

CENTRAL COALFIELDS LIMITED

AMiniRatnaCompany

INTERNATIONAL COMPETITIVE BIDDING

INTEGRATED BID DOCUMENT

FOR

SETTING UP OF 4.0 MTY NON COKING COAL ASHOKWASHERY/CPP AT PIPARWAR AREA, CCL

ON

BUILD-OWN-OPERATE (BOO) BASIS

September 2018



CENTRAL COALFIELDS LIMITED

(ASubsidiaryofCoalIndia Ltd.) DARBHANGA HOUSE RANCHI, JHARKHAND - 834029, INDIA INTERNATIONAL COMPETITIVE BIDDING

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DISCLAIMER

The purpose of this Bid Document is to provide interested parties with information to facilitate formulation of their Offer for "Setting up of 4.0 MtyAshokCoal Washery/CPPon Build-Own-Operate (BOO) concept in Central Coalfields Limited.

The Bid Document includes statements, which reflect various assumptions, which may or may not be correct. This Bid Document does not purport to contain all the information each Bidder may require. The Bid Document may not be appropriate for all persons and it is not possible for Central Coalfields Limited to consider the investment objectives, financial situation and particular needs of each Bidder who reads or uses the Bid Document. Certain Bidders may have a better knowledge than the others for execution of the subject work. Each Bidder should conduct its own investigations and analysis and should check the accuracy, reliability and completeness of the information in the Bid Document and obtain independent advice from appropriate sources.

Neither Central Coalfields Limited(CCL) nor its employees or its consultants will have any liability to any Bidder or any other person under the law of contract, tort, the principles of restitution or unjust enrichment or otherwise for any loss, expense or damage which may arise from or be incurred or suffered in connection with anything contained in the Bid Document, any matter deemed to form part of the Bid Document, the award for setting up, operation & maintenance of Coal Washery/CPP and any other information supplied by or on behalf of Central Coalfields Limited or its employees, any of its consultants or otherwise arising in any way from the selection process for execution of the subject work of the Coal Washery/CPP on BOO concept. The Bidder shall bear all costs associated with preparation and submission of his/ their Offer and Central Coalfields Limited will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

CCL reserves the right to reject any or all the Offers or cancel/ withdraw the Bidding process for execution of the subject work of the Coal Washery/CPP on BOO concept without assigning any reason whatsoever may be and in such case, no bidder/ intending bidder shall have any claim arising out of such action.

Though, adequate care has been taken while issuing the Bid Document, the Bidder should satisfy himself that document is complete in all respects. Intimation of any discrepancy shall be given to this office (as mentioned below) immediately. If no intimation is received by this office upto 30 days before last date of submission of the Offer, then this office shall consider that the Bid Document received by the Bidder is complete in all respects and that the Bidder is satisfied that the Bid Document is complete in all respects.

Office:

GM (Washery), Central Coalfields Limited, Damodar Building, Darbhanga House, Ranchi-834029, Jharkhand, INDIA

The Bid Document and the information contained therein are confidential and are for the use of only the person(s) to whom it is issued or whosoever download from the website and it may not be distributed to third parties (other than in confidence to the recipient's professional advisors).

CCL confirms that all information submitted with the proposal of the Bidder shall be treated by CCL as strictly confidential and such information shall be shared by CCL only with its consultants appointed for the purpose of Offer evaluation.

LIST OF ABBREVIATIONS

adb	Air Dried Basis
apb	As Produced Basis
arb	As Received Basis
ASQ	Agreed Scheduled Quantity
BG	Bank Guarantee
BOO	Build-Own-Operate
BS	Bid Security
CIL	Coal India Limited
CMPDI	Central Mine Planning & Design Institute Limited
Coal Co.	CIL / Subsidiary Company/CCL
EC	Environmental Clearance
EIC	Engineer-in-Charge
EMD	Earnest Money Deposit
EMP	Environmental Management Plan
FC	Foreign Currency
FQ	Financial Qualification
FQR	Financial Qualification Requirement
FS	Financial Security
FSA	Fuel Supply Agreement
GCV	Gross Calorific Value
GST	Goods and Services Tax
ICB	International Competitive Bidding
IEM	Independent External Monitor
INR	Indian National Rupee
JV	Joint Venture
LD	Liquidated Damages
LM	Lead Member
LoA	Letter of Acceptance/ Letter of Award
mm	Millimeter
MoU/ MOU	Memorandum of Understanding
MSQ	Monthly Scheduled Quantity

Mtpa	Million tonne per annum
Mty	Million tonne per year
NIT	Notice Inviting Tender
OE	Organic Efficiency
O&M	Operation and Maintenance
PGT	Performance Guarantee Test
QR	Qualifying Requirements
RFP	Request for Proposal
RFQ	Request for Qualification
SEB	State Electricity Board
SFMS	Structured Financial Messaging System
тсв	Techno Commercial Bid
tph	tonnes per hour
TQ	Technical Qualification
UHV	Useful Heat Value
USD	US Dollar
VM	Volatile Matter
WO	Washery/CPP Operator

DEFINITIONS

'Accepting authority' shall mean the management of CIL and/ or subsidiary companies or their authorized representative.

The '**Agreement**' shall mean the document envisaging the agreement entered into between the Company & the Selected Bidder for setting up of Washery/CPP as well as operation & maintenance of the Washery/CPP on BOO concept.

'Approved' shall mean approved in writing.

'Associate'/ 'Consortium' shall mean a proprietary firm/ a registered partnership firm/ a body corporate/ Joint Stock Company/ JV Company/ Subsidiary Company registered under the Company Act 2013 or any previous company Law/ Act as applicable in India or equivalent in case of Foreign Bidders who forms consortium in such a way that the consortium collectively possess both the Technical Qualification (TQ) of set up as well as operation of Coal Washery/CPP/ Mineral Beneficiation Plant & Financial Qualification (FQ). Associate individually may or may not possess any of the TQ.

'**Authorised Signatory**' shall refer to the person/ persons and organization who have been so authorised by the Bidder/ Associate to represent them in respect of the Offer submitted.

'Bank Guarantee' shall mean the Bank Guarantee to be provided by the Bank on behalf of bidder to the Company.

'Base Date for set up' shall mean the actual date of signing of Agreement or handing over of siteby CCL to the WOwhichever is later.

'Base Date for operation' shall mean the actual date on which plant commences its commercial operation and the same will be considered as a reference date for determining the period to be considered for payment of washing charges.

'Base Price'/ **'Washing Charges**' shall mean the washing charges per tonne of raw coal ('dry') processed excluding taxes & duties.

'Beneficiation/ Washing' shall mean improvement created by scientific treatment (through wet processes) on coal without destruction of its physical identity for the desired end use.

'Beneficiation plant/ Washing plant/ Coal Washery/CPP shall mean the plant where improvement is created by scientific treatment (through wet processes) on coal without destruction of physical identity for the desired end use.

'Bidder' shall mean a proprietary firm/ a registered partnership firm/ a body corporate/ Joint Stock Company/ JV Company/ Subsidiary Company registered under the Company Act 1956 or equivalent in case of Foreign Bidders who has purchased the Bid Document and submitted the Offer. In case of Associate/ Consortium Route, Lead Member of Consortium will be termed as 'Bidder'.

'Bidding' shall mean that participation in the bidding process may be done either as a Sole Bidder in case of Sole Bidder Route or as a Lead Member in case of Associate/ Consortium Route for setting up and operation & maintenance of Coal Washery/CPP on BOO concept.

'Bid Document'shall normally mean the documents such as RFQ & RFP (including Technical, Commercial & Price Offer etc.) both collectively or separately, as applicable.

'Build-Own-Operate (BOO)' refers to the concept in which the ownership (financing) of plant, setting up as well as operation & maintenance of plant during the entire contract period shall lie with the Washery/CPP Operator (WO). CIL or its subsidiary shall pay the agreed washing/ processing charges to the WO.

Ownership of the land (provided by Coal Co.), raw coal & its products will remain with CIL or its subsidiary.

'Coal Co.' means Coal India Limited and/ or its Subsidiary Companies and its successorsin-interest and assigns.

'Codes' shall mean the following, including the latest amendments, and/ or replacements, if any :

- (a) Standards/ Publications of Bureau of Indian Standards (BIS) relevant to the works under the contract and their specifications.
- (b) Other Internationally approved Standards and/ or rules and regulations touching the subject matter of the contract, such as:
 - (i) ASME Test codes.
 - (ii) AIEE Test codes.
 - (iii) American Society of Materials Testing Codes.
 - (iv) Indian Electricity Act and Rules and Regulations made thereunder.
 - (v) Indian Explosive Act and Rules and Regulations made thereunder.
 - (vi) Indian Petroleum Act and Rules and Regulations made thereunder.
 - (vii) Indian Mines Act and Rules and Regulations made thereunder.
 - (viii) Other Rules & Regulations related to the Washery/CPP environment etc.
- (c) Any other acts, laws, rules, regulations, acts and guidelines applicable in India with respect to factory, labour, safety, compensation, insurance etc. which directly or indirectly affects or governs this subject work.

'Commercial Operation' shall mean the operation & maintenance of plant in which the complete equipment covered under the contract is officially declared by the WO to be available for continuous operation after successful PGT and acceptance of the same by CCL (Name of the Coal Co.).

'**Commissioning of the Washery/CPP**' shall mean completion in all respect of construction of the Washery/CPP and successful Performance Guarantee Test and rendering the Washery/CPP ready for commercial operation.

'Company' wherever occurs means CIL or its subsidiary concerned, here CCL, as the case may be, and/ or its assigns unless it is repugnant to the context or meaning thereof

'Contract' shall mean the formal agreement executed between CIL or its concerned subsidiary and the Selected Bidder for setting up of the Washery/CPP, operation & maintenance on BOO concept.

'Contract period' shall mean the construction period of 18months& any extended period from the date of signing of contract *or* handing over of site whichever is later plus the period of eighteen (18) years from the date of commercial operation by the Washery/CPP Operator.

'Cost to Company' shall mean the "Total Value (i.e. Base price + taxes and duties) quoted by the bidder" excluding "CGST & SGST or IGST, GST (Compensation to state) cess eligible for input tax credit"

'Date of Contract coming into force'/ 'Effective Date of Contract' shall mean the date on which contract is signed between the Company and the Bidder for the subject work.

'Datum Line' shall mean the last day of the scheduled month of expiry of completion period (i.e. 18 months) from the date of signing of Agreement *or*handing over of site, whichever is later.

'Day' shall mean a period of 24 hours from midnight to midnight.

'Engineer' wherever occurs, means the authorised representative or any other officer, specially deputed by the Company for the purpose of contract and to assist the Engineer-in-Charge.

'Engineer-in-Charge(EIC)/ Designated Officer-in-charge' shall mean a person of appropriate seniority who will be responsible for supervising and administering the contract, certifying payment due to the WO, valuing variations to the contract, awarding extension of time and valuing compensation events. Engineer-in-Charge (EIC)/ Designated Officer-in-Charge may further appoint his representatives i.e. another person/ Project Manager or any other competent person and notify to the WO who is directly responsible for execution at the site. However, overall responsibility, as far as the contract is concerned during the entire contract period will be that of the Engineer-in-Charge (EIC)/ Designated Officer-in-Charge.

'Government Approvals' shall mean all permits, licenses, authorizations, consents, clearances, decrees, waivers, privileges, approvals from and filing with government instrumentalities necessary for the development, construction and operation of the plant/ project.

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'Inspector' shall mean the any person nominated by the Company from time to time to inspect the equipment, stores or works under the contract and/ or the duly authorised representative of the Company.

'Lead Member' (LM) shall mean the Bidder who has been identified by the Associate member through MoU in case of Consortium/ Associate Route. The LM shall continue to perform the obligations towards the subject work for the entire contract period having maximum no. of consortium partners upto 3 (three). In case of Associate/ Consortium Route, Lead Member of Consortium will be termed as 'Bidder'. The Lead Member may or may not have any Technical Qualification (TQ) but the Lead Member himself has to fulfil the Financial Qualification (FQ) of the Bid.

'Letter of Acceptance'/ **'Letter of Award'** (LoA) of the Offer shall mean the official communication issued by the Company notifying the Preferred Bidder about acceptance of its offer & inviting for signing of Contract.

'Month' shall mean a calendar month according to the Gregorian calendar.

'Offer' shall mean the proposal of the Bidder submitted in response to the Bid Document issued by CIL or its subsidiary (i.e. RFQ & RFP) and subsequent clarifications, if any.

'Performance Guarantee Tests (PGT)' shall mean all operational checks and tests which are required to determine and demonstrate capacity, efficiency, quality parameters and operating characteristics as specified in the Bid Document.

'Preferred Bidder' shall mean the eligible Bidder invited by CIL or its subsidiary for entering into contract for execution of the subject work on BOO concept.

'Price Offer' shall meanthe part of the offer submitted by the Bidder giving details of the price part i.e. washing charge, relevant taxes & duties etc.

'Project' shall mean the coal Washery/CPP including any and all infrastructure facilities proposed to be put up for setting up of Coal Washery/CPP on BOO concept.

'Qualified Bidders' shall mean the Bidders short-listed based on the offer against RFQ for further techno-commercial evaluation as per RFP part of the Bid.

'**Rejects**' shall mean the by-product produced during beneficiation process of the Washery/CPP having ash more than 60%.

'Request for Proposal' or 'RFP' shall mean one of the documents issued by CIL or its subsidiary for submitting the Techno-commercial as well as Price Offer.

'Request for Qualification' 'RFQ' shall mean one of the documents issued by CIL or its subsidiary as a part of Bid Document for submitting the offer for Qualification.

'Selected Bidder'/ **'Successful Bidder'** shall mean the Preferred Bidder that has finally entered into the contract with CIL or its subsidiary company for execution of the subject work of Coal Washery/CPP on BOO concept.

'Set up' shall mean execution of Coal Washery/CPP from concept to commissioning which inter-alia includes planning, design & engineering, selection of necessary equipment & machineries, procurement, delivery, erection/ installation, testing, successful commissioning of coal Washery/CPP plant including PGT and all allied activities.

'Set up period' is a period of eighteen (18) months and any extension thereof required for set up of the Washery/CPP up to successful commissioning and Performance Guarantee Tests (PGT) after signing of the Contract *or* handing over of site, whichever is later.

'Site' shall mean the place of the contract work including land and any building and erections thereon and any other land allotted by the Company for Bidder's use in the execution/ performance of the contract.

'Specification' shall mean the technical specifications forming a part of the contract and such other schedules and drawings as may be mutually agreed upon.

'Subject Work' shall mean entire scope related to 'setting up of Washery/CPP' as well as its 'operation & maintenance' on BOO concept.

'Techno-commercial Offer' shall mean theproposal submitted by the Bidder in response to the RFP part of the document, except the Price Offer.

'**Temporary Works**' shall mean all temporary works of every kind required in or for the execution, completion or maintenance of the works.

'Washed Coal' shall mean the final product of Washery/CPP which satisfies the quality parameters laid down in the Bid Document/ Contract Document.

'Washery/CPP Operator' (WO) wherever occurs means the Selected Bidder and shall include legal representative of such individual or persons comprising a firm or an entity or the successors-in-interest and permitted assignees of such individual, firm, entity as the case may be.

'Written notice' shall mean a notice or communication in writing and shall be deemed to have been duly served if delivered in person to the individual or to a member of the firm or to

an office of the Corporation/ Company for whom it is intended, or if delivered at or sent by registered mail to the last business address known to him who gives the notice.

'Year' for escalation calculation purpose: year means- a year commence from the day of start of commercial operation and ends on completion of 365 days from the date of start of commercial operation.

<u>Note</u>

- When the words "Approved", "Subject to Approval", "Satisfactory", "Equal to", "Proper", "Requested", "As directed", "Where directed", "When directed", "Determined by", "Accepted", "Permitted", or words and phrases of like import are used, the approval, judgment, direction etc. is understood to be a function of the Engineer/ Engineer-in-Charge (EIC).
- ii) Terms and expressions not defined herein shall have the same meaning as are assigned to them in the "Indian Sale of Goods Act", failing that in the "Indian Contract Act", and failing that in the "General Clauses Act".
- iii) Words importing 'singular' only shall also include the plural and vice-versa where the context so requires. Similarly the words with 'masculine' meaning shall also refer 'feminine' meaning as per the requirement/ suitability of the text.
- iv) The 'Ashok Coal Washery/CPP' or 'AshokWashery/CPP', wherever appeared in this bid document bear the same meaning.

DETAILED E-TENDER NOTICE



(A Subsidiary of Coal India Limited) A Mini Ratna Company (Under Jurisdiction of Ranchi Court only) **Central Coalfields Limited** (A Subsidiary of Coal India Limited) Office of The General Manager(Washery/CPP/ Washery/CPPConstruction) P.O. – Darbhanga House Dist – Ranchi – 834029(Jharkhand) e-Mail: <u>gmws.ccl@coalindia.in</u> Fax. No.: 0651-2360114 Web Site <u>https:centralcoalfields.in</u> <u>www.coalindiatenders.nic.in</u> <u>www.eprocure.gov.in;</u>

E-Tender Notice No.: CCL/RNC/WC/AshokWashery/CPP/18-19/06Dated 30/08/2018

1.0 Bid/ Offers are invited on-line on the website <u>https://coalindiatenders.nic.in</u> from the bidders enrolled on this site with Digital Signature Certificate (DSC) issued from any agency authorized by Controller of Certifying Authority (CCA), Govt. of India which can be traced up to the chain of trust to the Root Certificate of CCA, for the following work::

DescriptionofWorks	BID SECURITY	Schedule (7122days as per 1 months + 18yrs)	
		Construction	Operation & Maintenance
 Setting up of AshokWashery/CPP at Piparwararea, CCL on BOO Concept with freedom of beneficiation technology. a. Scope of Work: The work consists of Planning, Design & Engineering, Selection of necessary equipment and machinery, procurement, delivery, erection/ installation along with all associated civil & structural works, testing, successful commissioning of coal washing plant and all allied activities as well as its subsequent operation & maintenance to produce washed coal of requisite quality & quantity; Washed coal storage at Washery/CPP site on "Build- Own-Operate (BOO)" concept. b. Throughput Capacity: 4 (Four) Mty raw coal (as received basis). 	`50,00,000 (INR Fifty Lakh, i.e., Five Million)	18Months (including trial-run and Commissioni ng of Washery/CP P) from the date of signing of Agreement or handover of sitewhicheve r is later.	18 (eighteen) years
c. Location: Located in the North Karnapura Coalfield, Ashok expansion OCP, Piparwararea, CCL Distt.:Chatra, Jharkhand State			

Tender notice will also be available on CPP Portal <u>www.eprocure.gov.in</u>.

2.0 TIME SCHEDULE OF TENDER

SI. No	Particulars	Date	Time
a.	Tender e-Publication date		
b.	Start date for Document download		
C.	Last date for Document download		
d.	Start date for seeking Clarification on-line by bidder		
e.	Last date for seeking Clarification on-line by bidder		the website
f.	Last date for replies to Clarifications sought by bidders	•	the website atenders.nic.in
g.	Date of Pre-bid Meeting	nups.//coaimu	atenuers.mc.m
h.	Start date for Bid/ Offer Submission		
i.	Last date for Bid/Offer submission		
j.	Bid/ Offer Opening date (Cover-1 & Cover-2)		
k.	Start of Reverse Auction (same as date of bid opening)		

3.0 DEPOSIT OF BID SECURITY/ EMD

The bidders have to make payment of BID SECURITY/EMD either through Axis Bank Payment Gatewayor by Net-banking or through NEFT/RTGS from any scheduled Bank. In case of payment through Net-banking, the money will be immediately transferred to CCL's designated Account. In case of payment through NEFT/RTGS, the bidder will have to make payment as per the Challan generated by system on e-Procurement portal. Bidder will be allowed by the system to submit the bid only when the EMD is successfully received in CCL'sbank account and the information flows from Bank's Server to e-Procurement portal.

4.0 SECURITY DEPOSIT & GENERAL INSTRUCTION:

Refer Clause No. 4.6 of Section 4 of this document.

5.0 PRE-BID MEETING

5.0 PRE-BID MEETING

The pre-bid meeting shall be held in the office of General Manager (Washery/CPP), CCLon the scheduled date & time, as specified in the bid document. The purpose of the prebid meeting is to clarify the issues and to answer the questions on any matter related to bid document that may be raised at that stage. Non-attendance at the pre-bid meeting will not be a cause for disqualification of bidder and it shall be presumed that the bidder does not require any clarification. The minutes of the Pre-Bid meeting shall be uploaded on the portal which can be viewed by all interested bidders. Representatives of bidder(s) only can attend the Pre-Bid meeting.

6.0 SEEKING ON-LINE CLARIFICATION BY BIDDER

The prospective bidders may seek clarification on-line within the specified period. The identity of the Bidder will not be disclosed by the system. The department will clarify, as far as possible, the relevant queries of bidders. The clarifications given by department will be visible to all the bidders intending to participate in that tender.

7.0 AMMENDMENT IN BID DOCUMENT

Before the deadline for submission of Bids, the Employer may modify the bidding documents by issuing addenda.

Any addendum/Corrigendum/date extension, etc. in respect of this tender shall be part of bid document and issued on our website <u>https://coalindiatenders.nic.inonly</u>. No separate notification shall be issued in the press. Bidders are therefore requested to visit our website regularly to keep themselves updated.

To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Employer shall extend, as necessary, the deadline for submission of Bids, in accordance with Sub-clause 15.1 of this Detailed e-Tender notice.

8.0 ON-LINE BID SUBMISSION USER PORTAL AGREEMENT

The bidders have to accept the on-line user portal agreement which contains the acceptance of all the Terms and Conditions of bid document, undertakings and the e-Procurement system through <u>https://coalindiatenders.nic.in</u> in order to become an eligible bidder. This will be a part of the agreement. However, tender notice will also be accessed through websites such as<u>www.eprocure.gov.in.</u>

9.0 ELIGIBLE BIDDERS

9.1Any bidder enrolled in the site <u>https://coalindiatenders.nic.in</u>having Digital Signature Certificate (DSC) issued from any agency authorized by Controller of Certifying Authority (CCA), Govt. of India and which can be traced up to the chain of trust to the Root Certificate of CCA subject to his qualification as per Clause no.10.0 of this detail e-tender notice. The bidder may be aproprietary concern/ partnership firm/ body corporate/ Company registered under the Companies Act 2013 or any previous Company Law/Act as applicable in India/ Joint Venture or equivalent in case of Foreign Bidders. In case of Joint Venture (JV) or consortium unless otherwise specified, all the partners shall be jointly and severally liable.

All Indian bidders should be registered under GST and should possess GST Registration Certificate (with GSTIN).

9.1.1 Participation of Joint Venture company

A Joint Venture Company may participate in the bidding process either as a sole bidder or as a member of consortium. Each member/ entity of the Joint Venture Company shall be responsible jointly & severally for completing the task as per the bid.

Joint Venture Company shall comply the following:

a) Documentary evidence (Certificate of Incorporation; Certificate of Registration; Memorandum & Article of Association etc.) w.r.t. formation of the joint venture company must be furnished with the offer.

b) The offer shall include all the information regarding capability, experience as required for a bidder for each entity in Exhibit 1. For the purpose of eligibility criteria, collective credentials of the members of a Joint Venture Company will also be considered.

c) An entity can be a member in only one Joint Venture Company. In case, same entity submits offer as a member of other Joint Venture Company for the same project then offers submitted by all such joint venture companies shall be rejected.

d) Separate offer by an entity of a Joint Venture Company shall not be accepted.

e) In case, JV Company submitting its Offer on the financial strength and/ or technical competence of its holding company/ JV Partner(s), it has to obtain and produce a letter of undertaking in Exhibit 6 to the effect that in case of any untoward happening towards the successful execution of the contract and/ or event occurring that are distinct and different from the stipulated terms & conditions of the bid document and attributable to bidders, its holding company/ JV Partner(s) shall be legally bound both jointly and severally to this Contract for discharging all the contractual obligations on behalf of bidder.

9.1.2 Participation of Subsidiary Company

In case, the Bidder is subsidiary/ entity(ies) of a parent company and consolidated financial report is prepared by the parent company showing information/ net-worth of subsidiary/ entity(ies) separately, the same in respect of the subsidiary/ entity(ies) shall also be considered to meet the eligibility criteria. In such case, copy of a letter from the parent company to that effect shall be submitted as Exhibit 5.

In case, the Bidder/ Consortium partner(s) being a subsidiary company submitting its Offer on the financial strength and/ or technical competence of its holding company, it has to obtain and produce a letter of undertaking in Exhibit 6 to the effect that in case of any untoward happening towards the successful execution of the contract and/ or event occurring that are distinct and different from the stipulated terms & conditions of the bid document and attributable to bidders/ consortium partner(s), its holding company shall be legally bound both jointly and severally to this contract for discharging all the contractual obligations on behalf of bidder/ consortium partner(s).

9.2Route of Bidding

9.2.1 Sole Bidder Route

In this route, both the Technical & Financial qualification parameters as stated in Cl. No. 10.2.1&10.2.2 shall be complied by the Sole Bidder itself. The bidder shall be solely responsible for completing the task as per the Contract/ Bid document.

9.2.2 Associate/ Consortium Route

In case of Associate/ Consortium Route, one of the Consortium partner shall be designated as Lead Member. In this route, two or more (maximum threeincluding Lead member) entities may jointly participate in the bidding process including the Lead Member. Each entity shall be jointly and severally responsible for completing the task as per the contract. The consortium shall comply the requirements given hereafter.

In case of consortium, for qualifying as the member of consortium, each partner in the consortium shall contribute atleast 26% of the total equity in the project. The Lead Member shall meet the financial qualification & shall have to continue for entire Contract period

The consortium partners shall collectively meet both the technical & financial requirement.

The Lead Member shall be authorised to incur liabilities and receive instructions for and on behalf of any and all entities of the consortium and the entire execution of the Contract including payment and this shall be done exclusively with the lead member.

The lead member in the consortium shall be overall responsible for the execution of the contract. The lead and other members of the consortium shall be jointly and severally responsible for execution of the contract.

An entity can be a member in one consortium only. In case, same entity submits offer with other consortia, offer of all such consortium shall be rejected.

Separate offer(s) by consortium member shall not be accepted.

After submission of the offer and upto two years of commercial operation, any change in the membership of a consortium or in the responsibilities or commitments of a consortium member is not permitted.

NOTE:

i) Normally the Lead Member and the Associate(s) shall continue for entire period of Contract.

ii) All the Associate(s) shall have to continue for set up period and thereafter for a minimum period of two years of commercial operation.

iii) In case of dissociation of any Associate at any point of time after two years of commercial operation, the stake of dissociated Associate(s) shall be taken over by the Lead Member/ remaining Associate.

iv) If Lead Member/ remaining Associate do not take over the stake of the dissociated Associate(s), the Contract shall be terminated and CCL shall take over the entire plant with all the infrastructural facilities without paying any compensation.

v) If any of the Associate(s) dissociate from consortium prior to completion of two years of commercial operation, CCL shall take over the entire plant with all the infrastructural facilities without paying any compensation/ consideration.

9.3 Submission of Exhibits, GST Registration Certificate, MoU&PoA (To Be Submitted by Bidders as a Confirmatory Document)

Sole Bidder or each member of consortium shall furnish details regarding profile, communication details, Organization historyand responsibilities of each entity and the commitments each entity has made towards the consortiumas per the format given at Exhibit 1.

Indian Bidder (Sole bidder or Lead member of consortium) shall also furnish scanned copy of GST registration certificate issued by appropriate Authority.

In case the work is awarded to a Foreign Bidder (Sole bidder or Lead member of consortium), It shall be liable to get registered itself under GST in India and submit GST Registration Certificate (with GSTIN) before execution of the Agreement.

LM shall be identified through Memorandum of Understanding (MoU) amongst the Associate(s). Bidder shall upload a "Memorandum-of-Understanding" (MoU) with his Associate(s)/ Consortium partner(s) as per format given in the Exhibit 2 of this bid document. This MoU shall be signed by all the Consortium partners, through their respective legally authorized signatories. This authorization by all Consortium partner/ authorization by Sole bidder shall be evidenced by uploading a Notarized Power of Attorney (PoA) as per Exhibit-3.

Before authorizing the LM, there should be a decision by the respective Board of directors regarding selection of LM in a duly convened meeting and evidence of the same shall be furnished along with Exhibit - 2.

10.0 ELIGIBILITY CRITERIA FOR BIDDING

The Technical Qualification Requirement (TQR) and Financial Qualification Requirement (FQR) of the Bidders and/or Associate(s) for coal Washery/CPP under "Build-Own-Operate" (BOO) concept should meet the qualifying requirement as stipulated hereafter. Any Associate including Lead member in consortium route shall not be a partner of another Bidder bidding for the same coal Washery/CPP. Further, any Bidder bidding on its own for a particular coal Washery/CPP shall not associate with other Bidder(s) for the same Washery/CPP.

Non-compliance of any of the eligibility criteria and terms and conditions of Bid document may lead to rejection of the offer.

10.1 Desired Profile of Bidders / Associates

The Bidder/ Associates shall be proprietary concern/ partnership firm/ body corporate/ companies registered under companies Act 2013 or any previous Company Law/ Act as applicable in India/Joint Venture/ Consortium (Associate) or equivalent in case of foreign bidder(s). In case of Joint Venture (JV) or consortium unless otherwise specified, all the partners shall be jointly and severally liable.

