of the explosive cartridges was examined.		
7	Velocity of detonation of the explosive was measured.		
8	Density of the explosive was measured.		
9	Air-gap sensitivity of the explosive was examined.		
10	Continuity of detonation of the explosive was examined.		
11	Cap-sensitivity of the explosive was examined.		
12	Water Resistance was examined.		
13	Post detonation fume characteristics of the explosive was examined.		
14	Was the performance evaluated during the blasting trials by observing the powder factor?		
15	Was there any misfire observed during blasting trials?		
16	Blasting trials record was properly documented along with observations.		

Section VII – Sample Forms including LoB & Annexures

Annexure – I

TEST RESULTS OF NEW PERMITTED SMALL DIA. (PSD) EXPLOSIVE

1	Name of the manufacturer	:	
2	Name of the product	:	
3	Batch no. / Case no.	:	
4	Date of manufacturing	:	
5	Date of sampling	:	
6	Date of testing	:	
7	Name of mine / magazine from where samples were drawn	:	

8	Test Conducted	Specified limit as per RC	Results	Remarks
(i)	Physical Condition	Slurry / Emulsion type		
(ii)	Velocity of detonation (m/sec)	3500 ± 400		
(iii)	Density (g/cc)	1.15 ± 0.05		
(iv)	Air gap Sensitivity Test	As per 4 (d) of SOP		
(v)	Continuity of Detonation Test	As per 4 (e) of SOP		
(vi)	Cap-Sensitivity Test	As per 4 (f) of SOP		
(vii)	Water Resistance Test	As per 4 (g) of SOP		

9. Final result:

Sign. of CMPDI
Representative

Sign. of Mine
Representative

Sign. of Explosive
Manufacturer

Section VII – Sample Forms including LoB & Annexures

Annexure–II

RECORD OF BLASTING TRIAL OF NEW PERMITTED SMALL DIA. (PSD) EXPLOSIVE

Blasting Trial no:			
Sl. no.	Particulars		
A	Details of Mine		
	1 Name of mine	:	
	2 Date of blasting trial	:	
	3 Name and thickness of seam	:	
	4 Nature of strata	:	
	5 Degree of gassiness	:	
	6 Nature of coal	:	
	7 Face condition	:	
	8 Type of working	:	
	9 Dimensions of working face (W m X H m)	:	
B	Blast Geometry		
	1 Pattern of holes	:	
	2 Working Face where Blasting trial Conducted	:	
	3 Dia of holes (mm)	:	
	4 Average Length of holes (m)	:	
	5 No. of holes	:	
	6 No of rows		
C	Explosives		
	1 Name & Type of PSD explosive	:	
	Name of Manufacturer		
	Batch No. / Case No.	:	
	Date of manufacturing	:	
	2 Type of detonator used	:	
	3 Charge per hole (kg)	:	
	4 Charge per round (kg)	:	
D	Blasting Accessories Used		
	1 Detail of detonator used	:	
	Name of Manufacturer		
	Batch No. / Case No.		
	Date of manufacturing		
	2 Delay	:	
E	Evaluation of Blasting Performance		
	1 Total volume of face blasted (cu.m)	:	
	2 Yield per detonator (Te)	:	
	3 Pull obtained	:	
	4 In-situ powder factor (Te/kg)	:	
	5 In-situ detonating factor (Te/det)	:	
	6 CO (PPM)	:	
	7 NO (PPM)	:	
	8 Misfire (if any)	:	

Section VII – Sample Forms including LoB & Annexures

F Sketch Showing the Pattern of Holes, Placement of Detonator and Sequence of Delay

Sketch Showing the Pattern of Holes, Placement of Detonator and Sequence of Delay

Signature of
CMPDI Representative

Signature of
Mine Representative

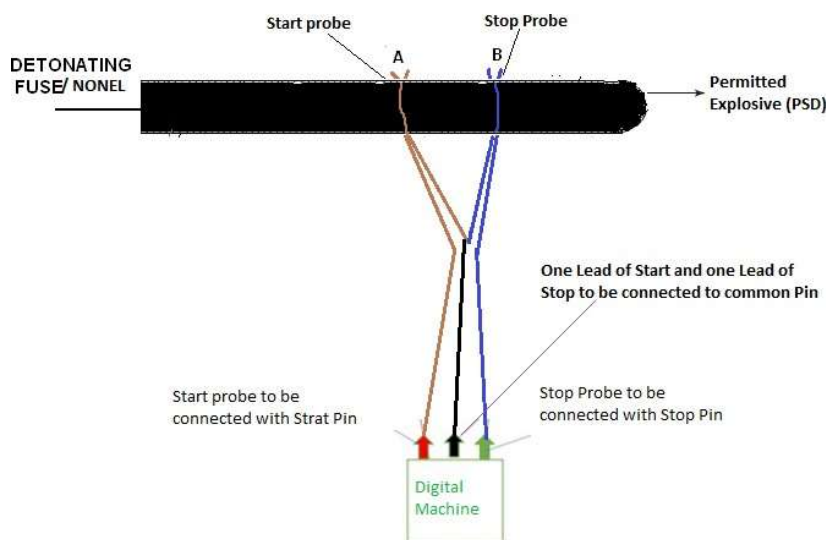
Signature of Explosive
Manufacturer

1. STEPS TO MEASURE VOD OF PERMITTED SMALL DIAMETER (PSD) CARTRIDGE WITH DIGITAL/ ELECTRONIC VOD METER

- a. Take the PSD explosives of unknown VOD and roll the PSD explosive samples inside a manila paper and make a train of 1 m length of PSD explosive of unknown VOD to the testing site.
- b. Take a pair of twisted cables (Preferably Green and Red). Green cable as Start Probe and Red Cable as Stop Probe and keep both probes (Start & Stop Probe) in open circuit as shown in figure (enclosed).
- c. Now tie two of these cables to PSD explosives at a distance (Exactly) of 10cm/15 cm/20 cm (Probe Distance) as per given figure.
- d. After binding cables on PSD explosives, measure the distance between the cables and make sure that the distance should not increase or decrease as per the distance set for the explosive sample to be tested.
- e. There will be 2 ends for Start Probe (Green) and 2 ends for Stop Probe (Red) as shown in Figure.
- f. Take a 3 core (Preferably one green, one red and one black) Cable (1.5mm Square copper wire) in required length to safeguard Operator and instrument (Preferably 100m)
- g. One end of the Start Probe (Green) and one end of the Stop probe (Red Cables) are to be joined and make 4 cores to 3 cores.
- h. The Probes taken from PSD explosives (Start, Stop and Common) are to be connected to 100m, 3 core cables (Green to Green, Red to Red and remaining Green and Red to Black).
- i. Other end of the 3-core cable has to be connected to the Digital/ Electronic VOD Meter, Start Probe to Start Pin, Stop probe to Stop Pin and Black to Common Pin. By this, the total circuit will be in open condition.
- j. Now put on the unit by pressing the “ON” button and input the required data to the Digital/ Electronic VOD meter.
- k. Finally, the PSD explosives have to be connected with the Nonel/ Detonating Fuse to initiate it.
- l. The Nonel/ Detonating Fuse has to be inserted into the PSD explosives towards the Start probe (Green Probe) and to be inserted in such a fashion that the Nonel/ Detonating Fuse should not be very near to the start probe (a little far from it) and the other end of the detonator will be connected to Exploder.
- m. Now press the Test Button on the Unit.
- n. After taking proper shelter, the blaster shall initiate the sample.

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- o. After blasting, the result will be displayed on the screen.
- p. Note down the reading of measured VOD shown in the screen in presence of Manufacturer's Representatives and subsidiary's representatives.
- q. After testing of VOD by Digital/Electronic VOD meter, the display result shall be captured by screenshot.



2. MEASUREMENT OF DENSITY OF PSD EXPLOSIVE BY WATER DISPLACEMENT METHOD

- a. Take a well graduated beaker of 500-1000 ml volume preferably.
- b. Fill the water up to the 100 ml mark preferably in the beaker.
- c. Measure the weight of the beaker plus water by a reliable and duly calibrated weighing machine.
- d. Take a pinch of PSD explosives sample and measure the mass using a duly calibrated weighing machine and drop the explosives sample into the beaker containing water.
- e. Also measure the volume of water displaced by explosives sample. Divide the mass of explosives sample (in gm) by the volume of explosives sample (in ml) to obtain density. The generalized formula is mentioned below.

Density of explosives sample (ρ) in gm/cc = m / v

Where,

m = mass of explosives sample (in gm) v =
volume of explosives sample (in ml)

Section VII – Sample Forms including LoB & Annexures

3. ~~MEASUREMENT OF AIR GAP SENSITIVITY~~

Air gap sensitivity was checked by maintaining a gap of 2 cm for emulsion explosives between the donor and receiver cartridge. In order to pass the AGS the receiver cartridge should get initiated in the specified gap of 2 cm for emulsion explosives from the donor cartridge.

4. MEASUREMENT OF CONTINUATION OF DETONATION

Take the PSD explosives and roll the PSD explosive samples inside a manila paper and make a train of 1 m length of PSD explosive. 1m of Permitted sample should be initiated with No. 6/8 strength Detonator.

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STANDARD OPERATING PROCEDURE FOR EVALUATING THE PERFORMANCE OF NEW CAST BOOSTER DURING BLASTING TRIALS BY CMPDI IN MINES OF COAL INDIA LIMITED

The steps to be followed during performance evaluation of new Cast booster supplied by any manufacturer during blasting trials are enumerated below:

- 1) Verification of Necessary Documents submitted by the manufacturer pertaining to
 - Valid Manufacturing License of the product granted by PESO
 - DGMS Permission, if applicable
 - Product Literature
- 2) Taking up the matter with the concerned subsidiary requesting to provide suitable mine / mines for carrying out the field trials where Cast booster is already in use so that the performance of new Cast booster can be comparatively assessed with the performance of Cast booster used by the mines where blasting trials will be conducted. Testing should be carried out in all possible scenarios viz. dry hole condition, watery hole condition containing mud and broken rock. The cartridge should contain the weight as claimed by the manufacturer.
- 3) **Quantity to be tested**
Minimum 60 kg of Cast Booster (PETN / TNT) or 60 kg of Cast Booster (Emulsion) is to be supplied free of cost by the manufacturer for carrying out blasting trials. A minimum of 6 to 7 rounds of blasting trials are required for evaluation of the new product of Cast booster.
- 4) The following Technical Parameters should be examined on the surface under unconfined condition before putting it to actual blasting to ascertain the quality. The test results of the new product must lie within the limiting range in respect of all technical parameters specified in the Running contract under the heading “Technical parameters for Random Testing”.

If any of the test results falls outside the range, the product shall not be recommended for use in the mines of Coal India Limited and if re-testing is required for the failed product, the procedure as specified in “Revised SOP for inclusion of new products of Explosive manufacturers in CIL approved product list of Explosives & Accessories” shall be followed.

a. Verification of Physical Condition:

By visual inspection of Cast booster.

b. Velocity of Detonation (VOD):

Velocity of detonation should be determined with a Digital / Electronic VOD meter under unconfined conditions.

c. Cap-sensitivity: The sensitivity of the Cast booster should be checked by employing cast booster along with the bulk explosive encapsulated in cartridge form to perform the test. When initiated the Cast Booster shall get initiated & it shall in turn be able to detonate the Bulk Explosive cartridge.

d. Water Resistance: At first the cast booster shall be immersed in water for 24 hours, it should be able to get fired when fired with electric / electronic detonator.

The procedure of testing is given in appendix-1

There should not be any **Misfire** during trial blasting. If there takes place any **Misfire** during trial blasting, the product should not be recommended for use in the mines of Coal India

Section VII – Sample Forms including LoB & Annexures

Limited and if re-testing is required for the failed product, the procedure as specified in “Revised SOP for inclusion of new products of Explosive manufacturers in CIL approved product list of Explosives & Accessories” shall be followed.

- 5) Trial Blast records should be properly documented along with observations, if any and should be duly signed by representatives of mine, representatives of respective manufacturer and representative of CMPDI and should be enclosed in the final report as Annexure-II.