10.2 Desired Qualification Requirement of Bidders / Associates

10.2.1 Technical Qualification Requirement (TQR)

a) The Bidder/ Associate(s) shall have a proven track record of successful completion of setting up atleast one (single unit)Coal/ Mineral Beneficiation Plant of minimum 1.5 Mtpawith Jig/HM Separation/Spiral/Floatation technologiesand combination thereof in the last Ten years (from last day of the month previous to the one in which bid is invited),with a minimum experience of 06 (six) months of successful running of the plant fulfilling contract condition.

In respect of the above eligibility criteria the bidders are required to furnish the following information on-line in the Technical Parameter Sheet:

- a. Name of the Coal Washery/CPP/ Mineral Beneficiation Plant set up
- b. Material Handled
- c. Complete address of the plant
- d. Whether Coal Washery/CPP/ Mineral Beneficiation Plant is owned by bidder/Associate/Client
- e. Name of the Client (if owned by client, else N.A.)
- f. Ref. No. & Date of Award of Work (if owned by Client, else N.A)
- g. Whether the scope of work for the reference plant included Planning, Design &Engineering,Procurement,Construction & Erection, Commissioning
- h. Plant capacity (in tonnes per annum)
- i. Date of Commissioning of the plant
- j. Technology used in the referred plant (Jig/HM Separation/Spiral/Flotation/ combination thereof)
- k. Experience of operation and maintenance shall be evaluated at the rated capacity of the referred plant.
- I. Bidder/ Associate(s) should submit a certificate along with the contract document from their client or self certificate in case the plant is run by the Bidder/ Associate(s) himself that "Bidder/ Associate(s) has successfully operated the plant for a period of minimum 06(six) months as per terms and condition of the contract against which certificate has been issued".

OR

- b) The Bidder/ Associate(s) shall have the experience of operation and maintenance (O&M) of the Coal/ Mineral Beneficiation plant with Jig/HM Separation/Spiral/Flotation technologies or combination thereof of minimum 1.5 Mtpa capacity for a continuous period of minimum 2 years in the last 10 years (from last day of the month previous to the one in which bid is invited) with minimum 15,00,000 tonnes quantity of raw coal/mineral handled in each year.
- In respect of the above eligibility criteria the bidders are required to furnish the following information on-line in the Technical Parameter Sheet:
- a. Name of the Coal Washery/CPP/ Mineral Beneficiation Plant operated
- b. Material Handled
- c. Complete address of the plant
- d. Plant capacity (in tonnes per annum)
- e. Whether the scope of work for the reference plant included Operation and Maintenance of Plant
- f. Maximum Quantity of Raw Coal/ Mineral (Tonnes) handled by the plant in any two consecutive years during last 10 years.Quantity handled in every year of two consecutive years should not be less than 1500000 tonnes.
- g. Technology used in the referred plant (Jig/HM Separation/Spiral/Flotation/combination thereof)
- h. Experience of operation and maintenance shall be evaluated at the rated capacity of the referred plant.
- i. Bidder/ Associate(s) should submit a certificate along with the contract document from their client or self certificate in case the plant is run by the bidder himself that "Bidder/ Associate(s) has successfully operated and maintained the plant for a continuous period of minimum 2 years as per terms and condition of the contract against which certificate has been issued".

10.2.2 Desired Financial Qualification Requirement of Bidders / Associates

The Bidder in case of Sole Bidder Route and the Lead Member in case of Associate/ Consortium Route should have adequate financial capability in terms of working capital and in terms of net worth to meet the financial commitments commensurate with the scope of work. This financial capability of bidders shall be evaluated for those bidders who will continue to perform the obligations towards the execution of the subject work for the entire contract period, such as sole bidder or Lead Member in case of Consortium/ Associate Route. Financial qualification requirements (FQR) are detailed hereafter:

10.2.2.1 Net Worth

The bidder must have minimum net worth (as per last financial year previous to the one in which bid is invited) of Rs.30.00Crores. Audited balance sheet in support of Net Worth is required to be furnished by the bidder.

In case of Foreign Bidder if a documentary evidence for Net Worth is in Foreign Currency the same shall also be furnished in INR duly certified by appropriate authority considering the rate of conversion as prevailing on the date of the documentary evidences in foreign currency. In respect of the above eligibility criteria the bidders are required to furnish the following information on-line in the Technical Parameter Sheet:

i) Net worth of the bidder/ lead member for the year 2017-18 in INRalongwith the Name of Chartered Accountant/ Equivalent Authority and his membership number.

10.2.2.2 Working Capital

The bidder must provide evidence of possessing adequate working capital (issued maximum 90 days before e-Publication date of tender) of Rs.6.00 Crores for inclusive of access to lines of credit and availability of other financial resources to meet the requirement. A proper certificate in this regard shall be submitted from Bank/ Financial Institution/ Registered Chartered Accountant.

In respect of the above eligibility criteria the bidders are required to furnish the following information on-line in the Technical Parameter Sheet:

a) Amount possessed in form of working capital by the bidder/ lead member along with Ref No. and date of issuing authority.

- **NOTE** :1. Notwithstanding any pre-bid check on qualification, CCL reserves the right to undertake any post-bid verification and/ or evaluation of qualification of bidders as deemed necessary.
 - 2. Even though the bidders meet the above criteria, they are subject to disqualify, if they have a) Made misleading or false representation in the offer uploaded in the proof of Qualification requirement; and/or b) Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, or financial failures etc.

11.0 SUBMISSION OF OFFER

- a. In order to submit the offer, the bidders have to get themselves registered online on the e-Procurement portal (<u>https://coalindiatenders.nic.in</u>) with valid Digital Signature Certificate (DSC) issued from any agency authorized by Controller of Certifying Authority (CCA), Govt. of India and which can be traced up to the chain of trust to the Root Certificate of CCA. The online Registration of the Bidders on the portal will be free of cost and one time activity only. The registration should be in the name of bidder, whereas DSC holder may be either bidder himself or his duly authorized person which shall be evidenced by Exhibit 4. The enrollment on the portal must be in the name of Sole Bidder, if bidding in Sole bidder route or in the name of Lead member, if bidding in the Consortium/Associate Route.
- b. The bidders have to accept unconditionally the online user portal agreement which contains the acceptance of all the Terms and Conditions of bid document including conditions of Contract and other conditions, if any, along with on-line undertaking in support of the authenticity of the declarations regarding the facts, figures, information and documents furnished by the Bidder on-line in order to become an eligible bidder. No conditional bid/offer shall be accepted.
- c. Letter of Bid: The format of Letter of Bid (as given in Enclosure I of bid document) will be downloaded by the bidder and will be printed on Bidder's letter head and the scanned copy of the same will be uploaded during bid/offer submission in **Cover-**

1.This will be the covering letter of the bidder for his submitted offer. The content of the "Letter of Bid" uploaded by the bidder must be the same as per the format downloaded from website and it should not contain any other information.

The Letter of bid will be digitally signed by DSC holder and it does not require any physical signature. However, if the Letter of Bid (LoB) bears the physical signature in addition to the digital signature of DSC holder, it will be accepted without questioning the identity of person signing the Letter of Bid.

If there is any change in the contents of Letter of Bid uploaded by bidder as compared to the format of Letter of Bid uploaded by CCL with bid document, then the offer will be rejected.

- d. **Technical Parameter Sheet**: The Technical Parameter Sheet i.e. **TPS** containing the technical specification in Excel format along with qualification requirement will be downloaded by the bidder and will furnish all the required information in this **TPS** in the desired format. Thereafter, the bidder will upload the same **TPS** during bid/offer submission. Non-compliance of any specification parameter of any item will disqualify the bidder. The bidder whose**TPS** is incomplete and not submitted as per instruction given above will be rejected. The bidder shall be responsible for the authenticity and correctness of the information being submitted by him in the TPS and for this,bidder has to accept the provisions given in user portal agreement. Bidders have to upload all the confirmatory documents in support of his online submitted information in TPS in Cover-1 and Cover 2 (Qualifying Documentary Evidences, i.e., Exhibits and Technical Documentary Evidences, i.e., Appendices) as enlisted in Cl. No. 14.0 of this detailed e-tender notice.
- e. Price bid/offer: The Price Bid/offer i.e. BoQ containing the details of Washing Cost per tonne of raw coal (dry) will be in Excel Format and the same will be downloaded by the bidders. They will quote for all items on this BoQ. Thereafter, the bidder will upload the same BoQ during bid/offer submission in Part 2Cover 3. This file will be digitally signed and uploaded by the Bidder. Lowest bidder will be decided after evaluation based on Cost to Company as per predefined logic in the BoQ sheet.

"Cost to Company' shall mean the "Total Value (i.e. Base price + taxes and duties) quoted by the bidder" excluding "CGST & SGST or IGST, GST (Compensation to state) cess eligible for input tax credit".

The system will compute the amount of GST and GST (Compensation to State) Cess, as per the predefined logic in BoQ sheet.

The Price Bids/offers of the bidders will have no condition. The bidder whose**BoQ** is incomplete and not submitted as per instruction given above will be rejected. Any alteration/ modification in the excel format may lead to rejection of the bid.

NOTE:

i.The rate quoted by the Bidder shall be exclusive of CGST, SGST, IGST and GST (Compensation to state tax) cess and it should be strictly as per the format of BOQ.

ii. The Tax Invoice raised by the bidder must be in compliance of relevant GST Acts, rules & notifications made thereunder and should bear the GSTIN for the services to CCL. The rate and amount of CGST, SGST, IGST, and GST (Compensation to state) Cess, related to washing charge, shall be shown separately in tax invoice.

iii. The CGST & SGST, IGST and GST (Compensation to state tax) Cess, as applicable at the time of operation, shall be paid extra against submission of proper

Tax Invoice by WO, as referred above, so that CCL could be able to avail Input Tax Credit of such CGST, GST, IGST, GST (compensation to state) Cess reflected in the invoice.

iv. If CCL fails to claim Input Tax Credit (ITC) or the ITC claimed is disallowed due to failure on the part of WO of services incorporating the Tax Invoice issued to CCL in its relevant returns under GST, payment of CGST & SGST or IGST, GST (Compensation to State) Cess shown in Tax Invoice to the tax authorities, issue of proper tax invoice or any other reason whatsoever, the applicable taxes &cess paid based on such Tax Invoice shall be recovered from the current bills or any other dues of the WO along with interest, if any.

v. The payment of CGST & SGST or IGST and GST (Compensation to state) Cess by CCL to WO would be made only on the latter submitting a Bill/Invoice in accordance with the provision of relevant GST Act and the rules made thereunder and after online filing of valid return on GST portal. Payment of CGST & SGST or IGST and GST (Compensation to state) Cess is the responsibility of WO.

vi. In the event of any additional tax liability accruing on the WO due to classification issue or for any other reason, the liability of CCL shall be restricted to the amount of GST charged on the original tax invoice issued by the WO.

viii. **TDS:** The TDS, if applicable, shall be made at applicable rate from the payment made or credited to the WO.

- 12.0 All documents relating to the online Bid shall be in the English language. In case of other language, information shall have to be translated in English and to be certified/ authenticated. The offers along with all the supporting documents are to be submitted on-line on the website <u>https://coalindiatenders.nic.in</u>. No offer shall be accepted off-line.
- **13.0** It is 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-tender website. Under any circumstances, CCL shall not be liable to the bidders for any direct/indirect loss or damages incurred by them arising out of incorrect use of the e-tender system or internet connectivity failures.
- 13.(A)Provision of Public Procurement (Preference to Make in India Policy) -The provision of public procurement (Preference to Make in India) order 2017 will apply to this tender as detailed in Gol order no. P-45021/2/2017-B.E.-II dated 15th June 2017 for giving preference to "Make in India" Products (Copy Enclosed as Exhibit-10). Bidders are required to submit necessary certificates & documents as detailed in the above referredGol order in support of their claim to avail benefit against this order.

14.0 The scanned copy of following documents will be uploaded by the bidder while submitting bid online:

	PART-1 (COVER-1)					
SI. No.	Particulars	Scanned copy of documents to be uploaded by bidder in support of information/ declaration furnished online by the bidder against Eligibility Criteria (CONFIRMATORY DOCUMENT)				
1	Letter of Bid [Ref.Cl.No.11(c) of this detail e-tender Notice]	Letter of bid on Bidder's letter head as per Format given in the bid document (As per Enclosure I) .				
2	Profile [Ref.Cl.No. 9.3 and 10.1 of this detail e- tender Notice]	The bidder and Associate(s) has to furnish details as per Exhibit 1 along with the documentaries evidences for items mentioned therein.				
3	Goods and Service Tax[Ref. Cl.No. 9.1 and 9.3 of this detail e-tender Notice]	The following documents establishing the status of bidder w.r.t GST as declared by Bidder in the BOQ sheet:				
		a) Status: GST registered Bidder -				
		GST Registration Certificate issued by appropriate authority. b) Status: Foreign Bidder -				
		A declaration stating therein that if the work gets awarded to them then they shall get themselves registered under GST in India and shall submit the GST Registration Certificate (with GSTIN) before execution of the Agreement.				
4	Route of bidding, Role of Bidder & their Percentage Stake [Ref.Cl.No.9.2 and 9.3 of this detail e-tender Notice]	 a) For Associate/Consortium route: Memorandum of Understanding with Associates, in case of Associate/ Consortium route of bidding as per Format given in the bid document (As per Exhibit 2). Along with evidence of the decision taken by the respective Board of directors regarding selection of LM in a duly convened meeting 				
		or				
		b) For Sole Bidder: Furnish the same as "Not Applicable"				
5	Power of Attorney [Ref.Cl.No.9.3 of this detail e-tender Notice]	Power of Attorney as per Format given in the bid document (As per Exhibit 3) .				
6	Letter by Parent Company [Ref Cl.No. 9.1.2 of this detail e- tender Notice]	 a) For Subsidiary Company whose consolidated financial report is prepared by the parent company showing information/ net worth of subsidiary/ entity(ies) separately: Letter by the Parent Company to that effect as per Cl.No. 9.1.2 of this detail e-tender Notice of Bid document (As per Exhibit 5) 				

		or	
		b) For others : Furnish the same as "Not Applicable"	
7	Undertaking by Holding Company/JV Partners [Ref Cl. No. 9.1.1 and 9.1.2 of this detail e- tender Notice]	 a) For Subsidiary Company/JV Company bidding on the strength of Holding Company/JV Partners: Undertaking by Holding Company/JV Partners as per Cl.No.9.1.1 and 9.1.2 of this detail e-tender Notice of Bid document (As per Exhibit 6) 	
		 b) For others : If not bidding on the strength of Holding Company/JV Partners: Furnish the same as "Not Applicable" 	
8	Technical Qualification Requirement [Ref. Cl.No. 10.2.1 of this detail e- tender Notice]	Affidavit on Non-Judicial Stamp Paper regarding correctness of information, furnished w.r.t Technical Qualification Requirement, online in the Technical Parameter sheet (As per Exhibit – 7).	
		The foreign bidders should submit this Affidavit duly vetted/endorsed by the relevant* Embassy/ High Commission concerned.	
		*Relevant Embassy/High Commission means the Embassy/High Commission in INDIA of the Country where the referred plant has been set up/operated or Country of origin of the bidder	
9	Financial Qualification Requirement [Ref.Cl.No.10.2.2 of this detail e-tender Notice]	Sole Bidder or Lead member of consortium to furnish details as per Exhibit - 8 along with documentaries evidences for Net worth& Working Capital as mentioned therein.	
		The foreign bidders should submit evidence of Net worth and Banker's Certificate regarding availability of access to credit (issued maximum 90 days before e-Publication date of tender) for Working capital duly vetted/endorsed by the relevant* Embassy/ High Commission concerned, towards authenticity of document (As per Exhibit-8).	
		*Relevant Embassy/High Commission means the Embassy/High Commission in INDIA of the Country where the bidder has obtained evidence of net worth or Country of origin of the bidder.	
10	Integrity Pact [Ref.Cl.No.34 of this detail e-tender Notice]	Duly signed and witnessed Integrity Pact as per Format given in the bid document (As per Enclosure - IV) . This should be signed by the bidder alongwith all the consortium partner, if any, through their respective legally authorized signatories	
11	Authorization for Digital Signature Certificate [Ref.Cl.No.11(a) of this	 a). If the bidder himself is the DSC holder bidding on-line then self declaration of the bidder to this effect (As per Exhibit – 4). OR 	

	detail e-tender Notice]	b). if the DSC holder is bidding online on behalf of the bidder then the Power of Attorney or any sort of legally acceptable document for authorization to submit bid on behalf of the bidder (As per Exhibit – 4).		
12	UNDERTAKING	An UNDERTAKING is to be given on Bidder's letter head as per the format given in the bid document (As per Exhibit -9). Undertaking is about the genuineness of information furnished online, authenticity of scanned copy of documents uploaded and about other commitments.		
13	Mandate Form	As per Enclosure-III (for electronic fund transfer / internet banking payment)		
14	Provision of Public Procurement (Preference to Make in India Policy)	Necessary document in support of Make in India as per Exhibit-10		
PART-1 (COVER-2)				
1	Appendix 1	BROAD PARAMETERS		
2	Appendix 2	 A. Description of Washing Scheme alongwith Flow Diagram B. Detailed Work Programme 		
3	Appendix 3	 A. Technical Details of Main Mechanical & Electrical Equipment B. Details of Civil Buildings & Structurals 		
4	Appendix 4	A. Details of Requirement of ElectricityB. Details of Requirement of Water		
5	Appendix 5	List of the recommended spares & critical spares as per Cl No. 4.32 of Section 4 of Bid document		
Note: Only one file in .pdf format can be uploaded against each eligibility criteria. Any additional/other relevant documents to support the information/declaration furnished by bidder online against eligibility criteria may also be attached by the bidder in the same file to be uploaded against respective eligibility criteria.				
Strict adherence to formats, wherever specified, is required. Non-adherence to formats may be a ground for declaring the Offer non-responsive & liable for rejection.				

15.0 EXTENSION OF TIME SCHEDULE OF TENDER:

15.1 The employer may extend the deadline for submission of bids by issuing a corrigendum in accordance with provisions of e-tender notice, in which case all rights and obligations of the employer and the bidders previously subject to the original deadline will then be subject to the new deadline.

15.2 If the number of bids received online is less than three on the end date of bid submission then the bid submission end date, bid opening date and date of Reverse Auction (which is same as bid opening date) will be automatically extended by the System, initially for a period of two days ending at 17:00 hrs and if the number of bids still remains less than three then for another five days ending at 17:00 hrs. This will be reflected in the portal after midnight i.e. start of the next day.

If any of the above extended dates falls on holiday i.e. a non-working day as defined in the e-procurement portal the same is to be rescheduled in the next working day.

In case number of bids received is still less than three, the offers received will be opened. If no offer is received even after second extension the tender will be cancelled.

16.0 OPENING OF BIDS:

Offers [Part - 1(Qualification-cum-Technicalbid) and Part -2 (Price-bid/BoQ)] will be decrypted and opened online by the Bid Openers with their Digital Signature Certificate (DSC) on the pre-scheduled date & time of tender opening.

The e-Procurement system will evaluate the Technical bids automatically on the basis of relevant data provided by the bidder while submitting the bid online. If the parameters furnished by bidder online in an objective and structured manner does not conform to the required eligibility criteria as specified in the Detailed e-Tender Notice, the bid will be automatically rejected by the system and the Price-bid of such bidders shall not be opened by the system.

17.0 REVERSE AUCTION PROCESS (RAP)

- i. After opening of price bid, e-Reverse auction will be initiated on the prescheduled date & time as mentioned in detailed e-tender Notice (Clause No. 2). However, H1 bid will be eliminated during Price Bid Opening, if more than three techno-commercially bids are available as per the evaluation done by the system and such bidder will not be allowed to participate in reverse auction. If two or three bidders have quoted same H1 landed cost (i.e. Cost to Company), the bidder(s) who submitted/frozen the bid later shall be rejected and will not be allowed to participate in Reverse Auction.
- ii. The start bid price for reverse auction shall be the "Cost to company", as per quoted price of L1 bidder and computed by an in-built pre-defined business logic incorporated in the BoQ in accordance with Cl. No. 11(e) of Detailed e-Tender notice of bid document.
- iii. Bidders will quote the value of "Cost to company" in accordance with Cl. No. 11(e) of Detailed e-Tender notice of bid document
- iv. The Reverse Auction will be conducted on the "Cost to company".
- v. Break up of "Cost to Company" quoted by the bidder(s) in the Reverse Auction will be arrived by the Company by reducing each component in the same

proportion i.e. ratio of Cost to Company quoted in the reverse auction to "Cost to company", as per quoted price of same bidder and computed by an in-built pre-defined business logic incorporated in the BoQ submitted by the same bidder along with the initial offer and the same will be binding on the bidder. The detailed Break-up of "Cost to company" so arrived for the bidder(s) shall be considered and Order, if placed, shall be with the same break-up of Prices.

- vi. The decrement value will be 0.5% of the start bid price (rounded off to nearest Rupee) with minimum of INR 1.00 as reflected on the e-Reverse Auction platform. The reduction in Cost to Company to be quoted by bidder during e-Reverse auction shall have to be made as per decrement value or in multiple thereon. The maximum seal percentage in one go shall be fixed as 2% over and above existing normal decrement of 0.5% i.e. total 2.5% of Start Bid Price/last quoted price during reverse auction, whichever is lower. The Start bid price and decrement value for quoting of "Cost to company" shall be displayed on the Reverse Auction Platform.
- vii. Initial period of reverse auction will be two hours. There will be auto extensions of time by ten minutes in case of any reduction recorded in the last ten minutes. The reverse auction will come to a close only when there is no further reduction recorded in the last ten minutes slot.
- viii. System will protect bid and bidder information till auction gets over and displays current L1 price to the bidder at the time of reverse auction. The system will provide the bidder details along with the bid document at the end of the reverse auction process.
- ix. If a bidder does not submit his bid in the reverse auction, the price quoted by him in the price bid 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 the reverse auction or the price quoted in the price bid, whichever is lower.
- x. Only the chronologically last bid submitted by the bidder till the end of auction shall be considered as the valid price bid of that bidder. Any bid submitted earlier by the bidder prior to submission of his last bid will not be considered as the valid price bid.
- xi. Server time shall be the basis of start time and closing time for bidding and shall be binding for all. This would be visible to all concerned.
- xii. On expiry of the closing of the auction, bid history showing all the last valid bids offered along with name of the bidders shall be published. All bidders shall have the facility to see and get a print of the same for their record.
- xiii. 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 CCL will form a binding contract between CCL and the bidder for entering into a contract.
- xiv. 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.
- xv. If the lowest price received during reverse auction is unreasonable or it is unacceptable on ground of being too high or too low, 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.

- xvi. In case of disruption of service at the service provider's 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 process will start all over again. In such a situation, the last recorded lowest price of prematurely ended RAP, will be '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.
- xvii. Disruption and restarting of e-RAP will be intimated to all the bidders through system/SMS/e-mail through e-Procurement portal automatically. All the time stipulations of normal RAP will be applicable to the restarted RAP.

18.0 EVALUATION OF BID

The Company will examine the uploaded documents against information/ declarations furnished by the L1 bidder after reverse auction online. If it conforms to all of the information/declarations furnished by the bidder online and does not change the eligibility status of the bidder then the bidder will be eligible for issue of 'Letter of Intimation (LoI) in line with the provisions of bid document.

In case CCL finds that there is some deficiency in uploaded documents or documents have not been uploaded by L1 bidder then the same will be specified online by CCL clearly indicating the omissions/shortcomings in the uploaded documents and indicating start date and end date allowing maximum 2 chances, each of 10 x 24 hours duration for online re-submission by L1 bidder. The L-1 bidder will get this information on their personalized dash board under "Upload confirmatory document" 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 dash board regularly after opening of bid. 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.

The bidder will upload the scanned copy of all those specified documents in support of the information/ declarations furnished by them online within the specified period of initial 10 (ten) days' timeas above and if the uploaded documents still contain some deficiency, additional time of 10 days (10 x 24 hours) shall be given to the L-1 bidder for re-submission, indicating start date and end date for re-submission of such document/s.

No additional time will be allowed to the bidder for on-line submission of documents.

The offer will be evaluated on the basis of documents uploaded by L-1 bidder online. The L-1 bidder is not required to submit hard copy of any document through offline mode. Any document submitted offline will not be given any cognizance in the evaluation of offer.

In case the L1 bidder submits requisite documents online as per bid document, then the bidder shall be intimated and subsequently awarded as per provision of bid document.

In case the L-1 bidder fails to submit requisite documents online as per the bid documentor if any of the information/declaration furnished by L-1 bidder online is found to be wrong by CCL during evaluation of scanned documents uploaded by bidder, which changes the eligibility status of the bidder, then his bid shall be rejected and EMD of L-1 bidder will be forfeited.

In such case, the documents of the next lowest bidder shall be downloaded for evaluation and short fall documents will be obtained if required from the L-2 bidder in the manner described for L-1 bidder. This process shall be repeated till the work is either awarded or all the eligible bidders are exhausted.

Note: The penal provisions will be squarely applicable to all those firms whose documents are examined and found to be inadequate on account of treating them as L1 successively.

19.0The techno commercially accepted L1 Bidder will be notified about acceptance of its bid through Lolonly after the project is found viable with his offer. The Evaluation of the viability of the project and Identification of Customer for Washed Coal shall be done within 3 months. The viability of the project shall be based on the washing charges quoted by the L-1 bidder after completion of reverse auction, yield of washed/clean coal at 5 to 6% reduction of supplied raw coal ash (adb)as per Cl 3.9 of Section -3 of this Bid Document and other related expenditure of CCL on this account. The techno commercially accepted L1 Bidder shall provide necessary assistance to the Company in obtaining Environmental Clearance.LoA(Letter of Acceptance/Award) will be issued after obtaining EC by CCL and transferring the same in the name of the successful bidder.

Preferred Bidder shall:

- a. accept the Letter of Award (LOA), submit the Security Deposit (SD) within a week after receipt of Letter of Award (LOA) and before signing of the Contract
- b. On receipt of Letter for Acceptance (LOA)/ Work Order of the tender issued by the Company, the 'Preferred bidder' shall execute contract agreement in the company's prescribed format for the due fulfillment of the contract. Failure to enter into the required contract within the specified period shall entail cancellation of LOA/work order and forfeiture of the Bid security/ Security Deposit. The written contract to be entered into between the Preferred Bidder and the Company, shall be the foundation of the rights of both the parties and the contract shall not be deemed to be executed until the contract is signed by both the parties i.e. the Preferred Bidder and the Company.

20.0 REFUND OF BID SECURITY/ EMD

- a. If Bid Security is paid by the bidder in online mode (Direct Debit/ NEFT) then the Bid Security of rejected/unsuccessful bidders (except the bidders whose Bid Security is to be forfeited) at any stage will be refunded directly to the account from where it has been received.
- b. No claim from the bidders will be entertained for non-receipt of the refund in any account other than the one from where the money is received.
- c. If the refund of Bid Security is not received by the bidder in the account from which the Bid Security has been paid due to any technical reason then it will be paid through e-payment. Bidder shall have to submit Mandate Form (Ref. **Enclosure-III** of bid document) for such e-payment.
- d. In case the tender is cancelled then Bid Security of all the participating bidders will be refunded unless it is forfeited by CCL/ department.
- e. If the bidder withdraws his/her offer online (i.e. before the end date of submission of offer) then the Bid Security will be refunded automatically after the opening of Bid.
- f. Bid Security of selected bidder (on Award of Contract) will be returned by CCL after signing of the contract and also after receipt of Security Deposit.

g. Bid Security of bidder will not carry any interest during the period of retention in CCL.

21.0Every bidder is expected, before quoting his rates, to go through the requirements of materials/workmanship under specification/requirements and conditions of contract and to inspect the site/area of the proposed work at his own cost.

It shall be deemed that the bidder has visited the site/area and got fully acquainted with the working conditions and other prevalent conditions and fluctuations thereto whether they actually visited the site/area or not and have taken all the above factors into account while quoting his rates.

22.0 COST OF BIDDING: The bidder shall bear all costs associated with the preparation and submission of his offer and the Employer will in no case be responsible and liable for those costs.

23.0The bidder shall closely study all specifications in detail, which govern the rates for which he is tendering.

24.0 CURRENCY: Bidder shall offer rates in INR only. This shall be applicable for bidding as well as for payment.

25.0The work should be completed within the stipulated period which shall be reckoned from the next day of executing agreement or handing over of the site, whichever is later.

26.0The bidder(s) will deploy sufficient number and size of equipment/ machineries/ vehicles and the technical/ supervisory personnel required for execution of the work.

27.0 CHANGE IN CONSTITUTION OF THE CONTRACTING AGENCY

Prior approval in writing of the company shall be obtained before any change is made in the constitution of the contracting agency, otherwise it will be treated as a breach of Contract.

28.0Canvassing in connection with the offers in any shape or form is strictly prohibited and offers submitted by such bidders who resort to canvassing shall be liable for rejection.

29.0 BID VALIDITY

The validity period of the tenders shall be **480 (FourHundred Eighty)** days from the end date of bid/offer submission or extended date of bid submission end date, whichever is later.

In exceptional circumstances, prior to expiry of the original time limit, CCL may request the bidders to extend the period of validity for a specified additional period. CCL's request and the bidder's responses shall be made in writing. A bidder may refuse the request without forfeiting his bid security. A bidder agreeing to the request will not be required or permitted to modify his offer but will be required to extend the validity of his bid.