Check List to be followed during Blasting trials of New Cast Booster (PETN/TNT) / Cast Booster (Emulsion)

Sl. No.	Particulars	Yes	No
1	Necessary documents i.e., License of the product granted by PESO, Lab Test Result of CIMFR, Dhanbad and DGMS permission, if applicable, were available and examined.		
2	Blasting trials were carried out in all possible scenarios viz. dry face / hole condition, watery face / hole condition containing mud and broken rock.		
3	Was the Cast booster containing the weight as claimed by the manufacturers?		
4	A minimum quantity Cast Booster (as mentioned below) was supplied free of cost by the manufacturer. Cast Booster (PETN / TNT): 60 Kg Cast Booster (Emulsion) : 60 Kg		
5	A minimum of 6 to 7 rounds of blasting trials were conducted.		
6	Physical conditions of the Cast booster were examined.		
7	Velocity of detonation of the Cast booster was measured.		
8	Density of the Cast booster was measured.		
9	Cap-sensitivity of the Cast booster was examined.		
10	Water resistance of the Cast booster was examined.		
11	Was there any misfire observed during blasting trials?		
12	Blasting trials record was properly documented along with observations.		

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Annexure – I (a)

TEST RESULTS OF NEW CAST BOOSTER (PENT/TNT)

1	Name of the manufacturer	:	
2	Name of the product	:	
3	Batch no. / Case no.	:	
4	Date of manufacturing	:	
5	Date of sampling	:	
6	Date of testing	:	
7	Name of mine / magazine from where samples were drawn	:	

8	Test Conducted	Specified limit as per RC	Results	Remarks
(i)	Physical Condition	Shall be good		
(ii)	Velocity of detonation (m/sec)	≥ 6000		
(iii)	Density (g/cc)	1.50 – 1.60		
(iv)	Cap-Sensitivity Test	As per 4 (d) of SOP		
(vii)	Water Resistance Test	As per 4 (e) of SOP		

9. Final result:

Sign. of CMPDI
Representative

Sign. of Mine
Representative

Sign. of Cast Booster
Manufacturer

Section VII – Sample Forms including LoB & Annexures**Annexure – I (b)****TEST RESULTS OF NEW CAST BOOSTER (EMULSION)**

1	Name of the manufacturer	:	
2	Name of the product	:	
3	Batch no. / Case no.	:	
4	Date of manufacturing	:	
5	Date of sampling	:	
6	Date of testing	:	
7	Name of mine / magazine from where samples were drawn	:	

8	Test Conducted	Specified limit as per RC	Results	Remarks
(i)	Physical Condition	Shall be good		
(ii)	Velocity of detonation (m/sec)	≥ 4800		
(iii)	Density (g/cc)	1.15 – 1.25		
(iv)	Cap-Sensitivity Test	As per 4 (d) of SOP		
(vii)	Water Resistance Test	As per 4 (e) of SOP		

9. Final result:

Sign. of CMPDI
RepresentativeSign. of Mine
RepresentativeSign. of Cast Booster
Manufacturer

Section VII – Sample Forms including LoB & Annexures

Annexure-II

RECORD OF BLASTING TRIAL OF NEW CAST BOOSTER

Blasting Trial no:			
Sl. no.	Particulars		
A	Details of Mine		
	1	Name of mine	:
	2	Bench	:
	3	Nature of strata	:
	4	Face condition	:
	5	Date of blasting trial	:
B	Blast Geometry		
	1	Pattern of holes	:
	2	Dia of holes (mm)	:
	3	Average depth of holes (m)	:
	4	Average burden (m)	:
	5	Average spacing (m)	:
	6	No. of holes	:
	7	No of rows	:
C	Explosives		
	1	Name & Type of Explosive Charge	:
	2	Type of Cast Booster	:
		Name of Manufacturer	:
		Batch No. / Case No.	:
		Date of Manufacturing	:
	3	Percentage of Cast Booster	:
	4	Charge Per Hole (kg)	:
	5	Charge Per Round (kg)	:
	6	Total Quantity of Bulk Explosive (Kg)	:
	7	Detail of Bulk explosive	:
		Name of Manufacturer	:
		Truck No.	:
D	Blasting Accessories Used		
	1	Type of Initiation System used	:
	2	No. of Nonel / Cord relay used	:
	3	Delay	:
	4	Type of detonator used	:
	5	Length of DF used	:
E	Evaluation of Blasting Performance		
	1	Fragmentation	:
	2	Muck-pile profile	:
	3	Throw	:
	4	Misfire (if any)	:

F Sketch Showing the Pattern of Holes, Placement of Nonel / Cord Relay / DF/Electronic Detonator and Sequence of Delay

Sketch Showing the Pattern of Holes, Placement of Nonel / Cord Relay / DF/ Electronic Detonator and Sequence of Delay

Section VII – Sample Forms including LoB & Annexures

G Section of Holes Showing the Charge Distribution and the Height of Stemming Column

Section of Holes Showing the Charge Distribution and the Height of Stemming Column