The bidder shall not, during the said period or within the period extended by mutual consent, revoke or cancel his offer or alter the offer or any terms/conditions thereof without consent in writing of the Company. In case the bidder violates to abide by this, the Company will be entitled to take action as per **Clause No.30**(Modification and Withdrawal of Offer) of bid document.

30.0 MODIFICATION AND WITHDRAWAL OF OFFER:

Modification of the bid submitted shall be allowed online only before the deadline of submission of offer and the bidder may modify and resubmit the bid online as many times as he may wish. Bidders may withdraw their bids online within the end date of bid submission and their Bid Security will be refunded. However, if the bidder once withdraws his bid, he will not be able to resubmit the bid in that particular tender. For withdrawal of bid after the end date of bid submission, the bidder will have to make a request in writing to the Tender Inviting Authority. Withdrawal of bid may be allowed till issue of work order/LOA with the following provision of penal action:

- a) The Bid Security will be forfeited and
- b) The bidder will be debarred for 1(One) year from participating in tenders in CCL.

The Price-bid of all eligible bidders including this bidder will be opened and action will follow as under:

- 1. If the bidder withdrawing his bid is other than L 1, the tender process shall go on.
- 2. If the bidder withdrawing his bid is L-1, then re-tender will be done.

(The penal action as per clause (a) & (b) above will be enforced from the date of issue of such order)

31.0CCLreserves the right to change the date of receipt and opening of tenders or to cancel the tenders without assigning any reason whatsoever.

32.0CCL does not bind itself to accept the lowest offer and reserves the right to reject any or all the offers without assigning any reasons whatsoever.

33.0The laws applicable to this contract shall be the laws in force in India. Matter relating to any dispute or difference arising out of the current tender process and subsequent Contract entered shall be subject to the jurisdiction of Ranchi Court Jharkhand only.

34.0 INTEGRITY PACT: All the bidders submitting their offers are accepting the Integrity Pact as given in the Enclosure -IV of this bid document through the User portal Agreement. The bidders are requested to go through the integrity pact, which is a part of the bid document. Bidders shall upload the Integrity Pact duly signed by bidder along with all the Consortium partners, if any, through their respective legally authorized signatories. The following have been nominated as Independent External Monitor (IEM) for this Bid:-

Name	Address	Contact number/email
Sri Chaman Kumar, IAS (retd.)	Bungalow No- 80, New MotiBagh, New Delhi- 110023	09818330862 chaman.kumar51@gmail.co m
Dr. B.P Nilaratna, IAS(retd.)	D-II/15, Pandara Road, New Delhi-110003	09810614775 dr.b.p.nilaratna@gmail.com

35.0CCL reserves the right to change, modify, add or alter the bidding process at any stage under intimation to all the bidders.

General Manager (Washery), CCL

(Tender Inviting Authority)

SALIENT FEATURES OF 'BOO' CONCEPT

Salient features and mode of development of the Washery/CPP under Build-Own-Operate (BOO) are mentioned hereunder:

i. Finance

Financing of the project shall be done as follows:

- a) Sole Bidder Route of bidding: 100% by the selected Bidder
- b) Associate/Consortium Route of bidding: At least 26% of the project by each Associate totaling to 100%.

ii. Technology & Capacity

The Washery/CPP shall be built, owned and operated by the successful bidder alias the Washery/CPP Operator (WO), who will enjoy the freedom of selection of technology, type & design of the plant with zero effluent discharge and also operation and maintenance of the plant, subject to various statutory & regulatory provisions, as prevalent in India, environmental regulations and safeguards as per norms etc. The plant shall be capable of efficient performance with the throughput capacity.

iii. Environment/ Statutory & Regulatory Clearances

Obtaining all necessary statutory/ regulatory and other clearances etc. prevalent in the country barring Environment Clearance and Forest Clearance shall be the responsibility of WO. CCL shall be responsible for obtaining Environment Clearance and Forest Clearance but WO shall give necessary assistance/support to CCL in this regard and be involved actively in the process as necessary. However, compliance of EC regulations and other statutory & regulatory clearances during the entire period of contract or extension, if any, shall be the responsibility of WO and for this purpose, any information/data required from CCL, if available, will be provided to the WO.

iv. Raw Coal Supply

Assured supply of raw coal of size -1000 mm of specified quality & quantity by CCL by road on mutually agreed basis as per the Monthly Scheduled Quantity (MSQ) determined at the beginning of each year and receipt of the same by WO at the Washery/CPP end. Weighment of raw coal will be done at mine end and the same will be considered as raw coal supply to the WO.Details are given at Cl. No. 1.21 of Project Outline of this bid document.

v. Washed Coal Delivery & Despatch

Assured supply of washed coal of specified quality & quantity to the consumer(s) of the Coal Co. (CCL) only through designated delivery places i.e. Railway wagons.Details regarding washed coal is given under the heading 'Broad Parameters' at Cl. No. 1.21.

Details regarding Washed coal Delivery & Despatch are given under the clause No. 1.5 of this bid document.

vi. Ownership of Raw Coal and Products (washed Coal & Rejects)

Ownership of raw coal and its products (washed coal, rejects, slurry, if any, etc.) shall remain with CCL. The WO shall wash the raw coal provided by CCL only.

vii.Washing Charges

The WO shall be paid agreed washing charges. The washing charge is to be quoted by the bidder in terms of per tonne of raw coal processed on 'dry basis'. To arrive at the quantity of raw coal processed ('dry basis'), the quantity of washed coal loaded into the wagons ('dry basis') shall be divided by the practical yield ('dry basis'). The details are given in Section 1.

The washing charges covers the cost for receiving & storage of raw coal, sizing & crushing, beneficiation, storage of products, handling of rejects and reclamation, if any etc.Suitable weighing arrangements shall be provided by the WO.

The washing charges shall also cover the cost for disposal of rejects from the Washery/CPP as per Cl. No. 1.17 as well as cost of handling & disposal of slurry, in case slurry is generated during beneficiation/ washing.

This washing charge consists of two parts viz. 'base price' and 'taxes & duties'. Base price does not include taxes & duties. Taxes & duties as applicable shall be reimbursed separately to the WO.

viii. Site

For construction of the Washery/CPP/CPP, 24.00 Ha land will be provided by CCL on lease rent basis to be paid at prevalent rate (the indicative land lease rent is ₹16.73/m2/year as on 14.08.2018 with annual escalation of 7% on previous year's rate) as shown in enclosed Drawing.

CCL shall pay all taxes and impositions, as applicable in respect of the said land including the enhancement of rates and taxes payable either to the Panchayat/ Municipality/ Government.

ix. Disposal of Reject as Second Product

The coal company (CCL) is the sole owner of the rejects produced from the Washery/CPP.

Rejects produced from the plant shall be dumped separately at the identified reject site by the coal company. WO shall keep provision for storage of rejects as per the norms of the Environment Management Plan (EMP) duly approved by the State/Central and other agencies concerned at the identified reject site. The dumping site shall be provisioned by WO with PCC platform, fencing, lighting, dust suppression, garland drain etc. to collect surface runoff and arrangement for its treatment for further use/ disposal as per approved EMP. The WO shall also be responsible for safety and security of 2nd Product stacked in dumping site.

If the Coal Company (CCL) desires, the reject may be sold through e-auction.

x.Safeguards to be ensured by the Washery/CPP Operator

- i) Quantity of Products shall match with the quantity of raw coal supplied to the WO during a specified period, to be calculated on dry basis.
- ii) Consistent specified quality of washed coal in terms of ash and moisture as specified in bid document.
- iii) The yield of washed coal shall commensurate with washability characteristics (considering organic efficiency of the overall system also) of raw coal keeping the quality of washed coal fixed i.e. within the specified ash/ moisture range.
- iv) The organic efficiency of the overall system shall not be less than 95%. The technology giving overall organic efficiency less than 95% will not be acceptable.
- v) Capacity of the plant shall be in terms of raw coal throughput (on 'as-received-basis') per annum.
- vi) The WO shall have to keep raw coal storage facility at least of half day requirement.
- vii) The WO shall also have to keep covered storage facility for washed coal at least of one day production.
- viii) All allied facilities such as stores, laboratory, workshop, etc shall be considered for establishment within the Washery/CPP premises.
- ix) The technology offered by the bidder shall be environment friendly in all respect along with zero effluent discharge from Washery/CPP premises.
- x) The technology offered by the bidder shall be accepted with reference to the above safeguards and capacity of the plant only.
- xi) The WO shall not wash raw coal of any other customer in thisWashery/CPP (the 4.0 MtyAshokWashery/CPP).

SECTION : 1 PROJECT OUTLINE

1.1 INTRODUCTION

CCL intends to set up Ashok Coal washery/CPP of 4.0 Mty capacity at Ashok Opencast Project of Ashok Block with raw coal linkage from Ashok Opencast Project and similar grade raw coal from neighbouring mineson Build-Operate-Own (BOO) concept through reputed, experienced and potential washery operator. The assured raw coal throughput capacity of the washery shall be 4.0 Mtyof raw coal on "arb" (as received basis).

The expected monthly average ash content of Raw Coal is around 38.6% (adb) and likely average moisture content is 6.0 % (arb) on day-to-day basis. However, the total moisture content in raw coal may vary within a range between 5.2% &6.8% on day-to-day basis.

The Washery/CPP will be designed to produce two products viz. Washed Coal & Rejects. Description of washing scheme shall be furnished by the bidder as **Appendix – 2**. The bidder shall also furnish the list of major P&M items and Civil & Structural works as per **Appendix – 3**.

1.2 WASHERY/CPPPRODUCTS

The Washery/CPP will be designed to produce two products viz. Washed Coal & Rejects as elaborated hereafter:

I. Washed Coal

Washed coal (beneficiated coal + untreated fraction, if any) with monthly average target ash (i.e. Reduction of monthly average ash of supplied raw coal by 5 to 6% on adb) and total average moisture content not exceeding 11% (day-to-day basis) shall be produced.

Control of total moisture is an extremely important parameter besides reduction of ash as indicated above. Therefore, the washing approach has to be such that the total moisture of washed coal does not exceed 11%.

II. Rejects

Washing scheme shall take care of the ash content of the reject and it shall be as high as possible but not less than 60%. WO shall arrange transportation of Washery/CPPrejects through Belt conveyor(s) to the temporary reject storage site, within the proposed Washery/CPP site.

III. Slurry

Slurry, if produced, shall either be handled separately or mixed with suitable product in consultation with the Coal Company (CCL) depending upon its quality.

IV. Others

Indenting of railway wagons shall be the responsibility of WO in consultation with CCL.

1.3 SUPPLY OF RAW COAL

Assured supply of run-of-minecoal of specified quality & quantity by CCL through dumpers. The receiving arrangementof the same for feeding tothe Washery/CPP is to be done by WOalong with weigh-bridge at suitable place.

Weighment of raw coal will be done by weighing arrangement installed at mine endand the same will be considered as raw coal supply to the WO.

Calibration of all different types of weighing system used in the project shall be carried out as per standard norms.Details regarding raw coal is given under the heading 'Broad Parameters' at Cl. No. 1.21.

1.4 STORAGE OF RAW COAL

WO shall provide storage facility for raw coal with rehandling arrangement in the Washery/CPP premises so that it can receive raw coal even when the plant is not operating and the same shall be used when there is short/ no supply of raw coal from mines. The storage capacity shall be at least of half day requirement (6000 tonne).

1.5 WASHED COAL DELIVERY & DESPATCH

Assured supply of washed coal of specified quality & quantity to the consumer(s) of the Coal Co. (CCL) only through designated delivery places i.e. Railway wagons/Trucks/Tippers/ belt conveyors. Details regarding washed coal is given under the heading 'Broad Parameters' at Cl. No. 1.21.

For arrangement of transportation of Washery/CPP products to railway siding, CCL will float separate tender as per methodology of CMC department to discover the transportation charges and transporter. The selected transporter will be under administrative control of the WO as such an Administrative charge will be paid @5% of transportation and wagon loading charges to prevent pilferage and to ensure quality of Washery/CPP products transported from Washery/CPP to the loading point. If WO fails to ensure the quality at the loading point, penalty will be applicable as indicated in the existing bid document.Further, as per transportation contract clause, loss/pilferage arrived at with difference in two weighments, penalty will be imposed on the Transporter. This will be determined on monthly basis.Suitable clauses in line with this, which will be incorporated in the Transportation Tender, shall be as follows for understanding of the probable bidders if at all required:-

A Tripartite agreement will be made between CCL, Washery/CPP Operator and the Transporter carrying Washery/CPP products from Washery/CPP end to Loading end and loading into the Railway wagons.

The Transporter will be under the administrative control of Washery/CPP operator.

Provision to be made by WO for loading of reclaimed Washery/CPP product directly into trucks/ tippers without use of Earth moving loading machines for transportation to siding.

For any shortfall quantity in transportation of Washery/CPP products, the transporter will be penalized as per terms and condition of NIT and the penalty so imposed will be adjusted from the bills to be paid to the transporter by CCL as per the quantity certified by the Washery/CPP operator(WO) and CCL.

The Washery/CPP operator will be responsible for any deductions on account of quality of the Washery/CPP products and such deductions to be realized by CCL from the bill, be paid to the Washery/CPP operator.

Deductions on account of under loading and demurrage of railway wagons shall be borne by the transporter carrying washery products from washery to railway siding and loading into railway wagons without any financial or any other liability to CCL on account of this. (II) However, as the responsibility of delivering the quality of washed coal into railway wagon lies with the WO, the WO will have therefore right to recommend cancellation of transportation contract to CCL for the poor performance (quality or quantity) of the transporter and CCL will agree to such recommendation of WO and terminate the contract as per terms and conditions of NIT. In case of such termination, the WO may deploy his agency for remaining period of transportation & loading contract for transportation of such washed coal from Washery bunker to loading point but the rate of transportation to be paid to the washery operator will be the same as was discovered in the open tender for the defined route. In such case, 5% administrative charges will not be paid to WO.

(III) WO, if desires, may participate in transportation & loading tender through himself or through partnership/ Joint Venture subject to meeting the eligibility criteria of transportation tender. If the WO participates himself or through partnership/ Joint venture and declared Lowest Bidder and considered for award of work, no administrative charges (@ 5%) as specified above will be payable to him.

In both the cases i.e. (II) and (III) for quality and quantity the washery operator will be responsible.

Further, deductions on account of under loading and demurrage of railway wagons shall be borne by the transporter carrying washery products from washery to railway siding and loading into railway wagons without any financial or any other liability to CCL on account of this in both the cases i.e. (II) and (III).

1.6 STORAGE OF WASHED COAL

The WO shall provide covered storage facility for washed coal with suitable reclamation arrangement. The storage capacity shall be at least of one day production or one rake capacity whichever is more (capacity atleast 10000 tonne).

1.7 POWER SUPPLY

1.7.1 **Power Supply during Construction:** CCL will provide electric power as required for construction of Washery/CPP from 440V line of BarwaTola at a distance of about 1.5 km from the proposed Washery/CPP site on chargeable basis. However, drawl of power from the available source shall be the responsibility of the WO.

- 1.7.2 **Power Supply during Operation:** WO shall have to arrange/tap power from 33kV DVC North Karnapura substation, which is at distance of about 4 km from proposed Ashok Washery site. However drawl of power shall be responsibility of WO with due permission and Power Purchase Agreement with DVC.
- 1.7.3 Provision for DG Set as standby power supply system for critical equipment/ system shall be kept by WO.
- 1.7.4 Requirement of power during construction & operation shall be furnished as per the Format enclosed as Appendix 4.

1.8 WATER SUPPLY

- 1.8.1 CCL will provide water required for construction of Washery/CPP. The source of water will be Discharge of Ashok OCP at a distance of about 5-6 km from the Washery/CPP site on payment basis.However, drawl of water from the identified source shall be responsibility of the WO.
- 1.8.2 CCL shall provide to the WO the required amount of water for operation of the coal Washery/CPP on chargeable basis. However, drawl of water from the identified source shall be responsibility of the WO.

Source of water for operation of plant shall be the Discharge of Ashok OCP at a distance of about 5-6 km from the Washery/CPP site.WO shall have to lay pipelines and construct pump house with necessary pumps &fittings for integrated system of drawl of water from the identified source to the Washery/CPP. Arrangement of power for pumping water shall be the responsibility of WO.

Requirement of water during construction & operation shall be furnished in Appendix – 4.

1.9 RAILWAY SIDING

Nearest Railway siding from the proposed Washery/CPP site is Rajdharrailway siding located at a distance of about 7-8kms. Washed Coal from the proposed Washery/CPP will be transported and loaded into wagons by the transporter identified by CCL through separate bidding. The transporter will be put under the administrative control of WO for maintaining the quantity and quality of washed coal. WO will be paid 5 % of the transportation cost by CCL for administering transportation and loading into wagons without any pilferage.

Maintenance & up keeping of the Railway siding shall be the responsibility of CCL and all expenditure on this account shall be borne by CCL.

Indenting of Railway wagons shall be done by WO in consultation with CCL.

1.10 EMP AND OTHER STATUTORY & REGULATORY CLEARANCES

Obtaining all necessary statutory/ regulatory and other clearances etc. prevalent in the country barring Environment Clearance and Forest Clearance shall be the responsibility of WO. CCL will give necessary assistance/ support to the WO to the extent possible.

CCL shall be responsible for obtaining Environment Clearance and Forest Clearance but WO shall give necessary assistance/support to CCL in this regard

and be involved actively in the process as necessary. However, compliance of EC regulation and other statutory & regulatory clearances during the entire period of contract or extension, if any, shall be the responsibility of WO and for this purpose, any information/data required from CCL, if available, will be provided to the WO.

1.11 PRODUCT SIZE

The top size of all the products shall be maximum 50 mm irrespective of any washing scheme.

1.12 QUANTITY/ WEIGHMNET, MONITORING & RECORDING

For keeping a record of raw coal supplied, raw coal washed, washed coal & rejects produced/ dispatched on hourly/ daily basis, suitable no. of electronic weighment system with accuracy within BIS limits with computer display, memory storage & print out facility shall be provided at suitable locations in the Washery/CPP. The weight of washed coal as loaded into the Railway wagons shall be signed jointly by representatives of both the WO & CCL and shall be considered as final washed coal supplied to CCL.

1.13 QUALITY MONITORING CONTROL& RECORDING

- 1.13.1 Facilities for sample collection and adequate number of automatic samplers complete with all required accessories shall be provided by the WO at all relevant points where quality parameters are required to be determined for raw coal received, washed coal and rejects produced from the Washery/CPP. The provision of required infrastructure for sampling and testing as per BIS norms will be the responsibility of the WO. The samples collected shall be jointly signed and sealed.
- 1.13.2 Besides above, on-line analysers for ash and moisture shall be provided on respective conveyors of Washery/CPP for instantaneous monitoring and recording of ash & moisture of raw coal, washed coal and rejects. This shall also provide a tool to control the operation of Washery/CPP within the agreed parameters of the outputs.

In addition to instantaneous monitoring, recording and display of above parameters in a control room, the on-line analysers should have facilities for storage of all data on a time scale basis and producing desired printout. These instruments should have accuracy within limits as per relevant BIS. The WO shall ensure that the ash and moisture of the washed coal dispatched shall be within the permissible limits.

- 1.13.3 The WO shall keep provision of necessary equipment for carrying out screen analysis, float & sink test and measurement of ash, moisture & GCV etc. in the laboratory of the Washery/CPP.
- 1.13.4 The test will be carried out in presence of representatives from both CCL and the WO on day-to-day basis as well as monthly basis.

1.13.5 **Testing and Analysis of Raw coal & Products:**

- i. An independent agency will be appointed and paid by CCL for sampling and analysis of both raw coal and products. However, 50% of the charge paid by CCL to the independent agency will be recovered/ adjusted from WO from their bills.
- ii. Sampling shall be done for both raw coal and products in each shift as per BIS. One part of raw coal sample collected in each shift shall be kept for carrying out washability test at the end of each month.
- iii. Determination of ash and moisture for both raw coal and products will be carried out in each shift.
- iv. Raw coal samples collected in each shift will be blended for all the days of a month from which a representative sample will be prepared. From this representative sample, washability test and other tests will be carried out to determine optimum theoretical yield of washed coal for that particular month.
- v. One representative sample of raw coal will be kept as reserved for testing in case any dispute arises.
- 1.13.6 The test results certified by the independent agency shall be binding on both CCL & WO.
- 1.13.7 CCL reserves the right to change the independent agency in consultation with WO.
- 1.13.8 Quality of Rejects shall be derived from balance of product

1.14 REJECT WEIGHMENT AND DISPOSAL

CCL is the sole owner of the rejects produced from the Washery/CPP. The rejects produced from the plant shall be transported & temporarily stacked/dumped separately by WO within the Washery/CPP site to be earmarked by WO with due arrangement of proper compaction and consolidation as per the norms of the Environmental Management Plan (EMP) duly approved by the State/ Central and other concerned agencies.Rejects produced from the plant shall have to be weighed in presence of representatives of both, the CCL & WO, and record of the same shall be signed jointly. Quantity of Rejects shall be in consonance with that derived from balance of products.

Further, sale/ disposal of rejects shall be done suitably by CCL. The weighment of such rejects shall be done at the weighbridges of WO in presence of representatives of both CCL and WO and shall be jointly signed and final.

1.15 FIRE FIGHTING ARRANGEMENT

The WO shall have to provide a suitable, reliable and adequate fire fighting system having fire fighting hydrant points at strategic locations on all the floors as per BIS regulations and prevalent norms. In addition to this, fire extinguishers of different types suitable for industrial use shall be provided at all the required vulnerable locations.

1.16 ENVIRONMENT MANAGEMENT

Environment clearance and other statutory clearances under Environment Protection Act 1986, Air (prevention & control of pollution) Act 1981, Water (prevention & control of pollution) Act 1974, other environment acts, their amendments and rules:

a) Obtaining all necessary statutory/ regulatory and other clearances etc. prevalent in the country barring Environment Clearance and Forest Clearance shall be the responsibility of WO. CCL will give necessary assistance/ support to the WO to the extent possible.

CCL shall be responsible for obtaining Environment Clearance and Forest Clearance but WO shall give necessary assistance/support to CCL in this regardand be involved actively in the process as necessary. However, compliance of EC regulations and other statutory & regulatory clearances during the entire period of contract or extension, if any, shall be the responsibility of WO and for this purpose, any information/data required from CCL, if available, will be provided to the WO.

Different statutory authorization under EP Act 1986 and rules will be the responsibility of preferred bidder. Periodic submission of compliances of environmental clearances and returns under water cess act will also be the responsibility of WO. The WO shall be responsible for planning, designing, constructing, operating and maintaining the Washery/CPP in an environmentally compatible/ friendly manner as per norms laid down by MoEFCC and State & Central Pollution Control Boards.

b) Compliance of environmental laws and rules:

If any action in court is brought against CCL or engineer or an officer or agent of CCL for failure or neglect on part of the WO to perform any pollution control or environmental management activities, act matters, convenants or things under the contract, or for any damage or injury or death or damage to any public property caused by the alleged omission or negligence on part of the WO, his agent, representative or his sub-contractor, workmen, suppliers or employees, the WO shall in all such cases indemnify and keep CCL and EIC and/ or his representative harmless from all losses, liabilities, expenses or decrees arising of such action.

Prospective bidders shall also elaborate slurry handling/ treatment section, if any, in detail in the Technical part of their offers.

1.17 WASHING CHARGES

CCL shall pay agreed washing charge to the WO. The washing charge is to be quoted by the bidder in terms of per tonne of raw coal processed on 'dry basis'. For payment of 1st part bill for a particular month raised by WO (i.e. 75%), the quantity of raw coal processed consider for payment shall be the quantity of raw coal processed as declared by WO for a particular month.

For payment of balance 25% of the bill, penalty/ bonus for OE shall be calculated on the difference in the quantity of washed/ clean coal arrived considering OE as 95% & Theoretical yield as determined in the laboratory on 'adb' and converted to 'dry basis' by independent agency and the actual quantity of washed/ clean coal loaded into the Railway wagons on 'dry basis'.

To arrive at the quantity of raw coal processed, the quantity of washed coal loaded into the wagons shall be divided by the practical yield. This is illustrated hereafter.

 $Organic_Ef fciency y (OE) = \frac{Practical Yield ('dry basis')}{Theoretical Yield ('dry basis')}$

Practical Yield ('dry basis') = OE * Theoretical Yield ('dry basis')

(OE as 95% & Theoretical yield as determined in the laboratory on 'adb' and converted to 'dry basis')

 $Quantity of Raw Coal Processed_{('dry basis)} = \frac{Washed Coal Loaded into Wagons ('dry basis')}{Practical Yield ('dry basis')}$

Note: i) All the above calculations shall be done on 'dry basis'.

ii) Theoretical yield will be arrived from the data of washability test carried out by the independent agency on monthly basisin presence of representatives of WO & CCL both.

Thus,

Washing Charge = $[ProcessedRawCoalQty \times UnitWashingCh arg e]_{(dry basis)}$

Monthly Washing Charge (in ₹) = Monthly Quantity Processed (in te) of Raw Coal_(dry basis) X Washing Charge (in ₹) per tonne of Raw Coal_(dry basis).

The washing charges covers the cost for receiving & storage of raw coal, sizing & crushing, beneficiation, storage of products, delivery of products of desired quality to the designated place. Suitable weighing arrangements shall be provided for raw coal receipt and product despatch by the WO.

The price to be paid to the WO for beneficiation/washing charge shall also cover costof handling & disposal of slurry, in case slurry is generated during beneficiation/ washing..

This washing charge consists of two parts viz. 'base price' and 'taxes & duties'. Base price does not include taxes & duties. Taxes & duties shall be reimbursed separately to the WO.

1.18 CONSTRUCTION PERIOD OF THE PROJECT

The Coal Washery/CPP will be constructed & commissioned by the successful bidder within 18months from the date of signing of Contract or date of handing over of site by CCL to the WO, whichever is later. The site will be handed over to the selected Bidder within 30 (thirty) days from signing of the Agreement.

In case construction & commissioning of Washery/CPP is completed earlier from the schedule date of completion, CCL shall ensure supply of raw coal as per the availability on mutually agreed basis upto the original date of schedule completion also. No commitment charges on short supply of raw coal by CCL shall be paid to the WO during this period. However, bonus/ penalty will be applicable during this period.

1.19 CONTRACT PERIOD

Contract period shall be for 18 months plus 18 years thereafter as follows:

- a. For construction period of 18 months & any extended period from the date of signing of contract or handing over of siteby CCL to the WO, whichever is later.
- b. Eighteen (18) years from the date of commencement of commercial operation by the Washery/CPP Operator. Thereafter, the contract may be extended based on mutually agreed terms & conditions.

1.20 DESIRED INFORMATION

The desired information shall be furnished by the bidder as per the format enclosed as Exhibits/ Appendices/ Annexure/ Enclosures.

1.21BROAD PARAMETERS

The bidders are required to furnish the broad parameters of the Washery/CPP as per the format given at Appendix - 1.

SECTION - 2

GENERAL INFORMATION

2.1 LOCATION

The Ashok Washery/CPP will be situated in the Ashok Opencast Project of Ashok Block. The Ashok Opencast Project (OCP) is situated in the Chatra District of Jharkhand between latitudes 23⁰42'53" & 23⁰44'41" N and longitudes of 84⁰,57'07" & 85⁰02'11"E. Piparwar Opencast Project is located in the east of this block. The river Damodar flows in the south of this block towards east. The project falls under Piparwar area in North Karanpura Coalfields of Central Coalfields Ltd.

2.2 COMMUNICATION

Ashok Opencast Project is connected to Ranchi by a metalled road via Khalari and to Hazaribagh via Barkagaon. Its distance from Ranchi is about 80 Km. The project is accessible by a pucca road after crossing Damodar River. This road is connected to Khalari-Dakra-Tandwa-Hazaribagh metalled road. The nearest railway station "Ray" on Gomoh-Dehri On Sone loop line of Eastern Railway is about 10 kms away from the Ashok OCP.

2.3TOPOGRAPHY&DRAINAGE

The Ashok Block is characterized by more or less flat terrain with gentle undulations. The general slope of the ground is towards south. The ground elevation of Ashoka OCP varies from 420 to 480 metres above mean sea level. A prominent physiographic feature called Satohari Hill (height 636 m) lies in the north of the block. Two nallahs namely Dambua&Benti are originating from the block and draining into the Damodarriver.

A few nallahs namely Dambua&Benti originating from the block join Damodarriver which forms the main drainage channels of the area.

2.4 CLIMATE

The climate is tropical with hot summer. The summer months are severely hot and prevail from March to May. Generally the maximum and minimum temperatures during summer are 45° C & 20° C respectively. The summer nights are generally pleasant. Winter (Nov to Feb) is cold and minimum temperature is recorded as 1° C. The rainy season is generally from June to October. The average rainfall is about 1120mm. The average monthly rainfall during monsoon period is 198.87mm.

The proposed site is located in seismic zone III as per IS 1893.