Signature of
CMPDI Representative

Signature of
Mine Representative

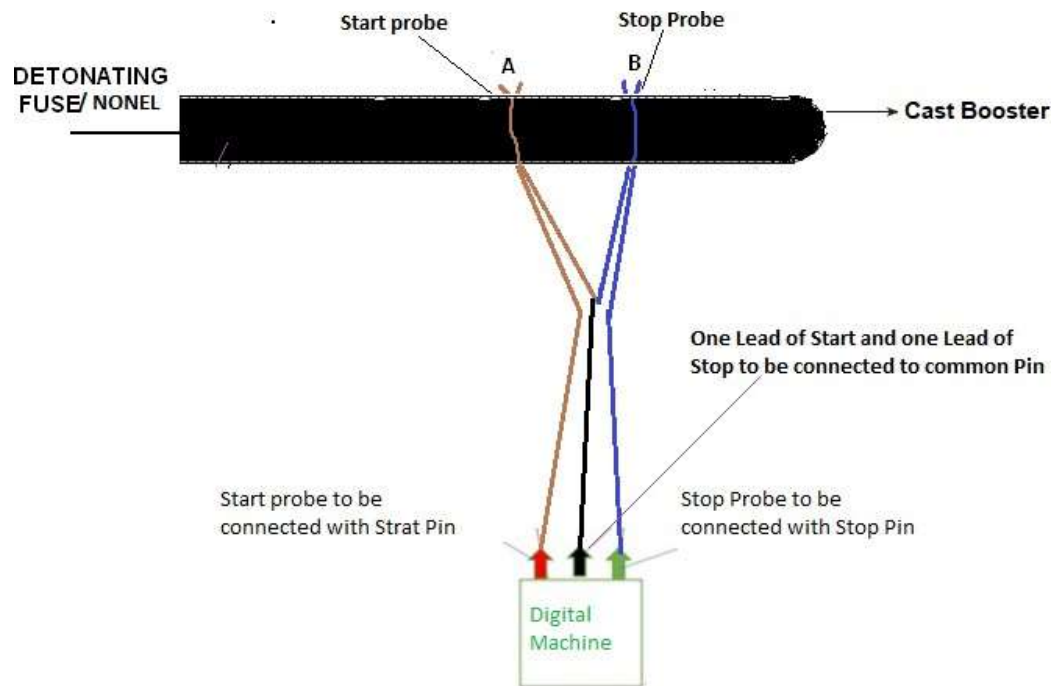
Signature of Cast
Booster Manufacturer

1. STEPS TO MEASURE VOD OF CAST BOOSTER WITH DIGITAL/ ELECTRONIC VOD METER

- a. Take the Cast Booster of unknown VOD and roll the Cast Booster samples inside a manila paper and make a train of 1 m length of Cast Booster of unknown VOD to the testing site.
- b. Take a pair of twisted cables (Preferably Green and Red). Green cable as Start Probe and Red Cable as Stop Probe and keep both probes (Start & Stop Probe) in open circuit as shown in figure (enclosed).
- c. Now tie two of these cables to Cast Booster at a distance (Exactly) of 10cm/15 cm/20 cm (Probe Distance) as per given figure.
- d. After binding cables on cast Booster samples, measure the distance between the cables and make sure that the distance should not increase or decrease as per the distance set for the sample to be tested.
- e. There will be 2 ends for Start Probe (Green) and 2 ends for Stop Probe (Red).
- f. Take a 3 core (Preferably one green, one red and one black) Cable (1.5mm Square copper wire) in required length to safeguard Operator and instrument (Preferably 100m)
- g. One end of the Start Probe (Green) and one end of the Stop Probe (Red Cables) are to be joined and make 4 cores to 3 core.
- h. The Probes taken from Cast Booster (Start, Stop and Common) are to be connected to 100m, 3 core cable (Green to Green, Red to Red and remaining Green and Red to Black).
- i. Other end of the 3-core cable has to be connected to the Digital/ Electronic VOD Meter, Start Probe to Start Pin, Stop Probe to Stop Pin and Black to Common Pin. By this, the total circuit will be in open condition.
- j. Now put on the unit by pressing “ON” button and input the required data to the Digital/ Electronic VOD meter.
- k. Finally, the Cast Booster has to be connected with the Nonel/ detonating Fuse to initiate it.
- l. The Nonel/ Detonating Fuse has to be inserted into the Cast Booster towards the start probe (Green Probe) and to be inserted in such a fashion that the Nonel/ Detonating Fuse should not be very near to the start probe (a little far from it) and the other end of the detonator will be connected to Exploder.
- m. Now press the Test Button on the Unit.
- n. After taking proper shelter, blaster shall initiate the sample.
- o. After blasting the result will be displayed on the screen.
- p. Note down the reading of measured VOD shown in the screen in presence of Manufacturer’s Representatives and subsidiary’s representatives.

Section VII – Sample Forms including LoB & Annexures

- q. After testing of VOD by Digital/Electronic VOD meter, the display result shall be captured by screenshot.



2. MEASUREMENT OF WATER RESISTANCE

Water resistance is ascertained by firing the cast booster with detonator after immersing it in water.

Section VII – Sample Forms including LoB & Annexures

STANDARD OPERATING PROCEDURE FOR EVALUATING THE PERFORMANCE OF NEW DETONATING FUSE DURING BLASTING TRIALS BY CMPDI IN MINES OF COAL INDIA LIMITED

The steps to be followed during performance evaluation of new Detonating Fuse (DF) supplied by any manufacturer during Blasting trials are enumerated below:

- 1) Verification of Necessary Documents submitted by the manufacturer pertaining to
 - Valid Manufacturing License of the product granted by PESO
 - DGMS Permission, if applicable
 - Product Literature
- 2) Taking up the matter with the concerned subsidiary requesting to provide suitable mine / mines for carrying out the field trials where Detonating Fuse (DF) of other manufacturers is already in use so that the performance of new Detonating Fuse product can be comparatively assessed with the performance of existing Detonating Fuse used by the mines where Blasting trials will be conducted. Testing should be carried out in all possible scenarios viz. dry face / hole condition, wet face / hole condition containing mud and broken rock.
- 3) **Quantity to be tested**
A minimum length of 5000 m is to be supplied free of cost by the manufacturer for carrying out Blasting trials. A minimum of 6 to 7 rounds of blasting trials are required for evaluation of new product of Detonating Fuse.
- 4) The following technical parameters should be examined on the surface under unconfined condition before putting it to actual blasting to ascertain the quality. The test results of the new product must lie within the limiting range in respect of all technical parameters specified in Running Contract under the head “Technical parameters for Random Testing”.

If any of the test results falls outside the range, the product shall not be recommended for use in the mines of Coal India Limited and if re-testing is required for the failed product, the procedure as specified in “Revised SOP for inclusion of new products of Explosive manufacturers in CIL approved product list of Explosives & Accessories” shall be followed.

a. Verification of Physical Condition:

By visual inspection of Detonating Fuse.

b. Diameter:

The nominal diameter of the detonating fuse when measured as prescribed in 3.2 of IS - 6609 should be within 4.5 to 5.5 mm.

c. Velocity of Detonation (VOD):

Velocity of Detonation should be determined with Digital / Electronic VOD meter under unconfined conditions.

d. Transmission of Detonation:

When tested as prescribed in 3.7 of IS - 6609, there shall be no failure of detonating fuse either in the main line or in the branch line.

The procedure of testing is given in appendix-1

There should not be any **Misfire** during trial blasting. If there takes place any **Misfire** during blasting

Section VII – Sample Forms including LoB & Annexures

trials, the product should not be recommended for use in the mines of Coal India

Limited and if re-testing is required for the failed product, the procedure as specified in “Revised SOP for inclusion of new products of Explosive manufacturers in CIL approved product list of Explosives & Accessories” shall be followed.