2.5 MINEABLE RESERVES & PRODUCTION PROGRAMME OF ASHOK OCP

The total balance mineable reserves are estimated as 324.17 M.tes. The break-up of the seam wise coal reserves is given below:

SI. No.	Particulars	Mineable Reserves (M.tes)				
А	SEAMS					
1	Lower Dakra (Comb.)	50.39				
2	Bottom Lower Dakra	1.50				
3	Top & Middle Lower Dakra(Comb)	15.81				
4	Middlle Lower Dakra	1.04				
5	Top Lower Dakra	0.29				
6	Upper Dakra	7.40				
7	Bukbuka (comb.)	18.21				
8	Bukbuka (Lower)	5.53				
9	Bukbuka (Upper)	10.23				
10	Bukbuka (Top)	4.39				
11	Bisrampur (Lower)	11.84				
12	Bisrampur (Upper)	6.73				
13	Karkatta	11.05				
14	K1	1.04				
15	K2	1.08				

Seam-wise Mineable Reserves Quarry I

16	Total Mineab	le reserves	146.54	
Y	ear	ROM2 (Overall)		

Seam-wise Mineable Reserves –Quarry II

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SI. No.	Particulars	Mineable Reserves (M.tes)
А	SEAMS	
1	Lower Dakra (Comb.)	10.55
2	Bottom Lower Dakra	6.49
3	Top & Middle Lower Dakra(Comb)	23.96
4	Middlle Lower Dakra	44.87
5	Top Lower Dakra	15.55
6	Upper Dakra	9.40
7	Bukbuka (comb.)	7.65
8	Bukbuka (Lower)	11.70
9	Bukbuka (Upper)	21.54
10	Bukbuka (Top)	1.27
11	Bisrampur (Lower)	10.90
12	Bisrampur (Upper)	4.17
13	Karkatta	7.00
14	K1	1.44
15	K2	1.12
16	Total Mineable reserves	177.63

Data from ASHOK OCP EPR prepared in 2017.

	Ash%	Coal (Mtes)	
Y1	38.4	6.00	
Y2	38.4	7.50	
Y3	38.3	6.50	
Y4	38.0	8.00	
Y5	38.2	10.00	
Y6	38.3	14.00	
Y7	38.4	16.00	
Y8	38.5	15.00	
Y9	38.6	14.50	
Y10	38.6	14.00	
Y11	38.6	13.50	
Y12	38.6	12.50	
Y13	38.6	12.00	
Y14	38.6	13.00	
Y15	38.6	13.00	
Y16	38.9	13.00	
Y17	38.9	13.00	
Y18	39.3	7.78	
Y19	39.5	5.54	
Total		214.82	

2.6 RAW COAL RECEIPT & STORAGE

Raw coal of specified quantity & quality shall be made available by CCL through dumpers and Washery/ CPP Operator (WO) shall receive the same at the Washery/ CPP end.

2.7 DESPATCH OF WASHED COAL

WO shall arrange to reclaim washed coal from washed-coal-covered storage (capacity at least 10,000 tonne) for transportation to RajdharRailway siding, which is about 7-8 km away from the proposed washery site.

Maintenance & up keeping of the Railway siding shall be the responsibility of CCL and all expenditure on this account shall be borne by CCL. However, the construction/ strengthening of Railway siding is under the scope of CCL.

2.8 SITE PLAN

For Site Plan of the proposed washery, refer the attached Drawing. The site plan showing land use of existing & proposed facilities provided by the Owner for the proposed washery like land for setting up of washery with approach road, location of designated delivery places for rejects, location of water & power for construction & operation has been enclosed.

SECTION – 3

RAW COAL CHARACTERISTICS

3.1 GENERAL

The raw coal supply to the proposed Washery/CPP shall be from Ashok Block and similar grade of raw coal from neighbouring mines of Central Coalfields Limited. Coal of this block is of non-coking category and is suitable for use in thermal power plants. The description of different coal seams of the mine(s)/ block(s) is given hereafter.

3.2 DESCRIPTION OF COAL SEAMS IN ASHOK BLOCK

The Ashok block located in the south central part of North Karanpura Coalfield is contiguous to Piparwar block in the east, Purnadih and Benti block in the south and Koira block in the west. The Ashok block has been divided in two sections viz. Eastern & Western. The eastern section being contiguous to Piparwar has similar set of coal seams with almost no splitting of Lower Dakra and Bukbuka seams. The eastern section is structurally less disturbed and has lower coal to OB cut-off ratio (1:2) as compared to western section. Hence, the eastern section has been planned for opencast mining. Based on the borehole data, Barakar, Karharbari and Talchir formations have been established within the block. However, rocks of Barakar formation are exposed in the block. Altogether, thirteen coal seams viz. Bachra, Lower Dakra, Upper Dakra, BukbukaBukbuka Top, Bisrampur (Lower), Bisrampur (Upper), Karkatta, K1, K2, K3, K4 & K5 have been established in the ascending order in Ashok east block. The seams from Lower Dakra to K2 (having quarriable potentialities) have been planned for opencast mining in the eastern section of Ashok Block. The Lower Bachra seam having thickness of less than 2 m and lying after a substantial parting of 94 m to 105 m below Lower Dakra seam has not been considered for opencast mining.

Sequence of coal seams and partings as per EPR (Expansion Project Report) for Ashok OCP is summarized in Table - 3.1.

Table - 3.1*: Sequence of Coal Seams and Parting in Ashok OCP Block

Particulars		Thickness Range	(in Metre)	
Barakar Formation				
K2		0.75-2.03		
	Parting		7.94-11.19	
K1		0.33-2.15		
	Parting		5.36-7.84	
Karkatta		3.67-6.31		
	Parting		4.55-18.73	
Upper Bisrampur		2.15-4.44		
	Parting		1.60-16.40	
Lower Bisrampur		3.06-5.92		
	Parting		5.36-16.05	
Bukbuka Top		0.59-6.22		
	Parting		5.82-14.55	
Bukbuka Combined		9.14-14.18		
Upper Bukbuka		5.457.44		
	Parting		1.05-2.16	
Lower Bukbuka		2.24-4.50		

	Parting		5.55-27.07
Upper Dakra		1.30-4.54	
	Parting		0.48-10.19
Lower Dakra (Combined)		18.37-23.09	
Top & Middle (Combined)		15.48-18.39	
Lower Dakra			
	Parting		1.65-2.15
Bottom Lower Dakra		1.19-1.85	
	Parting		94.75-105.65
Karharbari Formation			
Upper Bachra		0-0.60	
	Parting		4.61
Lower Bachra		0.44-1.61	

The brief description of individual seams of eastern part of Ashok block is given hereafter:

3.2.1 Lower Dakra Seam

Lower Dakra is the thickest coal seam of Ashok OCP block. It occurs as a composite seam in the proposed quarry area. In certain places, it has splitted into two viz. Lower Dakra (Bottom) and Lower Dakra (Top and Middle Combined).

3.2.1.1 Lower Dakra (Combined) Seam

This seam contributes about 58% of total reserves of the block. The seam varies in thickness from 18.37 m to 23.09 m with an average thickness of 18.0 m. The seam underlies Upper Dakra seam with a parting varying from 0.48 m to 10.19 m and overlies Bachra seam with a parting ranging from 94.75 m to 105.65 m. The immediate roof of the seam is generally shale, sandy shale and carbonaceous shale but at places it is marked by coarse grained sandstone and intercalations of shale and sandstone. Lower Dakra (Combined) seam is inter banded in nature.

The details of dirt bands have been summarized in Table 2.2. The quality details of the seam are given in the Table 2.3. The including band grade of the seam varies from E-G with corresponding UHV varying from 1670 to 3365 kcal/kg. However, the average grade of the seam is F (Avg UHV 2893 kcal/kg).

The incrop of Lower Dakra (Combined) seam in the eastern section has been extensively affected by surface burning. Due to surface burning, the effective coal incrop lies at depth in contrast to normal seam incrop below the alluvium cover. The depth of occurrence of effective incrop in the burnt area varies from 11.15 m to 39.30 m. However, in a small area in the extreme east, the incrop of the seam has not been affected by surface burning.

3.2.1.2 Lower Dakra (Bottom) Seam

The Lower Dakra (Bottom) seam is a thin seam having a thickness less than 2 m. The seam varies in thickness from 1.19 m to 1.85 m. The seam underlies Top and Middle (Combined) Lower Dakra (the upper split of Lower Dakra seam) with a parting varying from 1.65 m to 2.15 m. The immediate roof of the seam is shale and floor is represented mostly by shale & sandy shale and occasionally by carbonaceous shale.

The details of dirt bands have been summarized in Table 3.2. The seam is free of any dirt bands in this region. The quality details of the seam are given in the Table 3.3. The seam is of grade F-G with corresponding UHV variations ranging from 2345 to 2650 kcal/kg. However, the average grade of the seam is F (Avg. UHV 2497 kcal/kg).

Table 3.2*: Details of Dirt Bands in Ashok OCP Block

	Dirt Ba	ands < 1 m		Non-co	mbustible Dirt Ba	inds	Dirt Ba	ands > 1 m	
Seam	N o.	Thickne ss	%	No.	Thickne ss	%	N 0.	Thickne ss	%
K2	Nil -1	Nil-0.09	Nil- 4.94	-	-	-	-	-	-
K1	Nil -1	Nil-0.57	Nil- 26.5 1	Nil- 1	Nil-0.21	Nil- 9.77	-	-	-
Karkatta	Nil -2	Nil-0.33	Nil- 5.23	Nil- 1	Nil-0.06	Nil- 1.13	-	-	-
Upper Bisrampur	Nil -2	Nil-0.28	Nil- 10.8 9	Nil- 1	Nil-0.20	Nil- 8.33	-	-	-
Lower Bisrampur	Nil -3	Nil-0.27	Nil- 4.57	Nil- 1	Nil-1.37	Nil- 31.0	Nil -1	Nil-1.37	Ni 31
Bukbuka Top	Nil -4	Nil-1.69	Nil- 37.8 1	Nil- 5	Nil-1.5	Nil- 33.5 6	Nil -1	Nil-1.50	Ni 33 6
Bukbuka Upper	Nil -2	Nil-0.25	Nil- 3.80	-	-	-	-	-	-
Bukbuka Lower	Nil -4	Nil-0.37	Nil- 10.6 3	Nil- 3	Nil-0.36	Nil- 14.4 5	-	-	-
BukbukaCombin	1-	0.08-	1.42	Nil-	Nil-1.01	Nil-			

ed	9	1.70	14.4	2		8.42			
			7						
Upper Dakra	Nil	Nil-0.99	Nil-	0.4	0-16.9	-	-	-	-
	-4		31.2	0-					
			3	0.4					
				9					
Top+Middle	4-	1.38-	7.50	Nil-	Nil-2.17	Nil-	Nil	Nil-1.57	Nil-
Combined Lower	8	2.91	-	5		15.4	-1		8.54
Dakra			18.8			3			
			0						
Bottom Lower	-	-	-	Nil-	Nil-0.39	Nil-	-	-	-
Dakra				1		20.8			
						5			
Lower Dakra	3-	0.58-	2.65	Nil-	Nil-2.02	Nil-	Nil	Nil-5.87	Nil-
Combined	22	6.46	-	15		10.0	-3		26.2
			28.7			7			7
			1						

NB: The non-combustible dirt bands irrespective of their thickness and dirt bands > 1 m have been excluded for reserve estimation.

Parameters	K2	К1	Karkata	Upper Bisrampu r	Lower Bisrampu r	Bukbuka Top	Upper Bukbu a
Proximate Analys	sis on 60% RH	1 & 400C (inclu	iding bands upto	o1m)		I	
1	2	3	4	5	6	7	8
Moisture%	6.2- 11.1	4.8- 7.4	8.6- 11.7	6.1-11.3	6.3-8.9	6.0-9.3	6.2-8.6
Ash%	30.8- 35.0	25.1- 37.8	23.2- 27.2	19.9-29.9	25.8-35.6	23.8- 40.6	28.8- 37.5
VM%	23.1- 25.8	28.1	24.9- 27.6	25.7-27.9	25.1-27.8	23.4- 27.9	25.3- 26.0
CV(kcal/kg)	3775- 4235	2710- 4030	4590- 4955	4765- 5350	4245- 4845	3915- 4975	4125- 4785
UHV(kcal/kg)	2660- 3350	1435- 2830	3930- 4445	3930- 4760	3075- 4305	2470- 4345	2870- 3920
Grade	F	F-G	D-E	D-E	D-F	D-F	E-F
Ultimate Analysis	(DMF Basis)						
UVm %	40.2	38.3	39.0- 40.2	34.2-40.3	40.1	38.8- 40.2	38.7- 41.7
C%	79.8	78.7	78.5- 78.8	79.0-81.2	78.1	79.1- 79.4	79.0- 79.4
H%	4.6	4.6	4.5-5.0	4.8	4.7	4.9	4.8-4.9

N%	1.8	1.8	1.7	1.7	1.8	1.6-1.7	1.5-1.6
S%	0.7	0.7	0.6-0.7	0.6	0.6	0.7	0.6-0.7
O% by difference	14.1	14.2	13.8- 14.7	13.9	14.8	13.3- 13.7	13.4- 14.1
P%	-	0.08	-	0.192- 0.335	0.03	0.26	-
CO2 %	-	-	-	-	-	0.62	-
HGI	58**	60	54-60	61**	53	55	53-62
Ex.1m bands							
Ash Fusion Rang	ge (oCelsius)				I		
IDT Ex.1m bands	1160**	1190	1210- 1250	1270**	1220	1220	1210- 1300
HT Ex.1m bands	>1400	>1400	>1400	>1400	>1400	>1400	>1400
Ash Analysis (%)							
SiO2	58.4	57.2	59.6	59.1	56.0-59.4	-	59.6
AI203	28.3	29.5	28.1	29.2	28.4-28.5	-	28.4
Fe203	5.2	6.9	5.3	4.7	4.5-5.4	-	4.5
TiO2	2.0	1.8	1.9	1.7	1.9-2.2	-	2.1
P2O5	0.8	0.7	0.6	0.7	0.6-0.8	-	0.6
CaO	1.5	1.2	1.4	1.6	1.8-2.9	-	1.4

SO3	0.2	0.4	0.4	0.6	0.5-0.6	-	0.5
Alkalies by difference	2.4	1.3	1.5	1.2	1.0-1.8	-	1.8

**Excluding all dirt bands

Table 3.3*: Summarised Details of Quality in Ashok OCP Block (Contd.)

	Lower			Top+Middle	Bottom	Lower
Parameters	Bukbuk Bukbuka U	Upper Dakra	Combined	Lower	Dakra	
	а			Lower Dakra	Dakra	Combined
Proximate An	alysis on 60%	6 RH & 400C (incl	uding bands upt	o1m)		
	9	10	11	12	13	14
Moisture%	6.3-	5.3-8.4	5.0-9.3	5.5-6.4	6.1-6.4	4.2-7.2
	7.6					
Ash%	28.8-	28.8-	24.9-	38.2-39.4	38.9-41.42	33.4-47.6
	41.3	40.2	47.6			
VM%	22.6-	22.6-	21.3-	23.7	22.6-25.3	21.2-26.0
	26.5	25.8	28.4			
CV(kcal/kg	3270-	3805-	3185-	3835-4050	3600-3965	2855-4450
)	4580	4710	5075			
	2330-	2400-	1725-	2705-2745	2345-2650	1670-3365

(kcal/kg)	3875	3920	4385			
Grade	E-G	E-F	D-G	F	F-G	E-G
Ultimate Analys	sis (DMF Basi	s)		I		
UVm%	38.9-	36.9-	35.6-	38.2-38.5	38.5	38.9-42.2
	39.9	39.9	39.6			
C%	79.1-	78.5-	78.4-	78.5	78.6	78.7-79.3
	79.4	79.4	78.7			
H%	4.9	4.9-5.0	4.7-4.8	4.8	4.8	4.8-4.9
N%	1.6	1.7	1.6-1.7	1.6-1.7	1.6	1.6-1.7
S%	0.6-	0.6-0.7	0.6-0.7	0.7	0.7	0.5-0.7
	0.7					
O% by diff.	13.4-	13.2-	14.2-	14.3-14.4	14.3	13.5-14.0
	14.0	14.2	14.3			
CO2%	0.6-	0.60-0.8	0.76-	-	-	0.5-0.84
	0.8		0.82			
HGI	56-61	54-55	58-59	53**	56	54-60
P%		0.36				0.36
Ash Fusion Ra	nge (oCelsius)		I		
IDT Ex.1m	1240-	1220	1220-	1220	1230	1230-1260
bands	1320		1240			
HTEx.1m	>140	>1400	>1400	>1400	>1400	>1400
bands	0					
Ash Analysis		I		I		L

SiO2	59.1-	56.8-	56.9-	-	-	58.5-60.9
	61.4	57.2	62.2			
AI203	24.2-	28.2-	26.2-	-	-	27.9-28.8
	28.2	29.8	27.9			
Fe203	4.6-	4.4-5.5	4.2-5.6	-	-	4.0-4.2
	7.6					
TiO2	1.8-	2.7-2.9	1.8-2.4	-	-	1.7-2.0
	2.2					
P2O5	0.2-	0.6	0.7-0.8	-	-	0.7-1.1
	0.5					
CaO	0.6-	1.8-2.2	1.8-2.2	-	-	1.9-2.2
	1.2					
MgO	1.1-	1.2-1.8	1.1-1.9	-	-	1.2-1.8
	1.3					
SO3	Trace	0.5	0.3-0.4	-	-	0.2-0.5
	s-0.6					
Alkalies by	1.5-	1.6-1.7	1.6-2.0	-	-	1.1-1.3
difference	2.9					

**Excluding all dirt bands

3.2.1.3 Lower Dakra (Top & Middle Combined) Seam

This seam varies in thickness from 15.48 m to 18.39 m. The seam underlies Upper Dakra seam with a parting varying from 0.48 m to 10.19 m and overlies Lower Dakra (Bottom) seam with a parting ranging from 1.65 m to 2.15 m. The immediate roof and floor of the seam is mostly carbonaceous shale, grey shale and medium grained sandstone. The seam is interbanded and consists of carbonaceous shale bands only.

The details of dirt bands have been summarized in Table 3.2. The quality details of the seam are given in Table 3.3. The including band grade of the seam is uniformly grade F with UHV varying from 2705 to 2745 kcal/kg. The average grade of the seam is also F (Avg. UHV 2725 kcal/kg).

3.2.2 Upper Dakra Seam

The seam varies in thickness from 1.30 m to 4.54 m with an average thickness of 3.0 m. The seam underlies Lower Bukbuka seam with parting varying from 5.55 m to 27.07 m and overlies Lower Dakra (Combined) / Lower Dakra (Top and Middle Combined) seam with a parting ranging from 0.48 m to 10.19 m. However, the parting between two seams are around 3 m in major part of the area except in the south western part, where it suddenly increases to 10.19 m.

The details of dirt bands have been summarized in Table 3.2. The seam contains only dirt bands of less than 1 m in thickness. These dirt bands are mostly grey shale and carbonaceous shale in nature. The quality details of the seam are given in the Table 3.3. The including band grade of the seam varies from D-G with corresponding UHV varying from 1725 to 4385 kcal/kg. However, the average grade of the seam is F (Avg. UHV 2978 kcal/kg).

3.2.3 Bukbuka Seam

Bukbuka is the next important seam after Lower Dakra seam in the Ashok block. This occurs as composite seam in the major part of proposed quarry area excepting near the line of division between the eastern and western section, where it splits into Lower Bukbuka and Upper Bukbuka.

3.2.3.1 Bukbuka Combined Seam

The seam varies in thickness from 9.14 m to 14.18 m with an average thickness of 10.80 m. The seam underlies Bukbuka Top seam with a parting varying from 5.82 m to 14.55 m and overlies Upper Dakra seam with a parting ranging from 5.55 m to 27.07 m. The roof and floor of the seam is mostly sandy shale and occasionally grey shale, carbonaceous shale or shale.

The details of dirt bands have been summarized in Table 3.2. Both combustible and non-combustible dirt bands are present within the seam. The bands are generally carbonaceous shale and occasionally grey shale, sandy shale and intercalation of shale and sandstone. The quality details of the seam are given in Table 3.3. The including band grade of the seam varies from E-F with a corresponding UHV varying from 2400 to 3920 kcal/kg. However, the average grade of the seam is F (Avg. UHV 2863 kcal/kg).

3.2.3.2 Bukbuka Lower Seam

The seam occupies only a small area along the line of division between eastern and western section. The seam varies in thickness from 2.24 m to 4.50 m with an average thickness of 3.70 m. The seam underlies Upper Bukbuka seam with a parting varying from 1.05 m to 2.16 m and overlies Upper Dakra seam with a parting ranging from 5.55 m to 27.07 m.

The details of dirt bands have been summarized in Table 3.2. The seam is free of dirt bands excepting at two places where it is either carbonaceous shale or grey shale. The quality details of the seam are given in Table 3.3. The including band grade of the seam varies from E-G with corresponding UHV varying from 2330 to 3875 kcal/kg. However, the average grade of the seam is F (Avg. UHV 2959 kcal/kg).

3.2.3.3 Bukbuka Upper Seam

The seam varies in thickness from 5.45 m to 7.44 m with an average thickness of 6.40 m. The seam underlies Bukbuka Top seam with a parting varying from 5.82 m to 14.55 m and overlies Lower Bukbuka seam with a parting ranging from 1.05 m to 2.16 m.

The details of dirt bands have been summarized in Table 3.2. The seam is generally free of dirt bands. Wherever present, it is carbonaceous shale and generally one to two in number. The quality details of the seam are given in Table 3.3. The including band grade of the seam varies from E-F with corresponding UHV varying from 2870 to 3920 kcal/kg. However, the average grade of the seam is E (Avg. UHV 3501 kcal/kg).

3.2.3.4 Bukbuka Top Seam

The seam varies in thickness from 0.59 m to 6.22 m with an average thickness of 2.80 m. However, normal thickness ranges from 1 m to 3 m. The seam underlies Lower Bisrampur seam with a parting varying from 5.36 m to 16.05 m and overlies Upper Bukbuka/ Bukbuka (combined) seam with a parting ranging from 5.82 m to 14.55 m.

The details of dirt bands have been summarized in Table 3.2. The bands are mostly alternate bands of shale and sandstone and grey shale. The quality details of the seam are given in Table 3.3. The including band grade of the seam varies from D-F with corresponding UHV varying from 2470 to 4345 kcal/kg. However, the average grade of the seam is F (Avg. UHV 2827 kcal/kg).

3.2.4 BISRAMPUR SEAM

3.2.4.1 Blisrampur Lower Seam

The seam varies in thickness from 3.06 m to 5.92 m with an average thickness of 4.10 m. The seam underlies Upper Bisrampur seam with a parting varying from 1.60 m to 16.40 m and overlies Bukbuka Top seam with a parting ranging from 5.36 m to 16.05 m. The roof and floor of the seam is generally carbonaceous shale and intercalation of shale and sandstone.

The details of dirt bands have been summarized in Table 3.2. The dirt bands are few. The bands are generally grey shale, carbonaceous shale and sandy shale. The quality details of the seam are given in Table 3.3. The including band grade of the seam varies from D-F with corresponding UHV varying from 3075 to 4305 kcal/kg. The average grade of the seam is E (Avg. UHV 3803 kcal/kg).

3.2.4.2 Bisrampur Upper Seam

The seam varies in thickness from 2.15 m to 4.44 m with an average thickness of 3.20 m. The seam underlies Karkatta seam with a parting varying from 4.55 m to 18.73 m and overlies Lower Bisrampur seam with a parting ranging from 1.60 m to 16.40 m. However in major part of OCP area, the parting is 2 m to 3 m.

The details of dirt bands have been summarized in Table 3.2. The bands are few and are generally grey shale and carbonaceous shale. The quality details of the seam are given in Table 3.3. The including band grade of the seam varies from D-E with corresponding UHV varying from 3930 to 4760 kcal/kg. However, the average grade of the seam is D (Avg. UHV 4444 kcal/kg).

3.2.5 KARKATTA SEAM

The seam varies in thickness from 3.67 m to 6.31 m with an average thickness of 4.60 m. The seam underlies seam K-1 with a parting varying from 5.36 m to 7.84 m and overlies Upper Bisrampur seam with a parting ranging from 4.55 m to 18.73 m.

The details of dirt bands have been summarized in Table 3.2. This is a clean seam of the block and contains one or two thin bands of carbonaceous shale or grey shale. The quality details of the seam are given in Table 3.3. The seam has been graded D-E with corresponding UHV varying from 3930 to 4445 kcal/kg including band. However, the average grade of the seam is E (Avg. UHV 4162 kcal/kg).

3.2.6 K-1 SEAM

The seam varies in thickness from 0.33 m to 2.15 m with an average thickness of 1.40 m. In the major part of the area (80%) the seam is less than one metre in thickness. The thickness more than one metre is confined in the area close to western sector. The seam underlies K-2 seam with a parting varying from 7.94 m to 11.19 m and overlies Karkatta seam with a parting ranging from 5.36 m to 7.84 m. The roof and floor of the seam is generally carbonaceous shale.

The details of dirt bands have been summarized in Table 3.2. The seam is almost free of dirt bands. The quality details of the seam are given in Table 3.3. The including band grade of the seam varies from F-G with corresponding UHV varying from 1435 to 2830 kcal/kg. The average grade of the seam is G (Avg. UHV 2313 kcal/kg).

3.2.7 K-2 SEAM

This is the topmost seam considered in the Ashok OCP. The seam varies in thickness from 0.75 m to 2.03 m with an average thickness of 1.50 m. However, the seam is 1 m to 2 m in thickness in major part of the quarry area. The seam overlies K-1 seam with a parting varying from 7.94 m to 11.19 m.

The details of dirt bands have been summarized in Table 3.2. The seam is almost free of dirt bands. The quality details of the seam are given in Table 3.3. The including band grade of the seam is F (Avg. UHV 3041 kcal/kg) in the proposed quarry area. The UHV varies from 2660 to 3350 kcal/kg.

3.2.8 QUALITY OF ASHOK OCP COAL

The quality of coal from Ashok OCP is Grade F (Avg. UHV 3031 kcal/kg).

3.3 TESTING OF COAL

Tables 2.1 & 2.2 of Section – 2 reveal that about 95% coal is expected to be produced from Lower Dakra, Upper Dakra, Bukbuka and Bisrampur seams. Ashok opencast mine is under operation and is presently producing coal from Lower Dakra (Combined) and Upper Dakra seams only. In view of the present scenario, samples from Lower Dakra& Upper Dakra seams could only be collected from Ashok OCP. Further, samples from both seams were combined in the ratio of average thickness of the seams and tested at CP Laboratory, CMPDI, Ranchi to generate washability data of coal presently produced from Ashok OCP.

3.4 SAMPLE COLLECTION

CMPDI team visited Ashok OCP, CCL on 6.01.2005 for supervision during collection of representative samples from working seams i.e. Lower Dakra& Upper Dakra seams of Ashok OCP. RoM coal samples of Lower Dakra& Upper Dakra seams were collected from coal face by the officials of CCL under supervision of the officials of CMPDI team from 6th to 10th January 2005 as per IS Code 436 (Part I:1956).

3.5 **TEST PROCEDURE**

Each coal sample of Lower Dakra& Upper Dakra seam was prepared by mixing and coning & quartering the whole coal at CP Laboratory, CMPDI, Ranchi. One representative sample was prepared by mixing the samples in the ratio of average thickness of the Lower Dakra& Upper Dakra seams. The sample preparation for various tests was carried out as per IS 436 Part I. The testing of samples were carried out as per relevant IS codes viz. IS 436 (Part I-Sec 1), 1350 (Part I & Part II), 6345 & 13810.

The test procedure is given in Table - 3.4.

Table - 3.4 : Testing Procedure

RoM COAL COMBINED SAMPLE

PART I PART II	Part III	PART IV	PART V	
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Soroon oum och	Cruching of co	1 Cruching of co	Proximate analysis	Drovimata analysis of
Screen -cum-ash	Crushing of as	1. Crushing of as	,	Proximate analysis of
analysis of as	received coal	received coal sample	of crushed (-100	crushed (-50 mm)
received sample	sample down to -	down to -50 mm size	mm) sample at	sample at equilibrated
at 200, 150, 100,	100 mm size	2. Screen -cum-ash	equilibrated	condition i.e. 60%RH &
50, 25, 13, 6, 3 &	Screen -cum-ash	analysis at 25,13, 6, 3	condition i.e. 60%RH	40oC including GCV
0.5 mm screen	analysis at 25,13,	& 0.5 mm screen	& 40oC including	and UHV
aperture			GCV and UHV	2. Constation of close
alongwith	6, 3 & 0.5 mm	aperture alongwith	2 Conception of	2. Generation of clean
moisture%	screen aperture	moisture% on air	2. Generation of	coal at targeted ash
	alongwith	dried basis	clean coal at	(i.e.33.5+0.5%) under
2. Proximate	moisture%	3. Float & sink test of	targeted ash (i.e.	equilibrated condition
analysis of as	Float & sink test of	50-25mm, 25-13 mm,	33.5+0.5%) under	from crushed coal
received sample	100-25mm, 25-13	13-6 mm, 6-3mm & 3-	equilibrated	sample and Proximate
under equilibrated	mm, 13-6 mm, 6-	0.5mm	condition from	analysis of washed
condition i.e.	3mm & 3-0.5mm	0.51111	crushed coal sample	coal & rejects under
60%RH & 400 C	3mm & 3-0.5mm	4. Determination of	and Proximate	equilibrated condition
including GCV	Determination of	wt% & ash% at each	analysis of washed	i.e. 60% RH & 400 C
	wt% & ash% at	specific gravity	coal & rejects under	including GCV & UHV
	each specific	1 3 9	equilibrated	
	gravity		condition i.e. 60%	3. Determination of
	granty		RH & 400 C	moisture% of washed
			including GCV &	coal & rejects on as
			UHV	generated basis, air-
				dried basis and
			3. Determination of	equilibrated basis
			moisture% of	
			washed coal &	
			rejects on as	
			generated basis, air	
			dried basis and	

	equilibrated basis	

Note: Float & sink test at 1.4, 1.5, 1.6, 1.7, 1.8 & 1.9 specific gravities.

The test results of combined sample of Lower & Upper Dakra seams are given hereafter in subsequent paras.

3.6 TEST RESULTS OF COMBINED SAMPLE OF LOWER DAKRA & UPPER DAKRA SEAMS OF ASHOK OCP

3.6.1 Screen-cum-Ash & Moisture Analysis

3.6.1.1 Screen-cum-Ash & Moisture Analysis of Combined RoM Coal Sample

Representative of combined sample of Lower Dakra& Upper Dakra seams was drawn after coning & quartering and was subjected to screen analysis at 200, 150, 100, 50, 25, 13, 6, 3 and 0.5 mm aperture screens. Weight%, ash% and moisture% were determined for respective size fractions. The test results are given in Table - 3.5. RRS diagram of screen analysis has been given at Plate No. 1. The gross calorific value (GCV) of RoM sample is 3610 kcal/kg.

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Table - 3.5: Screen-cum-Ash & Moisture Analysis

Colliery : Ashok OCP

Seam : Combined sample of Lower Dakra & Upper Dakra

Sample No. : CMPDI/CPL/439

Nature of sample : Combined RoM coal sample of Lower

Dakra& Upper Dakra seams

Size (mm)	Wt %	Ash %	Moisture%
+200	4.9	41.1	4.5
200-150	9.6	40.6	5.1
150-100	20.5	39.8	4.9
100-50	22.4	39.4	5.2
50-25	15.0	38.1	5.3
25-13	9.7	38.2	5.2
13-6	7.9	33.1	5.9
6-3	3.8	31.0	6.1
3-0.5	3.9	30.4	6.0
-0.5	2.3	35.6	6.3
Total	100.0	38.1	5.3

3.6.1.2 Screen-cum-Ash & Moisture Analysis of Combined RoM Coal Sample Crushed Down to 100 MM

Screen analysis of combined RoM coal sample crushed down to 100 mm of Lower Dakra& Upper Dakra seams was carried out at 25, 13, 6, 3 and 0.5 mm aperture screens. Weight%, ash% and moisture% were determined for respective size fractions. The results are given in Table - 3.6. RRS diagram of screen analysis has been given at Plate No. 2.

Table – 3.6: Screen-cum-Ash & Moisture Analysis

- Colliery : Ashok OCP
- Seam : Combined sample of Lower Dakra
- & Upper Dakra
- Sample No. : CMPDI/ CPL/ 439
- Nature of sample
- : Combined RoM coal sample crushed down to

down to 100 mm	
----------------	--

Size (mm)	Wt %	Ash	Moisture%
		%	
100-25	63.3	40.5	5.4
25-13	14.1	38.5	5.6
13-6	9.0	33.8	5.8
6-3	5.1	30.1	5.9
3-0.5	5.0	29.9	6.1
-0.5	3.5	34.2	6.5
Total	100.0	38.3	5.5

The screen-cum-ash analysis and moisture percent of 100 - 13 mm & -13 mm size fractions have been computed from Table - 3.6 and are given in Table - 3.7.

Table - 3.7 : Screen-cum-Ash Analysis Alongwith Moisture % of Combined RoM Coal Sample of Lower Dakra& Upper Dakra seams Crushed down to 100 mm

Size (mm)	Wt %	Ash %	Moisture%
100-13	77.4	40.1	5.4
-13	22.6	32.2	6.0
Total	100.0	38.3	5.5

3.6.1.3 Screen-cum-Ash & Moisture Analysis of Combined RoM Coal Sample Crushed Down to 50 MM

Screen analysis of combined RoM coal sample crushed down to 50 mm of Lower Dakra& Upper Dakra seams was carried out at 25, 13, 6, 3 and 0.5 mm aperture screens. Weight%, ash% and moisture% were determined for respective size fractions. The results are given in Table - 3.8. RRS diagram of screen analysis has been given at Plate No. 3.

Table-3.8: Screen-cum-Ash & Moisture Analysis

1

- Colliery : Ashok OCP
- Seam : Combined sample of Lower Dakra& Upper Dakra seams
- Sample No. : CMPDI/ CPL/ 439
- Nature of sample

Combined RoM coal sample crushed down to 50 mm

Size (mm)	Wt %	Ash	Moisture%
		%	
50-25	58.0	40.4	5.4
25-13	16.0	36.2	5.8
13-6	10.0	33.0	5.6
6-3	6.5	31.4	6.0
3-0.5	5.5	30.8	6.2
-0.5	4.0	34.9	6.5
Total	100.0	37.7	5.6

The screen-cum-ash analysis and moisture percent of 50-13 mm & -13 mm size fractions have been computed from Table - 3.8 and are given in Table - 3.9.

 Table - 3.9
 :
 Screen-cum-Ash Analysis Alongwith Moisture % of Combined RoM Coal Sample of Lower Dakra&

Upper Dakra seams Crushed down to 50 mm

Size (mm)	Wt %	Ash %	Moisture%
50-13	74.0	39.5	5.5
-13	26.0	32.4	5.9
Total	100.0	37.7	5.6

3.6.2 Float & Sink Tests of Different Size Fractions

Float and sink tests of combined RoM coal of Lower & Upper Dakra seams crushed down to 100 mm & 50 mm sizes has been carried out at 1.4, 1.5, 1.6, 1.7, 1.8 & 1.9 specific gravities for different size fractions of 100/ 50-0.5mm. The results are given in Table - 3.10 & 3.11. Float & sink results of 100-13 mm & 50-13 mm size fractions have been computed from test data and are given in Table - 3.12 & 3.13 respectively. The results of the float & sink analysis of 100-13 mm & 50-13 mm size fractions are shown graphically in the form of M-curves in Plate No. 4 & 5 respectively.

Table - 3.10: Float & Sink Test Results

Colliery : Ashok OCP

Seam : Combined sample of Lower & Upper Dakra

Sample No.	:	CMPDI/ CPL/ 439

Nature of sample : Combined RoM coal sample crushed down to 100 mm

Size of coal tested : 100-25, 25-13, 13-6, 6-3 & 3-0.5 mm

Respective wt% of coal tested on the

basis of +0.5 mm size fraction : 65.6, 14.6, 9.3, 5.3 & 5.2

Size															
(mm)	100 - 25			25 - 13		13 - 6		6-3		3 - 0.5		100 - 0.5			
Sp.gr.	Float			Float	Flo	oat	F	loat		Float		Float	(Cum. Float	
-1.2.	Wt. %	Ash %	Wt. %	Ash %	Wt. %	Ash %	Wt. %	Ash %	Wt. %	Ash %	Wt%	Ash%	Cu.Wt%	Cu.Ash%	
<1.40	9.2	13.8	18.9	12.7	27.4	8.6	37.6	7.7	31.5	6.7	15.0	11.1	15.0	11.1	
1.40-1.50	24.7	24.7	20.1	23.5	20.2	21.6	13.6	19.4	13.4	18.9	22.4	23.9	37.4	18.8	
1.50-1.60	14.4	34.6	13.4	33.1	11.4	32.7	10.1	30.0	10.2	28.9	13.5	33.8	50.9	22.8	
1.60-1.70	11.4	42.6	8.2	42.2	4.7	37.5	5.9	36.8	6.6	32.6	9.8	41.8	60.7	25.9	
1.70-1.80	10.7	49.0	8.5	45.8	7.3	43.7	6.4	42.5	7.1	37.1	9.6	47.5	70.4	28.8	
1.80-1.90	11.7	54.8	10.1	53.3	6.2	49.2	5.0	47.8	6.4	43.6	10.3	53.7	80.7	32.0	
1.90-2.00	17.9	67.5	20.8	66.2	22.8	65.8	21.4	65.4	24.8	59.5	19.3	66.5	100.0	38.7	
Total	100.0	40.9	100.0	38.1	100.0	33.5	100.0	29.8	100.0	29.9	100.0	38.7			

Table-3.11: Float & Sink Test Results

Colliery : Ashok OCP

Seam : Combined sample of Lower & Upper Dakra

Sample No. : CMPDI/ CPL/ 439

Nature of sample : Combined RoM coal sample crushed down to 50 mm

Size of coal tested : 50-25, 25-13, 13-6, 6-3 & 3-0.5 mm

Respective wt.% of coal tested on the

basis of +0.5 mm size fraction : 60.4, 16.7, 10.4, 6.8 & 5.7

Size(mm)	50	- 25	25	- 13	13	- 6	6-	3	3	- 0.5			50 - 0.5	
Sp.gr.	Float		Flo	oat	Cum.	Float								
op.gr.	Wt. %	Ash %	Wt%	Ash%	Cu.Wt%	Cu.Ash%								
<1.40	9.5	13.5	17.7	11.4	26.4	8.8	36.6	8.4	32.8	8.6	15.8	10.9	15.8	10.9
1.40-1.50	24.5	23.9	20.2	21.5	19.6	19.2	13.0	19.3	14.7	18.9	21.9	22.7	37.7	17.8
1.50-1.60	17.8	33.7	16.3	32.1	13.2	29.7	9.8	28.4	8.7	28.2	16.0	32.7	53.7	22.2
1.60-1.70	8.2	42.1	7.2	40.6	7.5	37.9	5.0	34.9	7.4	34.2	7.7	40.7	61.4	24.5
1.70-1.80	10.5	47.6	13.5	46.6	7.4	45.1	6.4	40.5	6.2	40.2	10.2	46.6	71.6	27.7
1.80-1.90	10.5	54.0	9.1	53.2	7.3	51.5	7.4	49.2	8.5	45.8	9.6	53.0	81.2	30.7
>1.90	19.0	70.5	16.0	69.5	18.6	68.4	21.8	67.5	21.7	61.4	18.8	69.3	100.0	37.9
Total	100.0	40.7	100.0	36.8	100.0	32.7	100.0	31.1	100.0	30.3	100.0	37.9		

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SignatOre of Bidder with Seal & Date

Table - 3.12: Float & Sink Test Results

Colliery : Ashok OCP

Seam : Combined sample of Lower & Upper Dakra seams

Sample No. : CMPDI/ CPL/ 439

Size(mm)	100-25		25	- 13	100-13	3			
	Float		Float		Float		Cum. Float		
Sp.gr.	Wt. %	Ash %	Wt. %	Ash %	Wt%	Ash%	Cu. Wt%	Cu. Ash%	
<1.4	9.2	13.8	18.9	12.7	11.0	13.5	11.0	13.5	
1.4-1.5	24.7	24.7	20.1	23.5	23.9	24.5	34.8	21.0	
1.5-1.6	14.4	34.6	13.4	33.1	14.2	34.3	49.0	24.9	
1.6-1.7	11.4	42.6	8.2	42.2	10.8	42.5	59.9	28.1	
1.7-1.8	10.7	49.0	8.5	45.8	10.3	48.5	70.2	31.1	
1.8-1.9	11.7	54.8	10.1	53.3	11.4	54.6	81.6	34.4	
>1.9	17.9	67.5	20.8	66.2	18.4	67.2	100.0	40.4	
Total	100.0	40.9	100.0	38.1	100.0	40.4			

Job No. 314308037

Signatore of Bidder with Seal & Date

Nature of sample	:	Combined RoM coal sample crushed down to 100 mm
Size of coal tested	:	100-25 & 25-13mm
Respective wt. % of co	oal teste	d : 81.8, 18.2on the basis of +13 mm size fraction

Table - 3.13 : Float & Sink Test Results

Colliery :	Ashok	OCP						
Seam :	Comb	Combined sample of Lower & Upper Dakra sea						
Sample No.	:	CMPD	I/ CPL/ 439					
Nature of samp	:	Combined	RoM coal sample					
crushed down to 50 mm								
Size of coal tes	sted	:	50-25 & 25	-13mm				
Respective wt.	% of co	al tested	: k	78.4 & 21.6				
on the basis of	+13 mn	n size fra	action					

Size(mm)	50-25	25 - 13	50-13			
Sp.gr.	Float	Float	Float	Cum. Float		

	Wt. %	Ash %	Wt. %	Ash %	Wt%	Ash%	Cu. Wt%	Cu. Ash%
<1.4	9.5	13.5	17.7	11.4	11.0	12.9	11.0	12.9
1.4-1.5	24.5	23.9	20.2	21.5	23.7	23.5	34.7	20.2
1.5-1.6	17.8	33.7	16.3	32.1	17.5	33.4	52.2	24.6
1.6-1.7	8.2	42.1	7.2	40.6	8.0	41.9	60.3	26.9
1.7-1.8	10.5	47.6	13.5	46.6	11.0	47.4	71.3	30.1
1.8-1.9	10.5	54.0	9.1	53.2	10.3	53.9	81.5	33.1
>1.9	19.0	70.5	16.0	69.5	18.5	70.3	100.0	39.9
Total	100.0	40.7	100.0	36.8	100.0	39.9		

3.6.3 **Proximate Analysis**

3.6.3.1 Proximate Analysis of RoM Coal Sample & Crushed Coal Samples

Proximate analysis on air dried basis and equilibrated basis (i.e. at 60% RH & 400 C) was carried out for combined RoM coal and combined RoM coal sample of Lower & Upper Dakra seams crushed down to 100 mm & 50 mm sizes. The results of proximate analysis are given in Table - 3.14.

3.6.3.2 Proximate Analysis of Generated Washed Coal & Rejects

The washed coal of +0.5 mm size fraction at 33.5+0.5% ash has been generated from both the RoM combined coal samples crushed down to -100 mm & -50 mm. Proximate analysis and other tests of generated washed coal at 33.5+0.5% ash level & rejects on air dried basis and equilibrated basis (i.e. at 60% RH & 400 C) were carried out. The results of proximate analysis are given in Table -Signat Bre of Bidder

3.14.

 Table - 3.14 :
 Proximate Analysis of RoM Coal, Crushed Coal, Generated Washed Coal & Rejects of Lower & Upper Dakra seams of Ashok OCP

		Crushed	l coal	Genera coal	ited Washed	Rejects		
SI. No	Particulars	Air dried basi s	At 60%R H & 400 C	Air dried basi s	At 60%R H & 400 C	Air dried basis	At 60%R H & 400 C	
1	RoM coal (uncrushed)							
	i) Moisture%	5.5	5.8	-	-	-	-	
	ii) Ash%	38.5	38.4	-	-	-	-	
	iii) VM%	23.2	23.1	-	-	-	-	
	iv) FC%	32.8	32.7	-	-	-	-	
	v) GCV (kcal/kg)	3610	3598	-	-	-	-	

2	RoM coal crushed down to 100 mm	Size: 10	10-0 mm	Size: 100	0-0.5 mm	Size: 100-0).5 mm
	i) Moisture%	5.8	6.2	6.0	7.6	3.6	4.8
	ii) Ash%	38.5	38.3	33.2	32.6	67.2	66.4
	iii) VM%	iii) VM% 23.8 23.7 25.8 25.4		25.4	16.2	16.0	
	iv) FC%	31.9	31.8	35.0	34.4	13.0	12.8
	v) GCV (kcal/kg)	3890	3873	4320		1340	
	vi) UHV(kcal/kg)	2759		3352		ungraded	
3	RoM coal crushed down to 50 mm	Size: 50)-0 mm	Size: 50)-0.5 mm	Size: 50-0	.5 mm
	i) Moisture%	5.8	6.3	6.1	7.8	3.7	4.9
	ii) Ash%	38.0	37.8	33.1	32.5	70.5	69.6
	iii) VM%	24.1	24.0	26.1	25.6	16.5	16.3
	iv) FC%	32.1	31.9	34.7 34.1		9.3	9.2

v) GCV (kcal/kg)	3730	3710	4450	1280	
vi) UHV(kcal/kg)	-	2814	3339	ungraded	

3.7 TEST RESULTS OF BUKBUKA SEAM OF DAKRA OCP

3.7.1 Screen-cum-Ash Analysis

3.7.1.1 Screen-cum-Ash Analysis of RoM Coal

Available test results of Bukbuka Composite seam have been taken from "Report on washability characteristics of RoM coals from K.D.Hesalong OCP - Dakra Composite seam, Karkatta Colliery - Bisrampur seam &Dakra OCP-Bukbuka Composite seam" prepared by M/s Coal Inspection Service, Dhansar, Dhanbad in 1988.

As per the above mentioned report, RoM coal sample was collected from Bukbuka Composite seam of Dakra OCP. Representative sample was drawn after coning & quartering and was subjected to screen analysis at 200, 150, 100, 75, 50, 25, 13, 6, 3 and 0.5 mm aperture screens. Weight% and ash% were determined for respective size fractions. The test results are given in Table - 3.15. RRS diagram of screen analysis has been given at Plate No. 6.

Table - 3.15 : Screen-cum-Ash Analysis

Colliery :Dakra OCP

:Bukbuka Composite

Nature of sample

Seam

:RoM coal (uncrushed)

Size (mm)	Wt %	Ash %
+200	20.2	38.6
200-150	9.1	40.6
150-100	13.1	38.1
100-75	6.8	37.4
75-50	9.5	36.0
50-25	14.0	35.5
25-13	11.3	33.9
13-6	6.8	31.6
6-3	3.1	27.0
3-0.5	4.0	28.2
-0.5	2.1	29.0
Total	100.0	36.0

3.7.1.2 Screen-cum-Ash Analysis of RoM Coal Crushed Down to 100 MM

Screen analysis of RoM coal crushed down to 100 mm was carried out at 50, 25, 13 & 6 mm aperture screens. Weight%& ash% were determined for respective size fractions. The results are given in Table - 3.16. RRS diagram of screen analysis has been given at Plate No. 7.

Table - 3.16 : Screen-cum-Ash Analysis

- Colliery : Dakra OCP
- Seam : Bukbuka Composite
- Nature of sample : RoM coal crushed down to 100 mm

Size (mm)	Wt %	Ash %
100-75	26.8	39.8
75-50	21.5	38.0
50-25	22.5	35.5
25-13	11.6	33.3
13-6	7.6	29.6
-6	10.0	30.4
Total	100.0	36.0

The screen-cum-ash analysis of 100-13 mm & -13 mm size fractions have been computed from Table - 3.16 and are given in Table - 3.17.

 Table - 3.17
 :
 Screen-cum-Ash Analysis of Bukbuka Composite Seam Coal Crushed down to 100 mm

Size (mm)	Wt %	Ash %
100-13	82.4	37.2
-13	17.6	30.1
Total	100.0	36.0

3.7.2 Float & Sink Tests of Different Size Fractions

Float and sink tests of RoM coal crushed down to 100 mm size has been carried out at 1.5, 1.6, 1.7, 1.8, 1.9 &2.0 specific gravities for different size fractions of 100-6mm. The results are given in Table - 3.18. Float & sink results of 100-13 mm size fraction have been computed from test data and are given in Table - 3.18. The results of the float & sink analysis of 100-13 mm size fraction are shown graphically in the form of M-curves in Plate No.8.

Table - 3.18 : Float & Sink Test Results

Colliery : Da	Dakra OCP							
Seam : Bu	ikbuka Co	mposite						
Nature of sample	:	RoM coal crushed down to 100 mm						
Size of coal tested	:	100-75, 75-50, 50-25, 25-13 & 13-6 mm						

Respective wt. % of coal tested on the

basis of +6 mm size fraction : 29.8, 23.9, 25.0, 12.9 & 8.4

Size(mm)	100 -75		75 - 5	5 - 50 50-25			25-13	25-13 13 - 6				100 - 6			
Sp. gr	Float		Float	Float		Float		Float		Float			Cum. Float	Cum. Float	
Sp. gr.	Wt. %	Ash %	Wt. %	Ash %	Wt. %	Ash %	Wt. %	Ash %	Wt. %	Ash %	Wt%	Ash%	Cu Wt%	Cu. Ash%	
<1.50	9.1	23.0	9.3	22.3	10.6	17.8	6.2	16.8	4.4	14.1	39.6	19.5	39.6	19.5	
1.50-1.60	5.2	35.2	3.4	34.3	3.8	35.7	1.3	34.2	0.8	32.9	14.5	34.9	54.1	23.6	
1.60-1.70	4.0	41.0	3.4	43.1	2.5	41.3	1.3	41.4	1.1	39.4	12.3	41.5	66.4	26.9	
1.70-1.80	4.8	47.5	3.1	48.4	2.9	45.7	1.8	47.9	1.0	48.0	13.6	47.4	80.0	30.4	
1.80-1.90	3.6	52.8	2.4	52.8	2.0	53.6	0.9	50.8	0.4	51.2	9.3	52.7	89.3	32.7	
1.90-2.00	1.1	62.8	0.7	63.0	1.2	63.8	0.6	62.4	0.2	61.8	3.8	63.0	93.1	34.0	
> 2.00	2.0	71.8	1.6	72.5	2.0	72.4	0.8	71.5	0.5	72.6	6.9	72.2	100.0	36.6	
Total	29.8	39.8	23.9	38.0	25.0	35.5	12.9	33.3	8.4	29.6	100.0	36.6			

Table - 3.19 : Float & Sink Test Results

Colliery : Dakra OCP

Seam : Bukbuka Composite

Nature of sample : RoM coal crushed down to 100 mm

Size of coal tested : 100-75, 75-50-50-25 & 25-13mm

Respective wt. % of coal tested on thebasis of +13 mm size fraction : 32.5, 26.1, 27.3, 14.1

Size(mm)	100 -7	75	75 - 5	0	50-25		25-13			100 - 13				
	Float		Float		Float		Float		Float		Cum. Float			
Sp.gr.	Wt. %	Ash %	Wt. %	Ash %	Wt. %	Ash %	Wt. %	Ash %	Wt%	Ash%	Cu.Wt%	Cu.Ash%		
<1.50	30.5	23.0	38.9	22.3	42.4	17.8	48.1	16.8	38.4	20.2	38.4	20.2		
1.50-1.60	17.4	35.2	14.2	34.3	15.2	35.7	10.1	34.2	15.0	35.0	53.4	24.3		
1.60-1.70	13.4	41.0	14.2	43.1	10.0	41.3	10.1	41.4	12.2	41.8	65.6	27.6		
1.70-1.80	16.1	47.5	13.0	48.4	11.6	45.7	14.0	47.9	13.8	47.4	79.4	31.0		
1.80-1.90	12.1	52.8	10.0	52.8	8.0	53.6	7.0	50.8	9.7	52.8	89.1	33.4		
1.90-2.00	3.7	62.8	2.9	63.0	4.8	63.8	4.7	62.4	3.9	63.1	93.0	34.6		
> 2.00	6.7	71.8	6.7	72.5	8.0	72.4	6.2	71.5	7.0	72.1	100.0	37.2		
Total	100.0	39.8	100.0	38.0	100.0	35.5	100.0	33.3	100.0	37.2				

3.8 TEST RESULTS OF BISRAMPUR SEAM OF KARKATTA COLLIERY

3.8.1 Screen-cum-Ash Analysis

3.8.1.1 Screen-cum-Ash Analysis of RoM Coal

Available test results of Bisrampur seam have been taken from "Report on washability investigation for K.D.Hesalong OCP & Karkatta Colliery" prepared by Coal Preparation Laboratory, CMPDI, Ranchi in August 1988.

As per the above mentioned report, RoM coal sample was collected from Bisrampur seam of Karkatta Colliery. Representative sample was drawn after coning & quartering and was subjected to screen analysis at 200, 100, 75, 50, 25, 13, 6 and 0.5 mm aperture screens. Weight% and ash% were determined for respective size fractions. The test results are given in Table - 3.20. RRS diagram of screen analysis has been given at Plate No. 9.

Table - 3.20 : Screen-cum-Ash Analysis

Colliery :Karkatta Colliery

Seam :Bisrampur

Nature of sample :RoM coal (uncrushed)

Size (mm)	Wt %	Ash %
+200	5.5	40.6
200-100	27.7	39.6
100-75	13.9	38.3
75-50	14.2	37.4
50-25	14.0	38.1
25-13	6.9	38.8
13-6	6.2	37.4
6-0.5	7.5	31.8
-0.5	4.1	37.9
Total	100.0	38.1

3.8.1.2 Screen-cum-Ash Analysis of RoM Coal Crushed Down to 100 mm

Screen analysis of RoM coal crushed down to 100 mm was carried out at 75, 50, 25, 13, 6 and 0.5 mm aperture screens. Weight%, ash% and moisture% were determined for respective size fractions. The results are given in Table - 3.21. RRS diagram of screen analysis has been given at Plate No. 10.

Table - 3.21: Screen-cum-Ash Analysis

Colliery :Karkatta Colliery

Seam

:Bisrampur

Nature of sample

:RoM coal crushed down to 100 mm

Size (mm)	Wt %	Ash %
100-75	27.9	40.0
75-50	23.5	36.7
50-25	17.3	37.3
25-13	9.5	37.9
13-6	8.0	36.6
6-0.5	8.4	30.5
-0.5	5.4	37.3
Total	100.0	37.3

The screen-cum-ash analysis and moisture percent of 100-13 mm & -13 mm size fractions have been computed from Table - 3.21 and are given in Table - 3.22.

 Table - 3.22
 :Screen-cum-Ash Analysis of Bisrampur Seam

Coal Crushed down to 100 mm

Job No. 314308037

Signation of Bidder with Seal & Date

Size (mm)	Wt %	Ash %
100-13	78.2	38.1
-13	21.8	34.4
Total	100.0	37.3

3.8.2 Float & Sink Tests of Different Size Fractions

Float and sink tests of RoM coal crushed down to 100 mm size has been carried out at 1.5, 1.6, 1.7, 1.8 &1.9 specific gravities for different size fractions of 100-13 mm. The results are given in Table - 3.23.

Table - 3.23 : Float & Sink Test Results

Colliery : Karkatta Colliery

Seam : Bisrampur

Nature of sample : RoM coal crushed down to 100 mm

Size of coal tested : 100-75, 75-50, 50-25 & 25-13 mm

Respective wt% of coal tested on the basis of +13 mm size fraction : 35.7, 30.1, 22.1 & 12.1

Size(mm)	100 -75 75		75 - 9	50	50	-25	25 [.]	-13		10	0 - 13	
Float		oat	Float		Float		Float		Float		Cum. Float	
Sp. gr.	Wt. %	Ash %	Wt. %	Ash %	Wt. %	Ash %	Wt. %	Ash %	Wt%	Ash%	Cu. Wt%	Cu. Ash%
<1.50	36.2	24.7	45.6	21.7	45.7	20.9	37.8	19.0	41.3	22.1	41.3	22.1
1.50-1.60	33.0	34.7	20.1	34.2	15.9	33.5	19.4	33.8	23.7	34.3	65.0	26.6
1.60-1.70	7.1	43.0	10.8	43.4	12.2	43.0	13.4	42.3	10.1	43.0	75.1	28.8
1.70-1.80	4.1	52.2	7.2	53.5	5.3	50.1	7.4	51.3	5.7	52.1	80.8	30.4
1.80-1.90	6.3	58.7	5.7	59.7	6.5	59.0	7.3	55.9	6.3	58.6	87.1	32.5
> 1.90	13.3	80.9	10.6	75.7	14.4	74.0	14.7	72.3	12.9	76.7	100.0	38.2
Total	100.0	40.0	100.0	36.7	100.0	37.3	100.0	37.9	100.0	38.2		

3.9 INDICATIVE BALANCE OF PRODUCT FOR VIABILITY PURPOSE

The indicative balance of product for viability purpose is given at Table – 3.24.

Products	Yield %	Ash%
Washed/ Clean coal	79.8	33.6
Rejects	20.2	58.3
Total	100.0	38.6

Table-3.24: Indicative balance of product for viability purpose

SECTION-4 : COMMERCIAL TERMS & OTHER CONDITIONS & PRICE BID

4.1 ACCEPTANCE OF TERMS & CONDITIONS BY THE BIDDER

Bidder shall confirm that all the terms & conditions laid down in the Bid Document are acceptable to them.

4.2 LANGUAGE OF BID

The language of the Agreement, drawings & all correspondences between the Company and the Bidders shall be English.

4.3 CONTRACT DOCUMENT

The following document shallconstitute the contract document:

- Bid document, offer submitted, subsequent correspondences/ clarifications, etc.
- Letter of Intimation (LoI) issued to the Lowest Bidder
- Letter of Award by CCL & its acceptance by the WO,
- Commercial Terms & Other Conditions of Contract for the entire contract period for set up & operation both,
- All Technical Specifications along with Contract Drawings/ Finalized Work Programme
- Proforma of applications for payment to WO for washing charges
- Lease Agreement between CCL & Selected Bidder and Security Deposit

4.4 TIME - THE ESSENCE OF CONTRACT

- 4.4.1 The time and the date of completion of the works as stipulated in the WO's proposal and accepted by the Company without or with modifications, if any and so incorporated in the award letter shall be deemed to be the essence of the contract. The WO shall so organize his resources and perform his work as to complete it not later than the date agreed to.
- 4.4.2 The bidder shall make available to CCL a detailed work programme along with his offer for setting up of the proposed Washery/CPP. (Appendix-2, B)
- 4.4.3 The Preferred Bidder shall enter into a Contract with CCL within 28 (twenty eight) days from the date of issue of Letter of Award or within such extended time as may be granted by CCL. *Also refer Cl.No. 19 of Detailed E-tender Notice.*

4.5 EARNEST MONEY DEPOSIT (EMD)/ BID SECURITY

Refer Cl No. 3 of Detail e-tender notice.