- 5) Records of blasting trials should be properly documented along with observations, if any and should be duly signed by representative of mine, representative of respective manufacturer and representative of CMPDI and should be enclosed in the Final Report as Annexure II.
-

Section VII – Sample Forms including LoB & Annexures

Checklist to be followed during Blasting trials of New Detonating Fuse

Sl. No.	Particulars	Yes	No
1	Necessary documents i.e., License of the product granted by PESO, and DGMS permission, if applicable, were available and examined.		
2	Blasting trials were carried out in all possible scenarios viz. dry face / hole condition, watery face / hole condition containing mud and broken rock.		
3	A Minimum of 5000 m of New Detonating Fuse was supplied free of cost by the manufacturer.		
4	A minimum of 6 - 7 rounds of Blasting trials were conducted.		
5	Physical Conditions of the New Detonating Fuse was examined.		
6	Diameter of the New Detonating Fuse was measured.		
7	Velocity of detonation of the New Detonating Fuse was measured.		
8	Transmission of detonation of the New Detonating Fuse was examined.		
9	Was there any misfire observed during blasting trials?		
10	Blast trials record was properly documented along with observations.		

Section VII – Sample Forms including LoB & Annexures

Annexure – I

TEST RESULTS OF NEW DETONATING FUSE

1	Name of the manufacturer	:	
2	Name of the product	:	
3	Batch no. / Case no.	:	
4	Date of manufacturing	:	
5	Date of sampling	:	
6	Date of testing	:	
7	Name of mine / magazine from where samples were drawn	:	

8	Test Conducted	Specified limit as per RC	Results	Remarks
(i)	Physical Condition	Shall be good		
(ii)	Nominal Diameter (mm)	4.5 - 5.5		
(iii)	Unconfined VOD (m/sec)	≥ 6000		
(iv)	Transmission of Detonation	As per 4(d) of SOP		

9. Final result:

Sign. of CMPDI
Representative

Sign. of Mine
Representative

Sign. of Detonating Fuse
Manufacturer

Section VII – Sample Forms including LoB & Annexures

Annexure-II

RECORD OF BLASTING TRIAL OF NEW DETONATING FUSE

Blasting Trial no:			
Sl. no.	Particulars		
A	Details of Mine		
	1	Name of mine	:
	2	Bench	:
	3	Nature of strata	:
	4	Face condition	:
	5	Date of blasting trial	:
B	Blast Geometry		
	1	Pattern of holes	:
	2	Dia of holes (mm)	:
	3	Average depth of holes (m)	:
	4	Average burden (m)	:
	5	Average spacing (m)	:
	6	No. of holes	:
	7	No of rows	:
C	Explosives		
	1	Name & Type of Explosive Charge	:
	2	Total Qty. of explosive used (Kg)	:
		Name of Manufacturer	
		Truck No.	
	3	Charge Per Hole (kg)	:
	4	Charge Per Round (kg)	:
	5	Type of Cast Booster	:
		Name of Manufacturer	
		Batch No. / Case No.	
		Date of Manufacturing	
	6	Percentage of Booster	:
	7	Cap-Sensitive (Kg)	:
	8	Non Cap-Sensitive (kg)	:
D	Blasting Accessories Used		
	1	Type of Initiation System used	:
	2	No. of Nonel / Cord relay used	:
	3	Delay	:
	4	Type of detonator used	:
	5	Type of Detonating Fuse used	:
		Name of Manufacturer	:
		Batch No. / Case No.	:
		Date of Manufacturing	:
	6	Length of DF used	:
E	Evaluation of Blasting Performance		
	1	Fragmentation	:
	2	Muck-pile profile	:
	3	Throw	:
	4	Misfire (if any)	:

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- F Sketch Showing the Pattern of Holes, Placement of Nonel / DF/ Cord Relay / Electronic Detonator and Sequence of Delay

Sketch Showing the Pattern of Holes, Placement of Nonel / DF/ Cord Relay / Electronic Detonator and Sequence of Delay

- G Section of Holes Showing the Charge Distribution and the Height of Stemming Column

Section of Holes Showing the Charge Distribution and the Height of Stemming Column

Signature of
CMPDI Representative

Signature of
Mine Representative

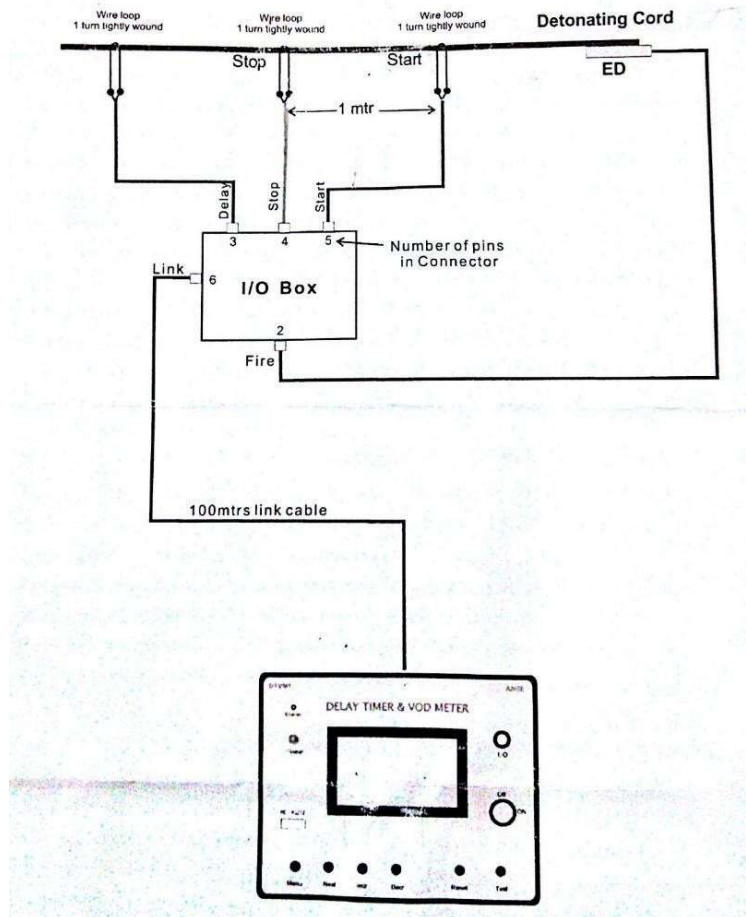
Signature of Detonating
Fuse Manufacturer