4.6 SECURITY DEPOSIT (SD)

The successful bidder shall submit, a Bank Guarantee of an amount equivalent to **10 (ten)** % of the annual washing charges[*e.g., for calculation of amount of SD, Annual Washing charge* = 4,000,000 tonnes x L1 washing charge in ₹/tonne of raw coal (dry)], from a schedule/ <u>nationalised</u> Bank, within a week after receipt of Letter of Award, to ensure that the successful bidder takes up the work in right earnest and also for deduction on account of liquidated damage for late commissioning of the plant and failure to pay electricity & water charges, penalties etc. along with applicable GST during construction and operation. The security deposit amount shall be valid upto 3 months beyond initial period of 18 months for set up or any extended period, if required plus first year of commercial operation. Thereafter, the said SD shall have to be replaced each year by a new SD commensurating with the revised annual washing charge. The new SD shall be valid upto three months beyond the year for which the same has been submitted. The SD submitted earlier shall be refunded to the WO each year after receipt of new SD by CCL. This process of submission of SD by WO & its refund by CCL shall continue till the expiry of the Agreement for fulfilment of all contractual obligations. The format for submission of Bank Guarantee for SD is given as **Enclosure – II.**

The aforesaid Bank Guarantee (BG) against security deposit (SD) shall be encashed byCCL in full or part under the following conditions:

- a) If the selected bidder quit from the job, any time after signing the Agreement during the entire period of contract, in such case the entire BG shall be forfeited byCCL.
- b) In case the selected bidder fails to fulfill the contractual obligations, including performance of the plant, CCL shall be at liberty to deduct/ appropriate any amount, that is due and payable by the WO to CCL, from the Security Deposit (SD) as may be determined in terms of the contract.

NOTE:

1. Structured Financial Messaging System (SFMS)

i) The Bank Guarantee (BG) issued by the issuing Bank on behalf of Washery/CPP operator, contractor, supplier, customer infavour of "Central Coalfields Limited" shall be in paper form as well as issued under "Structured Financial Messaging System (SFMS)".

ii) CCL has chosen State Bank of India to act as advising / beneficiary bank of CCL. The Bank issuing the guarantee shall have to send confirmation through SFMS through this Bank.

iii) The details of beneficiary (i.e. CCL) for issue of Bank Guarantee (BG) under SFMS platform is furnished below:

STATE BANK OF INDIA AS ADVISING BANK OF CCL:

i.	i. Name of the Beneficiary and its details.		Name	Central Coalfields Limited (CCL)
			Area	CCL - HQ. Ranchi
			Name of Bank	State Bank of India
		iv	Bank Account No.	10106155123
	٧	Department	Washery Construction	
ii.	Beneficiary's	i	Name of Bank	State Bank of India
Advising	ii	Bank Branch name	SME Branch	
	Bank, Branch	iii	Branch code	09620

and address	iv	IFSC Code	SBIN0009620
for	v	Beneficiary Bank	State Bank of India, SME
confirmation		Branch & Address	Branch, Doranda, Ranchi –
of BGs			834 002, JHARKHAND
through			
SFMS.			

iv) The Supplier/ Contractor/ Customer are required to take note of it that above particulars are to be incorporated by the issuing bank properly while issuing the Bank Guarantee under SFMS mode to avoid any future problem in accepting the BGs.

v) The Guarantor (BG issuing bank) shall send information about issuance of this guarantee through SFMS gateway to the State Bank of India, SME Branch, Doranda, Ranchi – 834002 (IFSC-SBIN0009620), to add in the process of confirmation of Bank Guarantee.

vi) The Guarantor (BG issuing bank) shall also send information about issuance of this guarantee to its local operating branch at Ranchi to add in the process of confirmation as well as claim for encashment of Bank Guarantee.

vii) The original Bank Guarantee issued by the outstation bank shall be sent by the issuing bank to Washery Construction Department, Damodar Building, Central Coalfields Limited, Darbhanga House, Ranchi-834029, Jharkhand by Speed Post/ Registered Post (AD).

2. GENERAL INSTRUCTION FOR SECURITY DEPOSIT:

i) No extension of Bank Guarantee for a period of less than 3 (three) months shall be accepted.

- ii) Bank Guarantees issued by outstation Banks shall be operative at their local branch i.e. Ranchi.
- c) iii) Bank Guarantees shall contain complete Postal Address, Telephone Number, FAX Number and e-mail address of both the outstation bank issuing the BG as well as its local operating branch at Ranchi.

If the Environmental Clearance is not obtained for the setting up of the Washery/CPP, Security Deposit submitted by the successful bidder will be refunded and no other compensation will be paid by CCL to successful bidder.

4.7 LAND

4.7.1 The siteproposed for 4.0 MtyAshokWashery/CPPisshown in enclosed Drawing.CCL shall provide 24.00 Ha land for setting up of Washery/CPP on lease basisat prevalent rate (the indicative land lease rent is ₹16.73 m2/year as on 14.08.2018 with annual escalation of 7% on previous year's rate). Further GST and other taxes will be chargeable extra as admissible.

The initial lease period is for 18 months of construction period and extension, if any from the date of signing of Contract or handing over of site whichever is later plus 18 (eighteen) years from the date of start of commercial operation or thereafter extended period on mutually agreed terms and conditions. After expiry of the Contract, WO will handover the site leased out to him &Washery/CPP along with all auxiliaries & infrastructures to CCL without any monetary claim. No land will be provided for colony or any other purpose.

- 4.7.2 CCL shall pay all taxes and impositions, as applicable in respect of the said land and buildings including the enhancement of rates and taxes payable either to Panchayat/ Municipality/ Government.
- 4.7.3 The successful bidder shall be responsible for surveying, soil testing, levelling and grading of sites and all pre-constructional development works.
- 4.7.4 The successful bidder shall not be entitled to transfer, assign or mortgage the land and shall use the said land only for construction of this Washery/CPP and supply washed coal, slurry & rejects of the Washery/CPP only to CCL. The successful Bidder shall also not be entitled to let out, transfer, assign, mortgage or allow others to use the said land as well as structure/ building constructed thereon.
- 4.7.5 The successful bidder shall bear all expenses and charges for special or temporary way leaves required by him in connection with access to the site.

- 4.7.6 On expiry of contract period, the WO shall yield to and deliver upon peaceful possession of land leased out to him and Washery/CPP along with auxiliaries & infrastructures to CCL without any monetary claim.
- 4.7.7 All operations necessary for the execution of the works at site and for the construction of any temporary works shall, so far as compliance with the requirements of the Contract permit, be carried on so as not to interfere unnecessarily or improperly with the public convenience or the access to use and occupation of public or private roads and footpaths or to or of properties whether in possession of the other agency or any other person and the WO shall save harmless and indemnify CCL in respect of all claims, demands, proceedings, damages, cost charges and expenses whatsoever arising out of or in relation to any such matters in so far as the bidder is responsible thereof.

4.8 SITE VISIT

- 4.8.1 Proposed site is presently undulated and the contour ranges as indicated in the enclosed Drawing. The responsibility of leveling of the site up to the desired level lies with the WO.
- 4.8.2 The Bidder, at the Bidder's own responsibility, cost and risk shall visit and examine the Washery/CPP Site and its surroundings and obtain all information that may be necessary for preparing the Offer and entering into a Contract for construction of the Washery/CPP.
- 4.8.3 It shall be deemed that the Bidder has visited the site/ area and got fully acquainted with the working conditions and other prevalent conditions and fluctuations thereto (whether he actually visits the site/ area or not) and has taken all the factors into account while quoting his rates and prices.

4.9 POWER

Whenever, power will be provided by CCL the same shall be on chargeable basis at the rate charged by DVC to CCL. Prevailing rate of power at the time of construction / operation will be charged from WO.

4.10 WATER

Whenever water will be provided by CCL, the same shall be on chargeable basis. Prevailing rate of water at the time of construction / operation will be charged from WO.

4.11 COMMISSIONING AND TRIAL OPERATION SCHEDULE

- 4.11.1 The successful bidder shall construct and commission the Washery/CPP within 18(Eighteen) months from the date of signing of Agreement or handing over the site, whichever is later. During the commissioning period, the authorized representatives of CCL will observe the performance of the Washery/CPP.
- 4.11.2 CCL will supply requisite quantity of raw coal to the WO for carrying out the load trial run and performance guarantee tests by the WO. CCL shall be informed by the WO in writing at least thirty (30) days in advance for the coal.
- 4.11.3 CCL will not bear any cost of beneficiation during the commissioning period. However, all the products obtained after washing during commissioning period will be the property of CCL.
- 4.11.4 The bidder shall carry-out *performance guarantee tests (PGT)/* trial-operation/ commissioning for a period of three (3) months to determine and demonstrate capacity, efficiency, quality parameters and operating characteristics as specified in the Bid Document. In case, the successful bidder fails to achieve the desired performance guarantee parameters (viz. 95% OE etc.), the above trial test may be extended suitably on mutually agreed basis. No washing charges will be paid during this trial test period.
- 4.11.5 Commercial Operation shall start only after successful PGT and acceptance of the same by CCL.

4.12 LIQUIDATED DAMAGE FOR LATE COMMISSIONING

- 4.12.1 The bidders in their offer shall guarantee the construction period (including commissioning) of 18(Eighteen) months which will be effective from the date of signing of Agreement or handing over the site, whichever is later. In case, the commissioning of the plant is delayed beyond the schedule period of 18 months, the successful bidder shall have to pay CCL liquidated damage at the rate of 2.5 percent of the annual washing charge (as quoted in the offer)*along with applicable GST* for each month of delay in commissioning of the plant, subject to a maximum of 10% of the annual washing charge *along with applicable GST* [e.g., for calculation of amount of LD, Annual Washing charge = 4,000,000 tonnes x L1 washing charge in ₹/tonne of raw coal (dry)]. Liquidated damage for late commissioning is however subject to force majeure clause.
- 4.12.2 The Company, if satisfied, that the works can be completed by the WO within a reasonable time after the specified time of completion, may allow further extension of time at its discretion with or without the levy of L.D. In the event of extension granted being with L.D., the Company will be entitled without prejudice to any other right or remedy available in that behalf, to recover from the WO as agreed damages equivalent rate specified in para 4.12.1.

- 4.12.3 The Company, if not satisfied that the works can be completed by the WO, and in the event of failure on the part of the WO to complete work within further extension of time allowed as aforesaid, shall be entitled, without prejudice to any other right, or remedy available in that behalf, to terminate the contract.
- 4.12.4 The Company, if not satisfied with the progress of the contract and in the event of failure of the WO to recoup the delays in the mutually agreed time frame, shall be entitled to terminate the contract.
- 4.12.5 In the event of such termination of the Contract as described in Cl. No. 4.12.3 or 4.12.4 or both, the Company, shall be entitled to recover L.D. upto 10% value of annual washing charge and forfeit the Security Deposit. In such case, CCL shall take over the plant without paying any compensation thereof.
- 4.12.6 The Company may waive the payment of liquidated damages, depending upon merit of the case, on request received from the WO if the entire work is completed even within the period extended by CCL.

4.13 PATENT RIGHTS AND ROYALTIES

Royalties and fees for patent covering materials, articles, apparatus, devices, equipment or processes used in the works to be paid shall be the responsibility of the WO. The WO shall satisfy all demands that may be made at any time for such royalties or fees and he alone shall be liable for any damages or claims for patent infringements and shall keep the Company indemnified in that regard. The WO shall, at his own cost and expense, defend all suits or proceedings that may be instituted for alleged infringement of any patent involved in the works, and, in case of an award of damages, the WO shall pay for such award. In the event of any suit or other proceedings instituted against the Company, the same shall be defended at the cost and expense of the WO who shall also satisfy/ comply and decree, order or award made against the Company. In no case, the Company shall be held responsible for the above.

4.14 GOVERNING LAWS & RULES

The WO shall familiarise himself with and be governed by all laws and rules of India and local statutory orders and regulations applicable to his subject work from time to time.

4.15 DELAYS BY CCL

In case the WO's performance is delayed due to any fault attributable to CCL, then the WO shall be given due extension of time for completion of the works, to the extent such fault attributable to CCL has caused delay in the WO's performance.

Further, if such delay caused increase in the washing charges, then CCL shall examine the justification for such claim and if satisfied, the extent of increase in washing charges shall be paid as per the escalation clause (refer Cl. No. 4.46).

4.16 GRAFTS AND COMMISSIONS ETC.

Any graft, commission, gift or advantage given, promised or offered by or on behalf of the WO or his partner, agent, officers, director, employee or servant or any one of his or their behalf in relation to the obtaining or to the execution of this or any other contract with CCL, shall, in addition to any criminal liability which it may incur, subject the WO to the cancellation of this and all other contracts and also to payment of any loss or damage to CCL resulting from any cancellation. CCL shall then be entitled to deduct the amount so payable from any moneys otherwise due to the WO under the contract.

4.17 LANGUAGE AND MEASURES

Refer Cl No. 12 of Detail e-tender notice

4.18 SETTLEMENT OF DISPUTES

It is incumbent upon the successful bidder to avoid litigation and disputes during the course of execution. However, if such disputes takes place between the successful bidder and the Coal Co.(CCL), effort shall be made first to settle the disputes at the Coal Co. (CCL) level.

The Successful Bidder should make request in writing to the Engineer-in-Charge (EIC) for settlement of such disputes/ claims within 30 (thirty) days of arising of the dispute/ claim failing which no disputes/ claims of the Successful Bidder shall be entertained by the company (CCL).

If differences still persists, the redressal of the dispute shall be resolved in the following manner:

- a) Disputes relating to the commercial contracts with Central Public Sector Enterprises/ Govt. Departments (except Railways, Income Tax, Customs & excise duties)/ State Public Sector Enterprises shall be referred by either party for Arbitration to the PMA (Permanent Machinery of Arbitration) in the department of Public Enterprises.
- b) In case of parties other than Govt. Agencies, the redressal of the dispute may be sought through Arbitration (THE ARBITRATION AND CONCILIATION ACT, 1996 as amended by AMENDMENT ACT of 2015).

4.18(A) SETTLEMENT OF DISPUTES THROUGH ARBITRATION

If the Successful bidder and CCL fail to resolve the disputes/differences by in house mechanism, then, depending on the position of the case, either the Successful Bidder or the CCL shall give notice to other party to refer the matter to arbitration instead of directly approaching Court. The Successful Bidder shall, however, be entitled to invoke arbitration clause only after exhausting the remedy available under the Clause 4.18.

In case of parties other than Govt. agencies, the redressal of disputes/differences shall be sought through Sole Arbitration as under.

4.18(A).1 Sole Arbitration:

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 CMD of CCL. The award of the arbitrator shall be final and binding on the parties of this Contract.

- 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 CMD of CCL 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 CMD of CCL 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.
- c) Subject as aforesaid, Arbitration and Conciliation Act, 1996 as amended by Amendment Act of 2015, and the rules thereunder and any statutory modification thereof for the time being in force shall be deemed to apply to the Arbitration proceedings under this clause.
- d) The venue of arbitration shall be the place from which the contract is issued.
- e) Applicable Law: The contracts shall be interpreted in accordance with the laws of the Union of India.
- f) Contracts with Partnership firm/ Consortium:

The Partnership firm / Consortium is required to submit written consent of all the partners to above arbitration clause at the time of submission of bid.

4.19 COST OF BIDDING

Refer CI No. 22 of Detail e-tender notice.

4.20 AMENDMENT OF BIDDING DOCUMENTS

Refer Cl No. 7 of Detail e-tender notice.

4.21 AGREEMENT

- 4.21.1 The successful bidder shall when called upon to do so, enter into and execute an Agreement for the subject work on BOO concept. The Agreement shall be operative initially for 18 months of construction period and extension, if any from the date of signing of Contract or handing over of site, whichever is later plus 18 (EIGHTEEN) years from the date of start of commercial operationor thereafter extended period on mutually agreed terms and conditions.
- 4.21.2 If the successful bidder fails or neglects to observe or perform or commits or allows to be committed breach of any of the terms, conditions, provisions or stipulations of the Agreement on its part to be observed and performed and if such breach is remediable, fails to remedy the same within 6 (six) months of the notice by CCL specifying such default and requiring such default to be remedied, then CCL will be entitled to terminate the Agreement and take possession of the land and the plant as is where is basis without giving any compensation on this account to the successful bidder and the coal Washery/CPP (land including buildings, structures, machinery etc.) shall rest in and be the absolute property of CCL.
- 4.21.3 The Agreement shall come to an end:
 - i) If the successful bidder goes into liquidation
 - ii) If the successful bidder fails to obtain statutory approvals as required.
- 4.21.4 At the expiration of the Agreement, the WO shall yield to and deliver upon CCL peaceful possession of land including buildings, structures and machinery without claiming any compensation value thereof and the coal Washery/CPP shall rest in and be the absolute property of CCL.
- 4.21.5 In the event of acquisition of the Washery/CPP or any portion thereof prior to completion of contract by any agency other than CCL under any act for the time being in force, the amount of compensation that will be awarded for the land & coal left in the Washery/CPP premises shall belong to CCL and that of plant and equipment and building etc. shall belong to the WO. The compensation money, if any, paid by the agency for loss of business shall be shared equally between CCL and the WO.

4.22 LAW GOVERNING AGREEMENT

The Agreement shall be governed by the law as is applicable in India and shall be construed in accordance thereto. The Court of Law at Ranchi in Jharkhand, India only have the jurisdiction to deal with and decide any legal matter on dispute whatsoever arising out of the contract.

4.23 COMPLETION OF CONTRACT

Unless otherwise terminated under the provisions of any other relevant clause, the Contract of the Washery/CPP shall continue till expiry of contract for operation & maintenance i.e. 18 years from the date of commercial operation of the Washery/CPP.

4.24 HANDING OVER OF LAND & PLANT BY WO TO CCL

After expiry of contract i.e. after 18 years of commercial operation, WO will handover the land including buildings, structures and machinery to CCL without any monetary claim. The WO shall also handover various information/ document regarding the plant viz. engineering data, drawings, manuals, and also those relating to different approval in this regard.

4.25 ENGINEER'S DECISION

- 4.25.1 In respect of all matters which are left to the decision of EIC including the granting or with-holding of the certificates, EIC shall, if required to do so by the WO give in writing a decision thereon.
- 4.25.2 If in the opinion of the WO, a decision made by EIC is not in accordance with the meaning and intent of the contract, the WO may file with EIC within fifteen (15) days after receipt of the decision, a written objection to the decision. Failure to file an objection within the allotted time will be considered as acceptance of EIC's decision and the decision shall become final and binding.
- 4.25.3 EIC's decision and the filing of the written objection thereto shall be a condition precedent to the right to any legal proceedings. It is the intent of the Contract that there shall be no delay in the execution of the works and the decision of EIC as rendered shall be promptly observed.

4.26 WO'S CO-OPERATION WITH CCL

In cases where electricity, water, etc. are provided by the coal company, the WO shall strictly adhere to perform only in the manner stipulated by the coal company.

4.27 DEFENCE OF SUITS

If any action in court is brought against CCL or engineer or an officer or agent of CCL for failure or neglect on part of the WO to perform any acts, matters, covenants or things under the contract, or for damage or injury caused by the alleged omission or negligence on part of the WO, his agents, representatives or his sub-Contractors, workmen, suppliers or employees, the WO shall in all such cases indemnify and keep CCL, and EIC and/ or his representative, harmless from all losses, damages, expenses or decrees arising of such action.

4.28 MARGINAL NOTES

The marginal notes to any clause of the contract shall not affect or control the construction of such clause.

4.29 ASSISTANCE IN PROCUREMENT OF MATERIALS

All the materials required for execution of the agreement shall be supplied by the successful bidder. CCL may, on demand, issue an Essentiality-Certificate (EC) to the successful bidder to enable him to procure steel and cement. However, procurement of such materials against the EC issued by CCL shall not be linked in any way with the completion schedule of the subject work and the procurement will be the sole responsibility of the successful bidder.

In case the use of imported materials/ equipment becomes essential, then the successful bidder shall obtain clearance from the Director General Technical Development (DGTD) and other relevant authority. CCL may on request of the successful bidder, render the necessary assistance in obtaining the import licence.

4.30 STORES

The WO shall maintain spares (for 2 years) for both indigenous and imported equipment, special tools & tackles covering all mechanical, electrical and instrumentation items for smooth operation & maintenance of the plant.

4.31 SUBMISSION OF OFFER

Refer CI No. 11 of Detail e-Tender Notice.

4.32 SPARES

A list of the recommended spares & critical spares will have to be furnished along with the Offer as Appendix-5. These recommended spares for indigenous and imported equipment, special tools & tackles covering all mechanical, electrical and instrumentation items for operation & maintenance of the Washery/CPP shall have to be provided by the WO and at the time of completion/ termination of the contract period, the same should be handed over to CCL without any monetary claim.

4.33 GENERAL CONDITIONS

4.33.1 **Operation & Maintenance of P&M**

The successful bidder shall use and operate the machinery carefully and maintain the same in good working condition and repair/ replace at his own cost and expenses in conformity with the instructions or operational manuals given by the manufacturer and comply with all statutory and other requirements of law, rules, regulations and directions applicable to the storage of fuel, oil, lubricant and machinery or installation and operation of the Coal Washery/CPP and ensure that the machinery are operated by suitably trained and qualified personnel for the purpose for which it is designed.

4.33.2 Insurance

- 4.33.2.1 The successful bidder shall insure all plant and machinery, working personnel including raw coal & products (also at the loading site) to receive the compensation money against risks of fire, riot, lightning, explosion, earthquake, storm, tempest, flood, war, malicious damage, theft, civil commotion or such other acts from time to time.
- 4.33.2.2 Any proceeds receivable from the Insurance Company shall be used by the WO to make good the damages and payment of compensation.
- 4.33.2.3 In the event of any irreparable loss or damage to the plant and machinery as a whole or the Insurance Company refusing to pay the claim arising out of any loss on the gross negligence and violation of the condition of insurance policy, the WO shall replace the damaged plant/ equipment at his own cost to resume the Washery/CPP operation.
- 4.33.2.4 In the event of any loss or expense or damage suffered by CCL due to any claim made against CCL by any person for suffering any injury or damages to any person/ property whatsoever arising out of or in consequence of any action or omission or commission on the part of the WO or in violation of statutory provisions in connection with erection, operation and maintenance of the Washery/CPP, the WO shall keep CCL indemnified for any claim, demand, proceeding, damages, cost, charges and expenses whatsoever in respect of or in relation thereto by taking suitable insurance policy.
- 4.33.2.5 The WO shall ensure that the insurance policy/ policies are kept alive till full expiry of the Agreement by timely payment of premiums and similar insurance policies are also taken by his sub-contractors, if any. The cost of premiums shall be borne by the WO. The WO's failure in this regard shall not relieve him of any of his contractual responsibilities and obligations.
- 4.33.2.6 The WO shall provide the Company (CCL) with a copy of all insurance policies and documents taken out by him in pursuance of the contract. Such copies of document shall be submitted to the Company immediately after such insurance coverage. The WO shall also inform the Company in writing at least sixty (60) days in advance, regarding the expiry, cancellation and/or change in any of such documents and ensure revalidation/ renewal, etc. as may be necessary well in time. Copy of the premium receipts and such

records which evidences that the policy remains valid and alive and shall also be furnished regularly to CCL by the WO without failure.

4.33.3 **Safety**

- 4.33.3.1 The successful bidder shall at all times exercise reasonable precautions for the safety of employees in the performance of his contract and shall comply with all applicable provisions of the safety laws drawn up by the State or Central Government or municipalities and other authorities in India. The successful bidder shall comply with the provisions of the safety Handbook as approved and amended from time to time by the Government of India.
- 4.33.3.2 The successful bidder shall familiarise himself with and be governed by all laws and rules of India and local statutory orders and regulations applicable to his work.

4.33.4 Progress Report

The successful bidder shall furnish to the company (CCL) or its authorised representative with relevant reports from time to time regarding the successful bidder's organisation and the progress made by him in the execution of the work as per the Agreement.

4.33.5 **Taxes and Duties**

- 4.33.5.1 All relevant taxes duties or Goods & Services Tax (GST), whether Local/ Municipal, Provincial or Central, levies etc. lawfully assessed, which are payable or may become payable in their business operation during the entire period of contract shall be to the successful bidder's account.
- 4.33.5.2 All relevant taxes & duties *or Goods* & *Services Tax (GST)* pertaining to washing charge shall be reimbursed by CCL to the WO on actuals after producing documentary evidences in support of taxes & duties paid by the WO. Payment on account of any inclusion or deletion in taxes & duties, shall be decided mutually by CCL and the WO.

4.33.6 **Declaration**

All operations necessary for the execution of the subject work and for construction of any temporary works shall, so far as compliance with the requirements of the agreement permit, be carried on so as not to interfere unnecessarily or improperly with the public

convenience or the access to use and occupation of public or private roads and footpaths or to or of properties whether in possession of CCL or any other person and the successful bidder shall save harmless and indemnify CCL in respect of all claims, demands, proceedings, damages, cost, charges and expenses whatsoever arising out of or in relation to any such matters in so far as the successful bidder is responsible therefor.

4.33.7 Statutory Approval

- 4.33.7.1 All the relevant clearances/ approvals for installation and operation of the Washery/CPP under relevant acts like Environment Act, Pollution Control Act, Mines Act, Indian Electricity Act and Factory Act etc. shall have to be obtained by the successful bidder from competent authority of State and Central Government as applicable. CCL may render assistance to the successful bidder in obtaining consent/ approval, if required.
- 4.33.7.2 The successful bidder will have to ensure sound civil, electrical and mechanical engineering, design, construction, installation and commissioning and operation of the plant in line with the various Indian Standards as per Bureau of Indian Standards and Engineering code of practices, Indian Electricity Act & Rules and various other statutes including environmental and pollution statutes as applicable. Where such standards are not available, equivalent international standards such as DIN/ American may be followed.

4.33.8 Plant Inspection

CCL shall supply raw coal at a designated point in the Washery/CPP, check quality of raw coal and saleable product at loading points and also that of rejects. CCL shall have access to the plant during construction & operation. They will also have access to various data of the plant of WO for exercising certain checks on yield, quality of raw coal and organic efficiency (i.e. ratio of practical/ actual yield to theoretical yield), capacity of the plant, crushing system, storage, loading arrangements, slurry recovery, reject disposal, effluent treatment, environmental measures, environmental management plan implementation, etc.

- 4.33.9 Termination, Suspension, Cancellation & Fore-Closure of Contract
- 4.33.9.1 CCL shall, in addition to other remedial steps to be taken as provided in the Bid Document, be entitled to cancel the contract in full or in part, if the WO:
 - a. makes default in proceeding with the works with due diligence and continues to do so even after a notice in writing from the Engineer-in-Charge (EIC), then on the expiry of the period as specified in the notice

b.commits default/ breach in complying with any of the terms and conditions of the contract and does not remedy it or fails to take effective steps for the remedy to the satisfaction of the Engineer-in-Charge (EIC), then on the expiry of the period as may be specified by the Engineer-in-Charge (EIC) in a notice in writing

or

c.fails to complete the work or items of work with individual dates of completion, on or before the date/ dates of completion or as extended by the Coal Co., then on the expiry of the period as may be specified by the Engineer-in-Charge (EIC) in a notice in writing

or

d.offer or give or agree to give any person in the service of CCL or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for act/ acts of favour in relation to the obtaining or execution of this or any other contract of CCL

or

e.try to obtain a contract from CCL by way of ring tendering or other non-bonafide method of competitive tendering.

or

- f. transfers, sublets, assigns the entire work or any portion thereof without the prior approval in writing from the Engineer-in-Charge (EIC). The Engineer-in-Charge (EIC) may by giving a written notice, cancel the whole contract or portion of it in default.
- 4.33.9.2 CCL shall in such an event give fifteen (15) days' notice in writing to the WO in this regard.
- 4.33.9.3 The WO upon receipt of such notice shall discontinue the work on the date and to the extent specified in the notice, make all reasonable efforts to obtain cancellation of all orders and contracts to the extent they are related to the work terminated and terms satisfactory to CCL, stop all further sub-contracting or purchasing activity related to the work terminated, and assist CCL in maintenance, protection and disposition of the works acquired under the contract by CCL.
- 4.33.9.4 The contract shall stand terminated under the following circumstances unless CCL is satisfied that the WO is capable of carrying out and completing the contract and CCL shall in any way not be liable to payment of any compensation to the estate of deceased WO and/ or to the surviving partners of WO's firm on account of the termination of the contract.
 - a. If the WO being an individual in the case of proprietary concern or in the case of a partnership firm, any of its partners is declared insolvent under the provisions of insolvency act for the time being in force, or makes any conveyance or assignment of his effects

or composition or arrangement for the benefit of his creditors amounting to proceedings for liquidation or composition under any insolvency act.

- b. In the case of WO being a company and its affairs are under liquidation either by a resolution passed by the company or by an order of court, not being a voluntary liquidation proceedings for the purpose of amalgamation or re-organisation, or a receiver or manager is appointed by the court on the application by the debenture holders of the company, if any.
- c. If the WO shall suffer an execution being levied on his/ their goods, estates and allow it to be continued for a period of 21 days.
- 4.33.9.5 If the WO is an individual or a proprietary concern and the individual or the proprietor dies and if the WO is a partnership concern and one of the partners dies, then unless the Coal Co. is satisfied that the legal representatives of the individual WO or of the proprietor of the proprietary concern and in the case of partnership the surviving partners, are capable of carrying out and completing the contract, the Coal Co. shall be entitled to cancel the contract as to its incomplete part without being in any way liable to payment of any compensation to the estate of deceased WO and/ or to the surviving partners of the WO's firm on account of the cancellation of the contract.