1. STEPS TO MEASURE VOD OF DETONATING FUSE WITH DIGITAL/ ELECTRONIC VOD METER

- a. Take Detonating Fuse of minimum length of 2 meters of unknown VOD.
- b. Take a pair of twisted cables (Preferably Green and Red). Green cable as Start Probe and Red Cable as Stop Probe and keep both probes (Start & Stop Probe) in closed circuit as shown in figure (enclosed).
- c. Mark two points on the detonating fuse at the distance of 1 meter with the help of a measuring tape and marker.
- d. Now tie two of these cables to Detonating Fuse at a distance (Exactly) of 1m (Probe Distance) as per given figure.
- e. After binding cables on Detonating Fuse samples, measure the distance between the Probe and make sure that the distance should not increase or decrease as per the distance set for the sample to be tested.
- f. Tie the break-wire/ Bobbin wire at these two marked ends separately in such a way that the start loop is near the detonator end.
- g. Crimp the No. 6/8 detonator (CDD/CED/ Electronic Detonator) to the detonating fuse as shown in figure and end of the detonator wire shall be connected with Fire cable.
- h. After making sure the site is ready for blasting, Power ON the main unit by putting the key switch to ON. Press Reset (Green) button. Confirm ready messages are displayed on the screen. If not attend to the problem as shown on the display. Refer Error message. Once all is OK, recheck site is ready for the test. Press the Test (Red) button. Within 3-4 second firing impulse would be given to ED which will initiate the shock tube and subsequently the delay detonator. VOD of the detonating fuse will be displayed on the screen.
- i. Note down the reading of measured VOD shown in the screen in presence of Manufacturer's Representatives and subsidiary's representatives.

Section VII – Sample Forms including LOR & Annexures

DTVM setup for Measurement of VOD of Detonating Cord



2. MEASUREMENT OF DIAMETER

The nominal diameter of the detonating fuse was measured by Vernier calipers. The Dia. Detonating fuse should lie within limit as per RC of CIL.

3. MEASUREMENT OF TRANSMISSION OF DETONATION

The Detonating Fuse is laid down as a main line and branching is laid at different angles from the main line by making a loop (as prescribed in 3.7 of IS-6609 (Part I-1972)). When fire, there shall be no failure in DF either in the main line or in the branch line.

Section VII – Sample Forms including LoB & Annexures

STANDARD OPERATING PROCEDURE FOR EVALUATING THE PERFORMANCE OF NEW NONEL DURING BLASTING TRIALS BY CMPDI IN MINES OF COAL INDIA LIMITED

The steps to be followed during performance evaluation of new NONEL supplied by any manufacturer during trial Blasting are enumerated below:

- 1) Verification of Necessary Documents submitted by the manufacturer pertaining to
 - Valid Manufacturing License of the product granted by PESO
 - DGMS Permission, if applicable
 - Product Literature
- 2) Taking up the matter with the concerned subsidiary requesting to provide suitable mine / mines for carrying out the field trials where NONEL of other manufacturers are already in use so that, the performance of new NONEL product can be comparatively assessed with the performance of existing NONEL used by the mines where trial Blasting will be conducted. Testing should be carried out in all possible scenarios viz. dry hole condition, watery hole condition containing mud and broken rock. NONEL should be used to provide designed delay time as Inter- deck delay, inter-hole delay and inter-row delay during trial blasting.
- 3) **Quantity to be tested**
A minimum of 5500 m of length or 600 No's of quantity, whichever is larger, is to be supplied free of cost by the manufacturer for carrying out Blasting trials. A minimum of 6 to 7 rounds of blast are required for evaluation of the new product of NONEL.
- 4) The following Technical Parameters should be examined on the surface under unconfined condition before putting it to actual blasting to ascertain the quality. The test results of the new product must lie within the limiting range in respect of all technical parameters specified in the Running contract under the head "Technical parameters for Random Testing".

If any of the test results falls outside the range, the product shall not be recommended for use in the mines of Coal India Limited and if re-testing is required for the failed product, the procedure as specified in "Revised SOP for inclusion of new products of Explosive manufacturers in CIL approved product list of Explosives & Accessories" shall be followed.

a. Verification of Physical Condition:

By visual inspection of NONEL.

b. Strength Test:

The Strength test should be determined by the lead plate method. The test procedure followed should be in accordance with requirements as laid down in IS: 6609 of 1973. After the blast the dent / crater produced on the lead plate should correspond to at least C.3 class.

c. Series Firing Test:

In Series Firing test a minimum of 10 No's. of NONEL should be connected in series connection and then shall be fired with the help of an Electric/Electronic Detonator. To pass the test, all the NONEL shall get fired successfully when initiated.

d. Delay Timing Test:

The delay timing should be determined by firing the NONEL after connecting it with the Digital Delay timer.

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e. Load Test:

Load Test should be carried out to determine the capability of the shock tube to withstand dynamic load while charging explosives in a shot hole. Two 125 mm cartridges each weighing 6.25 kg should be tied along with shock tube and kept on hanging for 15 minutes. It should be then brought out and the shock tube should be examined for any physical deformity such as cracks, elongation etc. If it is found in order, then above tested shock tube should be fired on the surface.

The test results of the new product shall be properly documented and should be duly signed by representatives of mine officials, respective manufacturer's representatives and CMPDI representatives and shall be enclosed in the Final report as Annexure I.

There should not be any **Misfire** during trial blasting. If there takes place any **Misfire** during trial blasting, the product should not be recommended for use in the mines of Coal India Limited and if re-testing is required for the failed product, the procedure as specified in "Revised SOP for inclusion of new products of Explosive manufacturers in CIL approved product list of Explosives & Accessories" shall be followed.

- 5) Trial Blast records should be properly documented along with observations, if any and should be duly signed by representatives of mine, representatives of respective manufacturer and representative of CMPDI and should be enclosed in the Final Report as Annexure-II.

Section VII – Sample Forms including LoB & Annexures

Checklist to be followed during Blasting trials of New Nonel

Sl. No.	Particulars	Yes	No
1	Necessary documents i.e., License of the product granted by PESO and DGMS permission, if applicable, were available and examined.		
2	Blasting trial were carried out in all possible scenarios viz. dry face / hole condition, watery face / hole condition containing mud and broken rock.		
3	A Minimum of 5500 m of length or 600 No's of quantity were supplied free of cost by the manufacturer.		
4	A minimum of 6 to 7 rounds of Blasting trials were conducted.		
5	Physical conditions of the NONEL were examined.		
6	Strength test of the NONEL was carried out.		
7	Series Firing Test of the NONEL was carried out.		
8	Delay time of the NONEL was measured.		
9	Load Test of the NONEL was carried out.		
10	Were there any misfire observed during Blasting trials?		
11	Record of Blasting trials were properly documented along with observations.		

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Annexure – I

TEST RESULTS OF NEW NONEL

1	Name of the manufacturer	:	
2	Name of the product	:	
3	Batch no. / Case no.	:	
4	Date of manufacturing	:	
5	Date of sampling	:	
6	Date of testing	:	
7	Name of mine / magazine from where samples were drawn	:	

8	Test Conducted	Specified limit as per RC	Results	Remarks
(i)	Physical Condition	Shall be good		
(ii)	Strength Test	As per 4(b) of SOP		
(iii)	Series Firing Test	As per 4(c) of SOP		
(iv)	Delay Timing Test	$\pm 10\text{ms}$ for long Delay $\pm 5\text{ms}$ for connector		
(v)	Load Test	As per 4 (e) of SOP		

9. Final result:

Sign. of CMPDI
Representative

Sign. of Mine
Representative

Sign. of Nonel
Manufacturer

Section VII – Sample Forms including LoB & Annexures

Annexure–II

RECORD OF BLASTING TRIAL OF NEW NONEL

Blasting Trial no:			
Sl. no.	Particulars		
A	Details of Mine		
	1	Name of mine	:
	2	Bench	:
	3	Nature of strata	:
	4	Face condition	:
	5	Date of blasting trial	:
B	Blast Geometry		
	1	Pattern of holes	:
	2	Dia of holes (mm)	:
	3	Average depth of holes (m)	:
	4	Average burden (m)	:
	5	Average spacing (m)	:
	6	No. of holes	:
	7	No of rows	:
C	Explosives		
	1	Name & Type of Explosive Charge	:
	2	Total Qty.& Type of explosive used (Kg) (with manufacturing detail)	:
	3	Charge Per Hole (kg)	:
	4	Charge Per Round (kg)	:
	5	Type of Cast Booster (Name of manufacturer, Batch no. & Date of manufacturing)	:
	6	Percentage of Booster	:
	7	Cap-Sensitive (Kg)	:
	8	Non Cap-Sensitive (kg)	:
D	Blasting Accessories Used		
	1	Type of Initiation System used	:
	2	Type of Nonel used	
		Name of Manufacturer	
		Batch No. / Case No.	
		Date of Manufacturing	:
	3	Delay Intervals of DTH Used (ms)	:
	4	Delay Intervals of TLD Used (ms)	:
	5	No's & Length (m) of NONEL used	:
	6	Length of DF used	:
E	Evaluation of Blasting Performance		
	1	Fragmentation	:
	2	No. & volume of boulder (m3)	:
	3	Percentage of boulders	:
	4	Volume of toe (m3)	:
	5	Muck-pile profile	:
	6	Throw	:
	7	Ease of digging	:
	8	Misfire (if any)	:

Section VII – Sample Forms including LoB & Annexures

F Sketch Showing the Pattern of Holes, Placement of Nonel and Sequence of Delay

Sketch Showing the Pattern of Holes, Placement of Nonel and
Sequence of Delay

Signature of
CMPDI Representative

Signature of
Mine Representative

Signature of Nonel
Manufacturer

Section VII – Sample Forms including LoB & Annexures

STANDARD OPERATING PROCEDURE FOR EVALUATING THE PERFORMANCE OF NEW ELECTRONIC DETONATOR DURING BLASTING TRIALS BY CMPDI IN MINES OF COAL INDIA LIMITED

The steps to be followed during performance evaluation of new Electronic Detonator supplied by any manufacturer during blasting trials are enumerated below:

- 1) Verification of Necessary Documents submitted by the manufacturer pertaining to
 - Valid Manufacturing License of the product granted by PESO
 - Lab Test Results of CIMFR, Dhanbad, if applicable (This is required when the Electronic Detonators are used for Underground purpose only)
 - DGMS Permission, if applicable
 - Product literature
- 2) Taking up the matter with the concerned subsidiary through CIL requesting to provide suitable mine / mines for carrying out the field trial where Electronic Detonator of other manufacturers is already in use so that the performance of new Electronic Detonator product can be comparatively assessed with the performance of existing Electronic Detonator used by the mines where Blasting trials will be conducted. Testing should be carried out in all possible scenarios viz. dry hole condition, watery hole condition containing mud and broken rock. Electronic Detonator should be used to provide designed delay time during trial blasting.

3) Quantity to be tested

A minimum quantity of 500 No's is to be supplied free of cost by the manufacturer for carrying out Blasting trials. A minimum of 6 to 7 rounds of blasting trials are required for evaluation of a new product of Electronic Detonator.

- 4) The following Technical Parameters should be examined on the surface under unconfined conditions before putting it to actual blasting trials to ascertain the quality. The test results of the new product must lie within the limiting range in respect of all technical parameters specified in the Running contract under the heading "Technical parameters for Random Testing".

If any of the test results falls outside the range, the product shall not be recommended for use in the mines of Coal India Limited and if re-testing is required for the failed product, the procedure as specified in "Revised SOP for inclusion of new products of Explosive manufacturers in CIL approved product list of Explosives & Accessories" shall be followed.

a.Verification of Physical Condition:

By visual inspection of Electronic Detonator.

b. Strength of Detonators (by Lead Plate Method)

The Strength test should be determined by the lead plate method. The test procedure followed should be in accordance with requirements as laid down in the following procedure.

When the detonators are subjected to the test as prescribed in 4.6 of IS 6609 (Part 3), the general electronic detonators shall produce dent on the lead plate corresponding to at least C-3 class [4.6.3.3 of IS 6609 (Part 3)]

Whereas, permitted electronic detonators shall produce dent on the lead plate corresponding

Section VII – Sample Forms including LoB & Annexures

to at least B-3 class [4.6.3.3 of IS 6609 (Part 3)].

(c) Parallel Firing Test:

In Parallel Firing test a minimum quantity of 10 No's of Electronic Detonator should be subjected to firing current. The test procedure should be in accordance with requirements as laid down in IS: 6609 of 1973. To pass the test, all the Electronic Detonator should be fired successfully.

(d) Delay Timing Test:

The delay timing (reference delay timing) should be determined by firing the Electronic Detonator after connecting it Blaster and measuring the reference delay timing with Digital Delay timer.

(e) Snatch Test:

When subjected to the snatch test as prescribed in 4.3 of IS 6609 (Part 3), the detonators shall not fire when a jerk is applied to the lead wires.