The decision of the Coal Co. that the legal representatives of the deceased WO or surviving partners of the WO's firm cannot carry out and complete the contract shall be final and binding on the parties. In the event of such cancellation, the Coal Co. shall not hold the estate of the deceased WO and/ or the surviving partners' estate of the deceased WO and/ or the surviving partners of the WO's firm liable to damages for not completing the contract.

4.33.9.6 On cancellation of the contract or on termination of the contract, the Engineer-in-Charge (EIC) shall have powers :

- a. to take peaceful possession of the site
- b. to recover the entire amount of Security Deposit (SD)
- c. to take-over the entire plant with all related infrastructure facilities in the existing condition without any compensation. In such case, WO shall submit various information/ document viz. engineering data, drawings, manuals etc. to CCL.
- 4.33.9.7 **Suspension of work -** CCL shall have power to suspend the progress of the work or any part thereof and the Engineer-in-Charge (EIC) may direct the WO in writing to suspend the work, for such period and in such manner as may be specified therein, on account of any default on the part of the WO, or for proper execution of the work for reasons other than any default on the part of the WO, or on ground of safety of the work or part thereof. In the event of suspension for reason other than any default on the part of the WO, extension of time shall be allowed by the CCL equal to the period of such suspension. Any necessary and demonstrable costs incurred by the WO as a result of such suspension of the works shall be borne by the WO. CCL shall not be responsible for any

liabilities if suspension or delay is due to some default on the part of the WO or his sub-Contractor. The work shall throughout the stipulated period of contract, be carried out with all due diligence on part of the WO. In the event of termination or suspension of the contract on account of default on part of the WO, as narrated herein before, the Security Deposit and other dues of this work or any other work under CCL shall be forfeited and also the plant shall be brought under the absolute disposal of CCL.

4.33.9.8 **Foreclosure of contract** in full or in part - If at any time after acceptance of the Bid, CCL decides to abandon or reduce the scope of the work for any reason whatsoever, CCL, through its Engineer-in-Charge (EIC), shall give notice in writing to that effect to the WO. In the event of abandonment/ reduction in the scope of work, modalities on future course of action will be decided mutually.

4.34 FORCE MAJEURE

- 4.34.1 Force majeure is herein defined as any cause which is beyond the control of the successful bidder or CCL as the case may be which they could not foresee or with a reasonable amount of diligence they could not have foreseen and which subsequently affect the performance of the agreement such as:
 - i) Natural phenomena including but not limited to earthquake, floods, droughts and epidemics.
 - ii) Act of any government including but not limited to war, declared or undeclared priorities, quarantines, embargoes

Provided either party shall within 15 days from the concurrence of such a cause notify the other in writing of such causes.

4.34.2 The successful bidder will advise in the event of his having resort to this clause (no. 4.34) by registered letter duly certified by the local chamber of commerce or statutory authorities, the beginning and the end of the cause of delay, within 15 (fifteen) days of the occurrence and cessation of such force majeure conditions. In the event of delay lasting over 2 months, if arising out of force majeure the contract may be terminated at the discretion of CCL.

or

Both the parties shall consult each other in finding out some amicable solution for further continuation/ discontinuation of the contract.

For delays arising out of force majeure, the successful bidder will not claim extension in completion date for a period exceeding the period of delay attributable to the cause of Force Majeure and neither CCL nor the successful bidder shall be liable to pay extra cost.

If any of the Force Majeure conditions exist in the place of the operation of the bidder even at the time of the submission of Offer, he will categorically specify them in Appendix - 1 and state whether they have been taken into consideration in their quotations.

4.34.3 The bidder or CCL shall not be liable for delays in performing his obligations resulting from any force majeure cause as referred to and/ or defined above. The date of completion will, subject to hereinafter provided, be extended by reasonable time even though such cause may occur after bidder's performance or his obligations has been delayed for other causes.

4.35 ENGINEER'S SUPERVISION

- 4.35.1 To eliminate delays and avoid disputes and litigation it is agreed between the parties to the contract that all matters and questions shall be referred to the EIC and his decision shall be final.
- 4.35.2 The work shall be performed under the direction and supervision of the EIC. The scope of the duties of the engineer, pursuant to the contract, will include but not be limited to the following:
 - a. receipt of all information related to progress of construction of Washery/CPP.
 - b. keeping record of all data related to raw coal supply.
 - c. keeping record of all data related to products.
 - d. keeping record of all data related to despatch of products.
 - e. keeping record of all data related to performance of the plant.
 - f. keeping record of all data related to payment.
 - g. keeping record of any other relevant information.

4.36 SECURITY

The Washery/CPP Operator shall make suitable security arrangements including employment of security personnel to ensure the protection of all materials, raw coal & its products, equipment and works from theft, fire, pilferage and any other damages and loss. For safety & security of the Washery/CPP and its properties, the entire Washery/CPP complex shall be provided with boundary wall of adequate height.

4.37 PROTECTION OF MONUMENTS AND REFERENCE POINTS

The WO shall ensure that any finds such as relic, antiquity, coins, fossils, etc. which he might come across during the course of performance of his works either during excavation or elsewhere, are properly protected and handed over to the EIC. Similarly, the WO shall ensure that the bench marks, reference points, etc., which are marked out either with the help of EIC or by the EIC shall not be disturbed in any way during the performance of his works. If any work is to be performed which disturb such references, the same shall

be done only after these are transferred to other suitable locations under the direction of the EIC. The WO shall provide all necessary materials and assistance for such relocation of reference points etc.

4.38 DEMONSTRATION OF GUARANTEED THROUGHPUT & ORGANIC EFFICIENCY

During commissioning and trial run, the successful bidder shall demonstrate the performance of the plant at rated capacity for a period of 3 months. During this period, the coal company (CCL) shall ensure to supply required quantity of coal to the WO to carry out the above tests. In case, performance is below rated capacity, the successful bidder will have to modify the plant for achieving rated capacity on a sustained basis within 6 (six) months.

Similarly, during the above period, the successful bidder shall achieve the desired organic efficiency as stated elsewhere in the document. Failing to prove the same, the requisite modification/ rectification shall be carried out by the WO immediately within 15 days.

4.39 REALISATION OF CHARGES FOR LAND, WATER, POWER GIVEN BY CCL

Land lease rent will be realised in advance on annual basis. Whenever power will be provided by CCL, the same shall be on chargeable basis. Similarly whenever water will be provided by CCL, the same shall be on chargeable basis. The rate of power and water given hereafter are indicative and for guidance purpose only:

- i) Rate of Power
 - a) Normal demand charge: INR 410/kVA/month
 - b) For Power : INR 4.05/ kWh
- ii) Rate of Water
 - a) DVC Water Charge : INR 5.40/ kL
 - b) JSPCB water charge : INR 0.30/ KI

Prevailing rate of power and water at the time of construction/ operation will be charged from WO. The charges for water and power will be realised on monthly basis.

4.40 PAYMENT TERMS

4.40.1 System of payment

The system of payment of washing charges to the successful bidder will be as given hereafter.

- a) Raising Invoice/ Bills :
 - i. The bills shall be raised by the WO in two parts i.e. for 75% and balance 25% payment for each billing period, complete in all respects and supported by all relevant documents.
 - ii. The WO shall submit the bills for 75% and 25% of washing charges for every month by 7th& 15th respectively of the following month as per Cl. No. 1.16 of this document during the billing period.
 - iii. At the time of submission of 75% bill for the month as mentioned above, a statement with respect to total parameters regarding raw coal, washed/clean coal such as raw coal processed, raw coal stock, washed/clean coal, if any, washed/clean coal despatched alongwith quality parameters, etc. related to preceding month is to be furnished by the WO for enabling the payment and also adjustment regarding penalties (as per Cl. No. 4.42), etc. from 25% bill, if any.
 - iv. However, the balance bill/ invoice of 25% value shall be released only after verifying/ checking the parameters of Washed coal loaded into the wagons and after due adjustment of penalty etc., if any. The payment as may become due against penalty etc. to be made by either party shall be raised by the WO through separate bills/ claims on monthly basis along with bills of 25% value of washing charges.
 - v. The total washing charges payable in a billing period shall be calculated by multiplying the quantity of raw coal on dry basis (arrived from Washed coal loaded into the wagons) or raw coal processed declared by the bidder, whichever is lower, with agreed washing charges.
 - vi. In case, the quantity of raw coal processed in the Washery/CPP by WO in the particular month is more or less than the quantity of raw coal supplied by the Coal Co. (CCL), then the WO shall give declaration to the satisfaction of CCL regarding the actual quantity of raw coal Washed.
 - vii. The bills shall be accompanied with all the relevant documents/ certificates indicating invoice numbers, net weight etc.
 - viii. All relevant taxes & duties pertaining to washing charges shall be reimbursed by CCL to the WO on actuals after producing documentary evidences in support of taxes & duties paid by the WO.

However, timely payment of all the taxes & duties shall be the responsibility of WO. Penalty, if any, is paid by the WO to the concerned agency(ies) shall not be reimbursed by CCL and shall be borne by the WO.

b) Release of Payment by CCL

- i. CCL will release payment of the 75 % bill for each period, within twelve (12) working days from the date of receipt of bills complete in all respects at the designated office(s) of CCL. The WO shall not account for necessary adjustment in the 75 % bill that may be on account of penalty etc., if any.
- ii. For balance 25% payment for the month corresponding to the 75% bill already raised for the month, a separate bill shall be required to be raised by the WO by 15th of the next month, complete in all respects and the payment, as admissible, shall be released within fifteen (15) days from the date of receipt of respective bills for the month after taking into account adjustment, if any. However, if the deduction is more than the amount of 25% balance payment, the balance deduction shall be made from the subsequent 75% & 25% bill of following month as the case may be.
- iii. All payments to the WO shall be released through e-payment from the designated office CCL.
- iv. CCL shall release the payments within its scheduled period(s) specified as above.
- c) No arbitrary/ unilateral change shall be made in the washing charge by either side unless mutually agreed to by the WO and CCL.
- 4.40.2 Washing charges shall remain firm for the first year of commercial operation of the Washery/CPP and such price determination for subsequent years of commercial operation shall be carried out as per **CI. No. 4.44** of this section.

4.41 CURRENCIES OF BID & PAYMENT

The washing charges shall be quoted by the bidder in INR only and all payments under this contract shall also be in INR only (Refer CI No. 24 of Detail e-Tender Notice).

4.42 PENALTIES

4.42.1 **Penalty for not meeting Quality of Washed Coal**

i) The desired reduction in ash % will be 5 to 6% as decided by CCL management. However for imposing the penalty the minimum reduction in ash will be 5%. The penalty amount will be calculated based on sampling results of raw coal feed to washery as well as washed coal loaded into railway wagons/Trucks/Tippers/ belt conveyorson monthly weighted average basis for the purpose of imposition of penalty, if any on the washery operator. ii) Washery Operator have to ensure Minimum reduction of 5% in ash of raw coal feed to Washery. In case he fails to do so, Penalty will be imposed @ Rs. 7.00 per tonne for 0.1% increase in ash% of washed coal. The penalty charges of Rs. 7.00 per tonne will be escalated as per the escalation formula as brought out in clause no. 4.45 in the bid document.

For example, if raw coal feed ash is 40%, for minimum reduction required, the ash of washed coal will be 35%. If the reduction in ash is only 4% i.e. the ash % of washed coal is 36%, the penalty amount will be Rs. 70.00 (10 * 7).

If the reduction of ash % in washed coal with respect to raw coal is more than 5% no penalty will be levied on the WO.

For example, if raw coal feed ash is 40%, for minimum reduction required, the ash of washed coal will be 35%. If the reduction in ash is 7% i.e. the ash % of washed coal is 33%, no penalty will be levied on WO.

4.42.2 Penalty for increase in Total Moisture of Washed Coal over agreed limit

- i) The total moisture of the Washed Coal will not exceed 11%. The successful bidder will have to guarantee that moisture in Washed coal shall not exceed the specified limit to be supplied to the consumer.
- ii) For increase in the total moisture% beyond the specified limit, penalty will be imposed on the WO for a sum equivalent to the penalty to be paid by CCL to its customer(s).
- iii) If the total moisture content of Washed Coal is more than 11% on a regular basis (one week), the Washed Coal will not be accepted and the WO will have to modify the plant to achieve the desired moisture of 11% at their own cost within 15 days.

4.42.3 Penalty for lower capacity & Lower organic efficiency of the Plant

The successful bidder shall have to demonstrate the organic efficiency and throughput capacity (hourly & daily) in performance test and shall conform to it. Failure to conform to organic efficiency as 95% and capacity as mentioned in the bid document in performance test and subsequently in regular operation of the plant, suitable penalties will be levied as mentioned hereafter.

4.42.3.1 Throughput Capacity

The successful bidder shall guarantee for 100% throughput capacity of the plant. Failing to prove the above, plant will not be accepted and the successful bidder shall modify the plant to achieve the same.

4.42.3.2 Organic Efficiency

The successful bidder shall guarantee that the Organic Efficiency (OE) is not less than 95%. OE below 95% shall not be acceptable. In case of shortfall of OE from 95%, the successful bidder shall modify the plant to achieve minimum OE of 95%.

In case, OE is less than the 95% during operation, the penalty for lower OE shall be worked out and it will be equivalent to double the price of loss of Washed coal on this account. Any decrease in organic efficiency below the fraction of 0.05% shall be ignored whereas variation in organic efficiency for 0.05% and above will be treated as 0.1%.

If the OE achieved is less than 95% during operation of the plant in successive months, the WO shall take corrective measures to establish minimum 95% OE of the plant within a week. However, penalty shall remain in force till the WO achieves the 95% OE.

4.42.4 Commitment charges for Lower Receipt of Raw Coal

At the beginning of each year, CCL and the WO shall jointly decide the programmed quantity/ Monthly Scheduled Quantity (MSQ) of raw coal to be supplied to the WO.

The successful bidder will have to receive programmed quantity/ MSQ of raw coal from the scheduled date of commissioning of the plant. On failure of programmed receipt, the successful bidder will have to pay commitment charges to CCL. The amount of commitment charge shall commensurate with the commitment charge paid by CCL to its consumer due to short supply of Washed coal on this account.

4.42.5 **Commitment Charges for Short Supply of Raw Coal**

In case, CCL is unable to supply programmed quantity of raw coal from the date of start of commercial operation of the plant, CCL will pay Commitment Charges as follows:

- i) If the quantity of raw coal supplied is equal to or more than 65% of the programmed quantity, no commitment charges shall be paid to the WO.
- ii) In case, the quantity of raw coal supplied is less than 65% of the programmed quantity, commitment charges shall be paid for the quantity less than 65% (i.e. 65% quantity actual quantity supplied) @ 60% of basic washing charges calculated as shortfall.
- iii) In case, CCL supplies less quantity of raw coal than the programmed quantity on monthly basis but fulfils the annual programmed quantity then the commitment charge already paid to the WO will be refunded to CCL by the WO after annual reconciliation.

4.42.6 Penalty for Mismatch in Balance of Products

Product balancing (washed coal and reject) including slurry, if any will be done on dry basis, i.e.

 $Qty of RawCoal Feed_{(dry basis)} = Qty of WashedCoal_{(dry basis)} + Qty of Reject_{(dry basis)} + Qty of Slurry_{(dry basis)}$ In case the quantity of products do not match with that of raw coal supplied within a specified time frame then penalty will be imposed on the WO for amount of double the price with applicable taxes of raw coal, equivalent to the shortage of products. This may further be illustrated as follows:

Let Q₁= Raw coal quantity (Tonne) supplied

Q₂ = Washed Coal (Tonne) supplied

Q₃ = Reject including slurry if any (Tonne) supplied

 Q_4 = Shortage of products (Tonne)

P= Prevailing Price of Raw Coal (₹./t)

If $Q_{1-}(Q_2 + Q_3)_= 0$, No penalty and

If $Q_{1-}(Q_2 + Q_3)_{=} Q_{4}$, then penalty of $\mathbb{E}(Q_4 \times P)$ shall be imposed on WO.

Note: All the penalty, commitment charges calculations will be done on monthly basis whereas moisture calculation will be done on day-to-day basis/ consignment basis.

4.43 BONUS

For achieving higher Organic Efficiency (OE) than 95%, bonus will be paid to the WO by CCL Bonus will be paid for each 0.1% increase in the OE. Any increase in organic efficiency below the fraction of 0.05% shall be ignored whereas variation in organic efficiency for 0.05% and above will be treated as 0.1%.

The bonus will be calculated on the basis of additional yield achieved due to higher OE than 95%. Bonus will be shared equally by the WO & CCL.

4.44 DEMURRAGE CHARGES

Responsibility of indenting of Railway wagon shall lie with Washery/CPP Operator(WO)in consultation with CCL.

4.45 ESCALATION

- 4.45.1 The washing charges quoted by the successful bidder and accepted by CCL in terms of per tonne of raw coal (dry basis) for the first year shall be firm unless there is any delay in scheduled completion of the subject work due to the fault on part of CCL. In case, there is delay in completion schedule of the subject work due to the fault on part of CCL, the escalated washing charge for the delayed period [i.e the extended period over and above 18months of set up and first 12 months of operation, due to the fault on the part of the Coal Co. (CCL)] and each subsequent year will be arrived in accordance with the formula given hereafter.
 - A) 35% of the base price of washing charges (excluding taxes & duties), say X quoted in the Price Offer will be constant and no escalation shall apply to it.
 - B) 20% of the base price of washing charges (excluding taxes & duties), say Y shall be subject to price variation based on All India Consumer Price Index (AICPI),
 - C) 45% of the base price of washing charges (excluding taxes & duties), say Z shall be subject to price variation based on Wholesale Price Index (WPI).
 - i) The formula for escalation of washing charges for subsequent years shall be as follows:

$$W = X + Y \times \frac{AICPI_1}{AICPI_0} + Z \times \frac{WPI_1}{WPI_0}$$

Where,

- W = Escalated Washing Charge
- AICPI₀ = All India Consumer Price Index as on the date of start of commercial operation of the Washery/CPP
- AICPI₁ = All India Consumer Price Index on the subsequent year i.e. the date on completion of the 1st year of commercial operation of the Washery/CPP
- WPI₀ = Wholesale Price Index as on the date of start of commercial operation of the Washery/CPP
- WPI₁ = Wholesale Price Index on the subsequent year i.e. the date on completion of the 1st year of commercial operation of the Washery/CPP

ii) The formula for escalation of washing charges for delayed period due to fault on account of Coal Company, if any, shall be as follows:

$$W = X + Y \times \frac{AICPI_1}{AICPI_0} + Z \times \frac{WPI_1}{WPI_0}$$

Where,

W = Escalated Washing Charge

- $AICPI_0$ = All India Consumer Price Index as on the actual date of start of commercial operation of the Washery/CPP
- AICPI₁ = All India Consumer Price Index on the date (scheduled date of completion of the 1st year of commercial operation of the Washery/CPP + delay due to fault on the part of CCL)
- WPI_0 = Wholesale Price Index as on the actual date of start of commercial operation of the Washery/CPP
- WPI₁ = Wholesale Price Index on the date (scheduled date of completion of the 1styear of commercial operation of the Washery/CPP + delay due to fault on the part of CCL)
- 4.45.2 The determination of washing charges for the subsequent years after first year of commercial operation shall be calculated based on (A), (B) and (C) above.

All relevant taxes & duties pertaining to washing charge shall be reimbursed by CCL to the WO on actuals after producing documentary evidences in support of taxes & duties paid by the WO.

4.46 MANAGEMENT SUPERVISION & QUALITY CONTROL

CCL management will supervise the construction of the Washery/CPP as well as operation of the Washery/CPP and WO shall allow free access to CCL for the same without any hindrance.

4.47 PRICE BID

Refer Cl. No. 11 (e) of the Detail e-tender notice.

4.48 VALIDITY OF OFFER

Refer CI No. 29 of Detail e-Tender Notice.

4.49 MINIMUM WAGE

4.49.1 For Set Up

The payments to the workmen will be made by the WO as per Minimum Wage Act/ rules of the State or Central Government of India whichever is higher and CCL shall have no responsibility towards any compensation payment to workmen or any liability for employment.

4.49.2 For operation and maintenance

The payments to the workmen will be made by the WO as per Minimum Wage Act/ rules of the State or Central Government of India or wages recommended by High Power Committee of CIL, whichever is higher and CCL shall have no responsibility towards any compensation payment to workmen nor any liability for employment.

4.49.3 **Payment of the Wages and Provident Fund etc.**

The WO shall comply with all the rules and regulations of local authorities during the performance of his field activities. He shall also comply with the minimum wages act, 1948 and the payment of wages act (both of the Government of India and the local State Government) and the rules made thereunder as well as the recommendations of High Power Committee of CIL as applicable in respect of any employee or workman employed or engaged by him or his sub-contractor.

The WO shall make all necessary payments of the Provident Fund for the workmen employed by him for the work as per the laws prevailing under provisions of CMPF & Allied Schemes and CMPF & Miscellaneous Provisions Act 1948 or Employees Provident Fund and Miscellaneous Provisions Act 1952, as the case may be.

The WO shall pay bonus to the contract workers engaged by them as per the provisions of Payment of Bonus Act, 1965.

The WO shall comply with statutory requirements of various acts including Child Labour (Prohibition & Regulation) Act, 1986 as mended from time to time and all rules, regulations and schemes framed thereunder from time to time in addition to other applicable labour laws.

The payment to the contractor's labour has to be made through Bank only.

4.50 TAXES AND DUTIES

Taxes and Duties wherever referred in the bid document shall include the applicable rates of GST.

SECTION-5 : SITE RELATED INFORMATION

Bidder is required to inspect and examine the site and its surroundings and satisfy himself as to the nature and characteristics of ground and soil, rainfall, the availability and suitability of other requirements, as required for fair bidding purposes.

An indicative Soil Investigation Report of the site is enclosed hereafter at Cl. No. 5.1.

It may be noted that some part of the selected site is standing on developed pillars of underground working of Seam-V, Ashok Special Project, Phase-II area. In this context, a scientific study for stability analysis of the site was done by CIMFR, Dhanbad with a purpose to construct a new Washery/CPP. The report including the addendum is enclosed hereafter at CI. No. 5.2 and 5.3.

While conceiving the Washery/CPP, the bidders are advised to take note of the report and recommendations and plan the Washery/CPP accordingly. Construction of underground structure shall be avoided as far as feasible. Wherever it is unavoidable it shall be planned & designed giving due considerations to site condition and report of CIMFR in this context.

5.1 Soil Investigation Report

SOIL INVESTIGATION REPORT

(for the locations of Bore Holes as shown in Drawing No. 3 i.e. DRG. NO. HQ/ 314398037/ 4/ 003)

The report presents the Test results on the Soil investigations carried out by Department of Civil Engineering, B.I.T., Mesra, Ranchi.

1. Location

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The locations of the boreholes (numbered BH - I to BH - VI) with their coordinates are shown on drawing number 3.

2. Field Tests and Sample Collection

The Topography of the place is undulating and hence all references to depths mentioned with respect to the Boreholes are from existing ground levels at the respective Borehole location.

The borings were carried out manually. Standard penetration tests were conducted in the Boreholes at intervals. Standard split spoon sampler attached to lower end of 'A' drill rods was driven in the bore holes by means of standard 63.5 Kgs hammer of falling freely through a height of 75 cm. The sampler was driven up to 60 cm wherever possible. This includes an overdrive of 15 cm for collecting enough liner samples for tests in the Laboratory. The number of blows required for each 15 cm penetration was recorded. The number of blows for the first 15cm penetration, considered to be seating drive, was ignored. The number of blows for the next 30cm penetration was taken as the observed SPT 'N' value. The data of SPT observations are presented in Table-1.

Wherever in the 15 cm interval of the drive, it was not possible to drive completely; the penetration was recorded for the interval stating the number of blows required for that penetration was recorded. Soil samples obtained in liner of the standard split spoon sampler for all the above standard penetration tests were

collected in polythene bags. These samples were property sealed, labeled, recorded and carefully transported to the laboratory for testing.

Undisturbed soil samples were collected from Pits located close to the respective Boreholes at depths of about 1.7m in thin-walled sampling tubes of 100mm dia and 450 mm. These sampling tubes after retrieval from the boreholes were properly waxed and sealed at both ends. These were carefully labeled and transported to the laboratory for testing.

Disturbed soil samples were also collected from the bore holes at regular/ desired intervals as per specifications. These samples were collected in polythene bags of suitable size. These were property sealed, labeled, recorded & carefully transported to the laboratory for testing.

Laboratory tests on Soil samples

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Shear Test (Usually Triaxial Shear) and consolidation Tests are carried out on Undisturbed Soil Samples for obtaining parameters to determine Bearing Capacity and consolidation settlement for determining Allowable Bearing Pressure.

Tests on Disturbed Soil samples are performed to know the physical parameters like Specific Gravity, Grain Size Distribution and Atterberg Limits, viz. Liquid, Plastic and Shrinkage Limits.

Tests on disturbed samples included Grain Specific Gravity, Grain Size . Distribution and Atterberg Limit Tests.

Tests on undisturbed samples included Triaxial Shear (Consolidated Undrained) Tests and Consolidation (Oedometer) Tests.

Test Results are presented in Tables II and III respectively.

Bearing Capacity of Foundations.

4.1 Design Parameters

4.1.1 SPT (N - value for Design)

These were obtained from the SPT Field data and a possibility of categorizing the area into three categories is apparent; those having SPT N value at 25, 30 & 40.

N - value	Borehole No (s)
25	II & VI
30	V
40	I, III & IV

4.1.2 Shear Strength and Physical parameters for Design

Borehole	Shear Strength Parameters							
no	Cohesion, c (t/m ²)	Angle of friction (degrees)	Bulk Unit Weight y (t/m ³)					
1	4.08	24.5	1.99					
- ii	5.14	13.3	1.94					
	5.62	22.0	2.04					
IV	2.33	10.3	1.99					
NV NV	6.76	10.0	2.08					
VI	4.54	11.75	2.07					

4.2 Determination of Bearing capacity and Recommendations

4.2.1 General

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Bearing Capacities were determined from both SPT N - values, using Teng's expression as well as from Shear Strength parameters, viz. Cohesion and angle of friction, using IS Code formula Square footings 2.0m wide were assumed at a foundation depth of 1.75m for purpose of analysis. Ground water table was taken at ground level.

Since the deposit is somewhat erratic, in case of Bearing Capacity using N – Value, quite high factors of safety have been considered, even up to 8, at some locations.

Note Safe BC	From shea	r strength	From SPT N – Value		
Location: Borehole No.	parameters Net Safe BC (t/m2)	Factor of Safety	Net Safe BC (t/m2)	Factor of Safety	
Borenole No.	38	5	40	2.8	
11	32	3	30 40	5	
	40 22.5	1.8	25	8	
V	32.5	3	39	3	
VI	29	2.5	28	3	

4.2.2 Comparison of Bearing Capacity

4.2.3 Recommendation of Safe Bearing Capacity

Location Borehole No.	Bearing Capacity (t/m2)	Consideration		
1	38	Shear strength parameters		
11	30	SPT N - value		
111	40	By either consideration		
IV	22.5	Shear strength parameters		
V	32.5	Shear strength parameters		
VI	28	SPT N - value		

Though Safe Bearing Capacity has been recommended as obtained at 1.75m depth and considering shallow foundation, as per requirement of structure, deeper foundation depth can be taken. Where foundation has to be taken to firm rock, necessary grip bolts have to be provided as per technical requirement.

Minimum width of footing should in no case be less than 1m. Where the width required works out to above 1m, the required width for the footing is to be provided.

Where individual footings are very close to one another, check must be made for stress overlaps.

Anticipated Settlement may be worked out. Taking into consideration the footing width and consolidation properties from Table III and in case it exceeds the permissible value, Allowable Bearing Capacity can be worked out in order to limit the settlement.