(f) Drop Test

When subjected to a drop test as prescribed in 4.2 of IS 6609 (Part 3), none of the detonators shall detonate on impact and after the test, each tested sample shall be checked again for its firing characteristic. All detonators shall be functional after the drop test.

(g) Water Resistance Test:

The Water Resistance test should be determined by the procedure in accordance with requirements as laid down in the following procedure.

The 10 No's Electronic Detonators shall be immersed in water continuously for 24 hours. Then they shall be subjected to the firing test, when tested all the Electronic Detonators shall be able to fire without fail

(h) Safety Features Test:

As the Electronic Detonators are supplied with Connectors, bus wires, Logger and Blaster, hence the connected accessories should be visually checked for the following features-

- (i) Connectors should have good quality and effective contact with bus wire.
- ii. Bus-wires should be good strength to not snapped during blasting
- iii. Logger and blaster should be Password protected access
- iv. Fire cap is not charged until the "Pre-Fire" command is sent
- v. Built in automatic defuse feature
- vi. Detection and alert of short circuit events
- vii. On field self-diagnostic tests
- viii. Detonator attendance verification prior to blasting

Logger should have facility to transfer the log events with Hole ID, Delay Timing either through Bluetooth or any data transfer protocol.

The test results of the new product shall be properly documented and should be duly signed by representative of mine, representative of respective manufacturer and representative of CMPDI and shall be enclosed in the Final Report as Annexure-I.

There should not be any **Misfire** during trial blasting. If there takes place any **Misfire** during blasting trials, the product should not be recommended for use in the mines of Coal India Limited and if re-testing is required for the failed product, the procedure as specified in

Section VII – Sample Forms including LoB & Annexures

“Revised SOP for inclusion of new products of Explosive manufacturers in CIL approved product list of Explosives & Accessories” shall be followed.

- 5) Records of blasting trials should be properly documented along with observations, if any and should be duly signed by representative of mine, representative of respective manufacturer and representative of CMPDI and should be enclosed in the Final Report as Annexure-II.

Checklist to be followed during Blasting trials of New Electronic Detonator (ED)

Sl. No.	Particulars	Yes	No
1	Necessary documents i.e., License of the product granted by PESO, Lab Test Result of CIMFR (for u/g product only), Dhanbad and DGMS permission, if applicable, were available and examined at the time of Blasting trials.		
2	Blasting trials were carried out in all possible scenarios viz. dry hole condition, watery hole condition containing mud and Broken rock.		
3	A Minimum of 500 No's of quantity was supplied free of cost by the manufacturer.		
4	A minimum of 6 to 7 rounds of Blasting trials were conducted.		
5	Physical conditions of the Electronic Detonator were examined.		
6	Strength Test of the Electronic Detonator was carried out.		
7	Parallel Firing Test of the Electronic Detonator was carried out.		
8	Delay time of the Electronic Detonator was measured.		
9	Snatch Test of the Electronic Detonator was carried out.		
10	Drop Test of the Electronic Detonator was carried out.		
11	Water Resistance Test of the Electronic Detonator was carried out.		
12	Were there any misfires observed during blasting trials?		
13	Record Blasting trials were properly documented along with observation.		

Section VII – Sample Forms including LoB & Annexures

Annexure – I

TEST RESULTS OF ELECTRONIC DETONATOR (ED)

1	Name of the manufacturer	:	
2	Name of the product	:	
3	Batch no. / Case no.	:	
4	Date of manufacturing	:	
5	Date of sampling	:	
6	Date of testing	:	
7	Name of mine / magazine from where samples were drawn	:	

8	Test Conducted	Specified limit as per RC	Results	Remarks
(i)	Physical Condition	Shall be good		
(ii)	Strength Test	As per 4(b) of SOP		
(iii)	Parallel Firing Test	As per 4(c) of SOP		
(iv)	Delay Timing Test	As specified by manufacturer		
	Up to 1000ms	$\pm 2\text{ms}$		
	Above 1000ms	$\pm 0.2\%$		
(v)	Snatch Test	As per 4 (e) of SOP		
(vi)	Drop Test	As per 4 (f) of SOP		
(vii)	Water Resistance Test	As per 4 (h) of SOP		

9. Final result:

Sign. of CMPDI
Representative

Sign. of Mine
Representative

Sign. of Electronic
Detonator Manufacturer

Section VII – Sample Forms including LoB & Annexures

Annexure-II

RECORD OF BLASTING TRIAL OF NEW ELECTRONIC DETONATOR

Blasting Trial no:			
Sl. no.	Particulars		
A	Details of Mine		
	1	Name of mine	:
	2	Bench	:
	3	Nature of strata	:
	4	Face condition	:
	5	Date of blasting trial	:
B	Blast Geometry		
	1	Pattern of holes	:
	2	Dia of holes (mm)	:
	3	Average depth of holes (m)	:
	4	Average burden (m)	:
	5	Average spacing (m)	:
	6	No. of holes	:
	7	No of rows	:
C	Explosives		
	1	Name & Type of Explosive Charge	:
	2	Total Qty. of explosive used (Kg)	:
	3	Charge Per Hole (kg)	:
	4	Charge Per Round (kg)	:
	5	Type of Cast Booster	:
		Name of Manufacturer	
		Batch No. / Case No.	
		Date of Manufacturing	
	6	Percentage of Booster	:
	7	Cap-Sensitive (Kg)	:
	8	Non Cap-Sensitive (kg)	:
D	Blasting Accessories Used		
	1	Type of Initiation System used	:
	2	Type of Electronic Detonator used	
		Name of Manufacturer	
		Batch No. / Case No.	
		Date of Manufacturing	:
	3	Delay Intervals of ED Used (ms)	:
E	Evaluation of Blasting Performance		
	1	Fragmentation	:
	2	No. & volume of boulder (m3)	:
	3	Percentage of boulders	:
	4	Volume of toe (m3)	:
	5	Muck-pile profile	:
	6	Throw	:
	7	Ease of digging	:
	8	Misfire (if any)	:

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- F Sketch Showing the Pattern of Holes, Placement of Electronic Detonator and Sequence of Delay

Sketch Showing the Pattern of Holes, Placement of Electronic Detonator and Sequence of Delay

Signature of
CMPDI Representative

Signature of
Mine Representative

Signature of Electronic
Detonator Manufacturer

Signature Not Verified

Digitally signed by PRADEEP KUMAR N
Date: 2025.10.18 13:38:08 IST
Location: Coal India Limited-CIL