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Borehole No.	From	То		of Blo m per			ry		N - Value observed	GW T	
1	0.60	1.20	10	10	10	09	10	11	40	Not observed	
10	1.20	1.80	10	10	10	11	11	11	43		
	1.80	2.40	11	11	13	13	14	14	54	1	
										N	
11	1.00	1.60	04	05	08	08	09	13	38	Not observed	
	1.60	2.20	06	07	09	06	08	07	30		
	2.20	2.80	16	09	05	06	05	05	21		
	2.80	3.40	06	04	07	12	15	18	52		
	0.50	1.10	07	08	08	12	16	13	49	Not observe	
III	1.10	1.25	20	35			-		>50		
	1		1								
IV	0.50	1.10	07	12	14	10	10	12	46	Not observed	
IV.	1.10	1.70	13	12	14	13	14	16	57		
						1	00	40	34	Not observed	
V	1.15	1.75	07	07	08	07	09	10	44	1101 00000	
	1.75	2.35	12	10	10	10	12	12	44		
	2.35	2.95	12	10	10	10	12	10	56		
	2.95	3.95	10	15	13	14	14	15	51		
	1.75	2.20	04	04	05	06	15	25	51		
	1.1.17	4 75	02	03	03	05	05	06	19	Not observed	
VI	1.15	1.75	02	04	05	06	15	25	51		

Table - I: Observed SPT (Standard Penetration Test) Data

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					T		11		1	11
SI.	B. H. No.		1	1						
No.	Location		110	1/3	11/1	11/2	11/3	11/4	111/1	111/2
	Sample No.	1/1	1/2		1.0	1.6	2.2	2.8	0.5	1.1
	Depth (m)	0.6	1.2	1.8	2.85	2.74	2.78	2.71	2.77	2.72
1	Specific Gravity	2.77	2.76	2.77	2.00	-				
2	Grain Size (mm):				14	00	14	16	06	20
	Gravel	00	00	00		02	03	06	07	09
	Sand Coarse	00	00	01	26	02	07	09	07	10
	Medium	02	02	03	13	11	36	20	14	22
	Fine	06	06	08	07	-	28	30	44	26
	Silt	71	61	72	25	81	12	19	22	13
	Clay	21	31	16	15	03	12	10		13
3	Atterberg Limits:					-		37	-	
279	Liquid Limit	55	56	57	-	-	-	-	-	
	Plastic Limit	33	23	23	38	28	-	26	28	29
	Plasticity Index	22	33	34	-	-	-	11	-	-
	Shrinkage Limit	13.8	13.8	18.2	42.0	31.2	-	27.0	14.4	32.5
4	Triaxial Shear (C _u):					•				
	Cohesion(kg/cm2)	0.246	1.287	0.569	C _u = 0.787	0.281	0.475	C _u = 0.702	0.562	
	Friction angle (deg.)	24.0	07.5	24.5		21.5	17.5		22.0	

Table- II Result of Laboratory Test on Soil Samples (contd.)

SI.	B. H. No.		IV			V			VI
No.	Location	1 million			LOCK!				
	Sample No.	IV/1	IV/2	V/1	V/2	V/3	V/4	V/1	V/2
	Depth (m)	0.5	1.1	1.15	1.75	2.35	2.95	1.15	1.75
1	Specific Gravity	2.71	2.75	2.72	2.72	2.77	2.72	2.71	2.66
2	Grain Size (mm):		1	1				-	1
	Gravel	00	12	00	01	15	00	01	01
	Sand: coarse	01	06	01	03	05	00	09	03
	Medium	03	09	03	06	06	05	07	21
	Fine	07	09	11	12	12	13	11	18
	Silt	46	36	42	37	36	37	34	28
	Clay	43	28	43	41	26	45		-
3	Atterberg Limits:					20	40	38	29
	Liquid Limit	51	53	51		48		20	-
	Plastic Limit	25	32	27	24	26	-	39	-
	Plasticity Index	26	21	24			26	22	19
	Shrinkage Limit	20.6	32.6	24.3	-	22	-	17	-
4	Triaxial Shear (Cu) :		52.0	24.3	16.2	30.1	19.4	14.3	14.6
	Cohesion (kg/ cm2)	0.120	C _u = 0.346	0.225	C _u =	C _u =	C _u =	0.724	0.429
_	Friction angle (deg.)	20.0		28.0	1.301	0.501	1.526	_	
			_	20.0		and the		17	11.0

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SL. No.	Sample No.		Р	-1	P	- 11	P	- IV				
1	Location	Location		Location		Location		BH-I	Near BH-II		Near BH-IV	
2	Depth (m)		1	.7	1	.7	1	.7				
3	Grain Sp. Gr	ſ.	2.	78	2	.78	2	.64				
4.a	Triaxial Shea	ar (C _u)										
	Cohesion (k	g/ cm ²)	0.3	281	0.	158	0.197					
_	Friction angle (deg.)		1:	2.5	06.5		08.5					
4.b.i	Dry unit wei	ght (g/ cm ³)	1.	.55	1.	.18	1.	28				
b.ii	Post test mo	c (%)	2	6,8	43.6		34	4.3				
5a	Consolidatio	on:										
	Pressure Ra	ange(kg/cm ²)						1				
	From	To	eo	Cc	eo	Cc	eo	Cc				
	0.2	0.5	0.738	0.023	1.312	0.058	0.932	0.038				
	0.5	1.0	0.729	0.050	1.289	0.093	0.917	0.080				
	1.0	2.0	0.714	0.070	1.261	0.143	0.893	0.043				
	2.0	4.0	0.693	0.083	1.218	0.206	0.880	0.149				
5b	Post-test m	ic(%)	2	5.6	3	9.4	31	1.4				

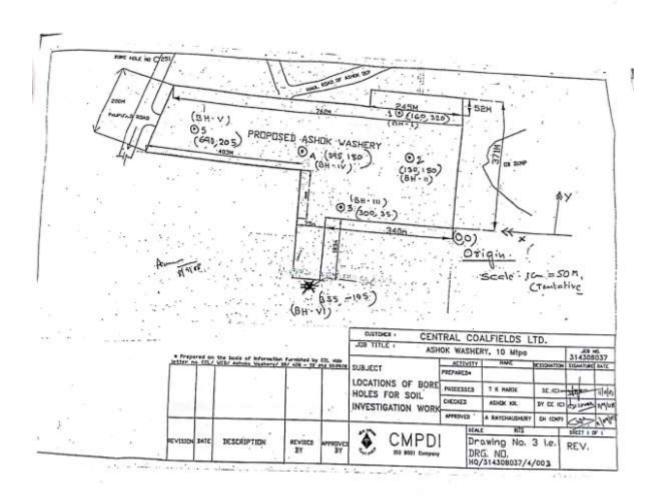
Table - III: Result of Consolidation and Triaxial Shear Tests on Pit Samples

Table - III : Result of Consolidation and Triaxial Shear Tests on Pit Samples (contd.)

SL. No.	Sample No.		P - V		P-VI	
1	Location		Near	BH - V	Near	BH-VI
2	Depth (m)		1	.7		1.7
3	Grain Sp. Gr.		2	74	2	.66
4.a	Triaxial Shear (C)				
1000	Cohesion (kg/ cn			204		478
	Friction angle (de	17.0		12.5		
4.b.i	Dry unit weight (g/ cm ³)		1	.48	1	.64
4.0.1 b.ii	Post test mc (%)		2	7.6	21.8	
5a	Consolidation:					
ou	Pressure range(kg/cm ²)				
	From	То	eo	CC	eo	CC
	0.2	0.5	0.725	0.015	0.543	0.020
	0.5	1.0	0.719	0.036	0.535	0.053
	1.0	2.0	0.708	0.060	0.519	0.073
	2.0	4.0	0.690	0.076	0.497	0.083
5b	Post-test mc(%)		2	7.1	2	3.2

Note : Results of Consolidation and Triaxial Shear Tests for BH - III is not available.

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EXHIBIT

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EXHIBIT-1

GENERAL DETAILS

(To be submitted by Bidder/ each member of Associate / Consortium)

SI. No.	Particulars	Reply (by Bidder/ each member of Associate / Consortium
1.0	Full legal Name of the organization:	
2.0	Communication details	
	i) Full Postal Address(es)	
	ii) Name and designation of the contact person	
	iii) e-mail:	
	iv) Telephone Code:	
	v) Telephone No./ FAX No.:	
3.0	Year in which established, Registration No. and date	
4.0	Ownership status	
4.1	a) Proprietary Concern	
	b) Partnership Firm	
	c) Body Corporate	
	d)Companies registered under the Companies Act 2013or any previous Company Law/Act as applicable in India	
	e) Joint venture	
	f) Equivalent of (a) to (e) in case of foreign bidder	
4.2	Documentary evidence e.g. Certificate of Incorporation; Certificate of Registration; Memorandum& Articles of Association; Partnership Deed, GST Registration Certificate etc. w.r.t. sl. no. 4.1 above	
4.3	Name and address of Chief Executive, President or Managing Director, Secretary or other persons authorized to bind the firm.	
4.4	Organization set up	
4.5	In case of Partnership Firm, Bidder to submit written consent of all the partners as per arbitration clause no. 4.18 and 4.18A of the bid document	
5.0	Whether any penalty has been imposed on you for delay in execution of assignment and/ or project?	

	If your answer is "yes", furnish number with details.	
6.0	Have you ever been black listed by any Govt. or Private organization? If your answer is "yes" by whom, when and why? Furnish details.	
7.0	In case of foreign entity, name and address of Indian representative, if any.	
8.0	Division of work between the bidders and Associate(s) for setting up and operation of the Washery/CPP:	
	Name of bidders/ Associates (with % of equity in this project)	Proposed responsibilities
-	1)	
	2)	
	3)	
9.0	Other details	
9.1	Certificate of Registration as per statutory requirement under contract labour laws, as may be applicable.	
9.2	If registered with CIL or its subsidiaries (Quote registration no., date & name of the work)	
	a write up along with roadmap indicating broad approach for designtenance of the AshokWashery/CPP covered by this offer.	gn, installation, operation

EXHIBIT-2

Format for Memorandum of Understanding amongst the Bidder i.e. Lead Member & its Associate(s)

(To be executed on Non-Judicial Stamp Paper of appropriate value)

Memorandum of Understanding (MoU)

Sub: Setting up of AshokWashery/CPP of capacity (4.0 Mty) at PIPARWAR Area, CCL on BOO concept

Ref : E-tender Notice No..... dated

We, M/s (Name & Address of the Bidder i.e. Lead Member), (1) M/s and (2) M/s.....* (Names and addresses of the Associate/ Consortium partners) have formed a Consortium for setting up of AshokCoal Washery/CPP of capacity 4.0MTY,CCL on BOO concept and hereby undertake:

1.0 to be held jointly and severally responsible for AshokCoal Washery/CPP as well as performance of the Contract with regard to set up and Operation & Maintenance as per the period of association specified at para 6.0 of this MoU.

2.0 *that (1) M/s (2) M/s & (3) M/s* (Bidder/ Associate or Consortium partners)* have the experience of setting up of *Coal Washery/CPP/CPP/Mineral Beneficiation Plant with a minimum experience of 06 (six) months of successful running of the plantfulfilling contract conditionas per Cl. No. 10.2.1 (a)

OR

that (1) M/s (2) M/s & (3) M/s (Bidder/ Associate or Consortium partners) have the experience of operation of *Coal Washery/CPP/CPP/Mineral Beneficiation Plant as per Cl. no.10.2.1 (b).

3.0 that I, M/s (Name of the Bidder) have the financial qualification as per Cl. no. 10.2.2.

4.0 that M/s shall be the Lead Member for this Associate/ Consortium.

5.0 that M/s (name of the Bidder i.e. Lead Member) has associated with (1) M/s & (2) M/s.....* (name of the Associate or Consortium partners) for the subject work as per the role, tenure & % stake in association as given hereafter.

SI.	Name of Bidder (LM) &	Role of Bidder/	Tenure of	% stake in Association (each
No.	Associate/ Consortium	Associate/ Consortium	Association	associate including LM must
	partners	partners		have minimum 26% equity in

				the project)
1.	M/s (Bidder/ LM)	Finance + (Set up/ Operation of owned plant/ none)*	Entire Contract Period	
2.	M/s (Associate 1)	Finance + (Set up/ Operation of owned plant/ none)*	Entire Contract Period Or Set up period and thereafter minimum period of two years after start of commercial operation	
3.	M/s (Associate 2)	Finance + (Set up/ Operation of owned plant/ none)*	Entire Contract Period Or Set up period and thereafter minimum period of two years after start of commercial operation	

6.0 that M/s (Bidder i.e. Lead Member) have formed consortium with (1) M/s & (2) M/s...... * (name of Associate/ Consortium partners) having collective experience towards 'set up' of Coal Washery/CPP/Mineral Beneficiation Plantwith a minimum experience of 06 (six) months of successful running of the plant* or* 'operation and maintenance' of Coal Washery/CPP/Mineral Beneficiation Plant* as per para 2.0 above and financial qualification as per para3.0 above. We hereby undertake that this MoU as per the provision of Bid Document shall remain valid for entire period of the Contract.

7.0 that the above MoU shall be governed by substantive and procedural laws in India.

For and on behalf of (the Lead Member	:
of Associate/ Consortium)	
Signature (theAuthorised Signatory)	:
Name of the Signatory	:

EXHIBITS

Designation	:	
Company's Stamp/ Seal	:	
For and on behalf of :	(1) (2)	*
(the Associate)		
Signature (theAuthorised Signatory)	: (1) (2)	*
Name of the Signatory	: (1) (2)	*
Designation	: (1) (2)	*
Company's Stamp/ Seal	:	
<u>Witness of Bidder</u> <u>2*</u>	Witness of Associate 1	Witness of Associate
Signature:	Signature:	Signature:
Name:	Name:	Name:
Designation:	Designation:	Designation:
Official address:	Official address:	Official address:

Date :

Place :

* Strike out which is not applicable.

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EXHIBIT-3

Format for Notarised Power of Attorney

(for each Authorised Signatory dealing the Bid on behalf of the Bidder & Associates)

(to be executed on Non-Judicial Stamp Paper of appropriate value)

Sub : Setting up of a 4.0 MtyAshok Coal Washery/CPP at PIPARWAR Area, CCL (name of the place & Coal Company), on BOO concept

Ref : E-tender Notice No..... dated

By this Power of Attorney executed at on thisday of20, I					
being (Post held in the company) of M/s (Name of					
the Bidder/ Associates*), aged about Years, son of Shri residing					
presently at (Name & address of					
the Bidder/ Associates*) do hereby nominate, constitute and appoint 1) Mr./ Mrs.					
son of resident of 2) Mr./ Mrs.					
son of resident of (hereinafter referred					
to as "the Attorneys") whose specimen signature is attested below as our Attorneys to act					
for me/ on our behalf, and for and in the name of the firm to execute and perform all or any					
of the following acts, deeds, matters and things, namely:					

1. To act as Attorney on my behalf/ on behalf of the Bidder/ Associate(s)* and to look after the affairs pertaining to the Bid Notice No...... dated issued by (name of the Coal Co.).

2. To do all acts, deeds and things as may be necessary on my behalf/ on behalf of the Bidder/ Associate(s)* in connection with the above Bid.

Photocopy of Approval of Board of Directors or CEO of the company having no Board of Directors in this regard is enclosed.

The validity of this PoA is for a minimum period of one & half years from the date of submission of this offer.

I/ We hereby ratify and confirm and agree to ratify and confirm all and whatsoever acts or deeds my/ our said Attorney shall do and purport to do by virtue of these presents.

IN WITNESS WHEREOF, I being theof the said firm have hereunto set and subscribed our respective hands on this day of 20.....

1. Specimen signature of 1st Attorney:

Name of 1st Attorney:

Designation:

2. Specimen signature of 2nd Attorney:

Name of 2nd Attorney:

Designation:

Attested

.....

(Signature of the executant)

Signed and delivered by

Within namedatat

In Presence of (Name & Designation of concerned person of Bidder/ Associate):

1.

2.

.....

Signature

(Authorised Signatory of Bidder/ Associate)

Dated:

Seal of the Notary with Signature

* Strike out whichever is not applicable

FORMAT FOR SELF DECLARATION OF BIDDER OR AUTHORIZATION OF DSC HOLDER BY BIDDER

[If the digital signature certificate holder is the bidder himself then self-declaration of bidder to this effect in the format mentioned at (a) below, otherwise an authorization in the format mentioned at (b) below from the bidder to the DSC holder authorizing him to submit the offer on behalf of bidder.]

Sub: Setting up of a Ashok Coal Washery/CPP/CPP of capacity 4.0 Mty at PIPARWAR Area, CCL on BOO concept

Ref: E-Tender Notice No. dated

OR

b) Ibeing (Post held in the company) of M/s (Name of the Bidder), aged about Years, son/daughter* of Shri residing presently at on behalf of M/s (Name & address of the Bidder) do hereby authorise Mr./ Mrs.* son/daughter of resident of to bid for me/ on our behalf*, and for and in the name of the firm by using his Digital Signature Certificate

Photocopy of Approval of Board of Directors or CEO of the company having no Board of Directors in this regard is enclosed.

.....

Signature

(Name & Designation with seal)

Dated:

* Strike out whichever is not applicable

COPY OF A LETTER FROM THE PARENT COMPANY TO THE EFFECT

IF

the Bidder is subsidiary/ entity(ies) of a parent company and consolidated financial report is prepared by the parent company showing information/ financial turnover of subsidiary/ entity(ies) separately,

Sub: Setting up of Ashok Coal Washery/CPP of capacity 4.0 Mty at PIPARWAR Area, CCL (name of the place & Coal Company), on BOO concept.

Ref: E-Tender Notice No. dated

We, M/s.....(name of the Parent Company), undertake that:

1. We are the Parent Company of M/s..... (name of the bidder who is the Subsidiary/ entity(ies)).

2. A Consolidated Financial report is prepared for us i.e. Parent Company and Subsidiaries/ entity(ies) in which the information related to financial turnover, net worth etc. of M/s.....(name of the bidder who is the Subsidiary/ entity(ies)) is indicated separately and the same may be considered for M/s.....(name of the bidder who is the Subsidiary/ entity(ies)) to meet the Qualification Criteria for this project.

Parent Company Stamp/ Seal:

.....

Signature

(Name & designation with seal of Authorised Signatory of Parent company)

Undertaking by Holding Company / JV Partners as per Cl. No. 9.1.1 and 9.1.2 of detail e-tender Notice of this Bid document.

(To be given on non-judicial stamp paper of ₹ 50/- in the form of an Affidavit duly notarized)

Sub: Setting up of Ashok Coal Washery/CPP of capacity 4.0 Mty at PIPARWAR Area, CCL (name of the place & Coal Company), on BOO concept

Ref: E-Tender Notice No. dated

We, M/s.....(name of the Holding Company / JV Partner(s) in JV Company^{*}), undertake that:

1. We are the Holding Company/JV Partner(s)* of M/s..... (name of the bidder/Consortium partner who is the Subsidiary Company/JV Company*).

2. M/s.....(name of the bidder/Consortium partner who is the Subsidiary Company/JV Company) is submitting its Bid on our financial strength and/ or technical competence*.

3. In case of any untoward happenings towards the successful execution of the contract and/ or event occurring that are distinct and different from the stipulated terms & conditions of this Bid Document as applicable and attributable to M/s...... (name of the bidder/Consortium partner who is the Subsidiary Company/JV Company) account, we shall be legally bound both jointly and severally to this contract for discharging all the contractual obligations on behalf of M/s......(name of the bidder/Consortium partner who is the Subsidiary Company)

Holding Company/JV Partners* Stamp/ Seal :

Signature (Authorised Signature

of Holding Company/JV Partner*)

* Strike out which is not applicable.

Note:

- i. The affidavit should be signed by a person having powers to do so which should be evidenced by way of a Board Resolution.
- ii. In case of JV Company, Undertaking shall be furnished by the concerned JV Partner whosefinancial strength and/ or technical competence has been taken into account.

Affidavit regarding correctness of information furnished w.r.t Technical Qualification Requirement

(To be submitted by bidders on Non Judicial Stamp Paper of minimum value of Rs.10/regarding correctness of information furnished by bidders on-line w.r.t Technical Qualification Requirement)

(May be submitted without any additional self-certification and attestation by Notary public)

- Sub: Setting up of Ashok Coal Washery/CPP of capacity 4.0 Mty at PIPARWAR Area, CCL on BOO concept
- Ref: E-Tender Notice No. dated
- 1. All information furnished by me / us on-line in respect of fulfillment of Technical Qualification Requirement of this Tender is complete, correct and true and I/we would be solely responsible for any error or omission or misleading information in our bid.
- 2. I/We shall be liable to submit documents as proof of correctness to the satisfaction of Coal Company, regarding information furnished by me/us on-line w.r.t Technical Qualification Requirement, if asked by the Coal Company.
- 3. I/we am/are aware that if I/we am/are not able to furnish the document as desired by Coal Company (CCL) or documents submitted by me/us are not satisfactory to the Coal Company, penal action as deemed fit may be taken against me/us for which I/we shall have no claim against Coal Company.

Stamp/ Seal of Bidder:

Signature of the Bidder

Dated.....

Note:

The foreign bidders should submit this Affidavit duly vetted/endorsed by the relevant* Embassy/ High Commission concerned.

*Relevant Embassy/High Commission means the Embassy/High Commission in INDIA of the Country where the bidder has obtained Turnover certificate or Country of origin of the bidder)

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EXHIBIT-8

FINANCIAL INFORMATION

(To be submitted by Sole Bidder/ Lead Member)

SI. No.	Particulars	Reply
1.0	Financial Qualification requirement	
	a) Bank reference (with full name and address of all bankers)	
	b) Evidence for a minimum net worth (as per last financial year previous to the one in which bid is invited) of ₹30Crores, (refer Cl. No. 10.2.2.1 of Detail E-Tender Notice)	
	c) Evidence of possessing adequate Working Capital of ₹6.0 Crores for 4.0MtyAshokCoal Washery/CPP inclusive of access to lines of credit and availability of other financial resources to meet the requirement (refer Cl.No. 10.2.2.2 of Detail E-Tender Notice)	
	d) Photocopies of Auditor's report or Chartered Accountant's certificate for the last financial year (from the last day of the month previous to the one in which bid is invited).	

PROFORMA FOR AFFIDAVIT

(To be submitted by bidders on Non Judicial Stamp Paper of minimum value of ₹.10/regarding genuineness of the information furnished by him on-line and authenticity of the scanned copy of documents uploaded by him on-line)

(May be submitted without any additional self-certification and attestation by Notary public)

I/We,	, Partner/Legal Attorney/Authorized
representative of M/s.	(Name of bidder)
solemnly declare that:	

- I/We have submitted bid/ Offer for the work
 against NIT
 No./Tender ID_____ dated _____
- All information furnished by me/us on-line in respect of fulfilment of eligibility criteria, qualification information, techno-commercial requirements, Price bid etc. of this Tender is complete, correct and true and I/we would be solely responsible for any error or omission in our bid.
- 3. All scanned copy of documents uploaded by me / us in support of the information furnished online by me / us are valid and authentic.
- 4. If any information furnished by me / us on-line and scanned copy of documents uploaded in support of the information furnished on-line by me / us is found to be fake / incorrect at any time, CCL (Name of Coal Co.) may cancel my Bid/ Offer and action as deemed fit may be taken against me / us, including termination of the contract, forfeiture of Earnest Money/ Security Deposit as the case may be and banning / delisting of our firm and all partners of the firm as per the terms & conditions mentioned in the bid document.
- 5. I/We have never been banned or delisted by any Govt. or Quasi Govt. Agency or any Public Sector Undertaking.

OR

I/We have been banned by the organization named "______ "for a period of ______ to

6. I/We (including all members of a joint venture and sub-contractors) am/ are neither associated presently nor has been associated in the past, directly or indirectly, with the consultant or any other entity that has prepared the design, specifications and other documents for the Project or being proposed as Engineer for the Contract i.e. CMPDIL in this case.

- 7. I/We are not engaging and will not engage any child labour in any of the activities for which I/We are participating in the tender. If it is reported and proved that child labour is engaged by me/us, then I/We will be penalized 10% of the contract value and will be blacklisted.
- 8. I / we shall abide by CMPF/ EPF Clause of Tender Document and ensure implementation of CMPF/ EPF and Misc. Provision Act 1948 and allied scheme framed thereunder in respect of the workers deployed by me / us.
- *9.* I/We shall abide by all applicable labour laws and shall provide certificate of contract labour laws as may be applicable before execution of agreement.

Signature of the Bidder

Dated.....

EXHIBIT – 11

No. P-45021/2/2017-B.E.-II Government of India Ministry of Commerce and Industry Department of Industrial Policy and Promotion

Dated 15thJune, 2017 UdyogBhawan, New Delhi

То

All Central Ministries/Departments/CPSUs/Allconcerned

<u>ORDER</u>

Subject: Public Procurement (Preference to Make in India), Order 2017

Whereas it is the policy of the Government of India to encourage 'Make in India' and promote manufacturing and production of goods and services in India with a view to enhancing income and employment, and

Whereas procurement by the Government is substantial in amount and can contribute towards this policy objective, and

Whereas local content can be increased through partnerships, cooperation with local companies, establishing production units in India or Joint Ventures (JV) with Indian suppliers, increasing the participation of local employees in services and training them,

Now therefore the following Order is issued:

- 1. This Order is issued pursuant to Rule 153 (iii) of the General Financial Rules 2017.
- 2. **Definitions:** For the purposes of this Order:

'Local content' means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, 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.

'Local supplier' means a supplier or service provider whose product or service offered for procurement meets the minimum local content as prescribed under this Order or by the competent Ministries / Departments in pursuance of this order.

'L 1' means the lowest tender or lowest bid or the lowest quotation received in a tender, bidding process or other procurement solicitation as adjudged in the evaluation process as per the tender or other procurement solicitation.

'margin of purchase preference' means the maximum extent to which the price quoted by a local supplier may be above the L 1 for the purpose of purchase preference.

'Nodal Ministry' means the Ministry or Department identified pursuant to this order in respect of a particular item of goods or services.

'Procuring entity' means a Ministry or department or attached or subordinate office of, or autonomous body controlled by, the Government of India and includes Government companies as defined in the Companies Act.

- 3. **Requirement of Purchase Preference:** Subject to the provisions of this Order and to any specific instructions issued by the Nodal Ministry or in pursuance of this Order, purchase preference shall be given to local suppliers in all procurements undertaken by procuring entities in the manner specified hereunder:
- a. In procurement of goods in respect of which the Nodal Ministry has communicated that there is sufficient local capacity and local competition, and where the estimated value of procurement is Rs 50 lakhs or less, only local suppliers shall be eligible. If the estimated value of procurement of such goods is more than Rs. 50 lakhs, the provisions of sub-paragraph b or c, as the case may be, shall apply.
- b. In the procurements of goods which are not covered by paragraph 3a and which are divisible in nature, the following procedure shall be followed:
 - i) Among all qualified bids, the lowest bid will be termed as L 1. If L 1 is from a local supplier, the contract for full quantity will be awarded to L 1.
 - ii) If L 1 bid is not from a local supplier, 50% of the order quantity shall be awarded to L 1. Thereafter, the lowest bidder among the local suppliers, will be invited to match the L 1 price for the remaining 50% quantity subject to the local supplier's quoted price falling within the margin of purchase preference, and contract for that quantity shall be awarded to such local supplier subject to matching the L 1 price. In case such lowest eligible local supplier fails to match the L 1 price or accepts less than the offered quantity, the next higher local supplier within the margin of purchase preference shall be invited to match the L 1 price for remaining quantity and so on, and contract shall be awarded accordingly In case some quantity is still left uncovered on local suppliers, then such balance quantity may also be ordered on the L 1 bidder.
- c. In procurements of goods not covered by sub-paragraph 3a and which are not divisible, and in procurement of services where the bid is evaluated on price alone, the following procedure shall be followed:
 - i) Among all qualified bids, the lowest bid will be termed as L 1. If L 1 is from a local supplier, the contract will be awarded to L 1.
 - If L 1 is not from a local supplier, the lowest bidder among the local suppliers, will be invited to match the L 1 price subject to local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such local supplier subject to matching the L 1 price.
 - iii) In case such lowest eligible local supplier fails to match the L 1 price, the local supplier with the next higher bid within the margin of purchase preference shall be invited to match the L 1 price and so on and contract shall be awarded accordingly. In case none of the local suppliers within the margin of purchase preference matches the L 1 price, then the contract may be awarded to the L 1 bidder.
 - 4. **Exemption of small purchases:** Notwithstanding anything contained in paragraph 3, procurements where the estimated value to be procured is less than Rs. 5 lakhs shall be exempt from this Order. However, it shall be ensured by procuring entities that procurement is not split for the purpose of avoiding the provisions of this Order.
 - 5. **Minimum local content:**The minimum local content shall ordinarily be 50%. The Nodal Ministry may prescribe a higher or lower percentage in respect of any particular item and may also prescribe the manner of calculation of local content.

- 6 .Marginof Purchase Preference: The margin of purchase preference shall be 20%.
- Requirement for specification In advance: The minimum local content, the margin of purchase preference and the procedure for preference to Make in India shall be specified in the notice inviting tenders or other form of procurement solicitation and shall not be varied during a particular procurement transaction.
- 8. Government E-marketplace- In respect of procurement through the Government E-marketplace (GeM) shall, as far as possible. specifically mark the items which meet the minimum local content while registering the item for display, and shall, wherever feasible, make provision for automated comparison with purchase preference and without purchase preference and for obtaining consent of the local supplier in those cases where purchase preference is to be exercised.

9. Verification of local content:

- a. The local supplier at the time of tender, bidding or solicitation shall be required to provide self certification that the item offered meets the minimum local content and shall give details of the location(s) at which the local value addition is made.
- b. In cases of procurement for a value in excess of Rs. 10 crores, the 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 percentageoflocal content.
- c. Decisions on complaints relating to implementation of this Order shall be taken by the competent authority which is empowered to look into procurement-related complaints relating to the procuring entity.
- d. Nodal Ministries may constitute committees with internal and external experts for independent verification of self-declarations and auditor's/ accountant's certificates on random basis and in the case of complaints.
- e. Nodal Ministries and procuring entities may prescribe fees for such complaints.
- f. 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.
- g. A supplier who has been debarred by any procuring entity for violation of this Order shall not be eligible for preference under this Order for procurement by any other procuring entity for the duration of the 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, in the manner prescribed under paragraph 9h below.

h. The Department of Expenditure shall issue suitable instructions for the effective and smooth operation of this process, so that

i. The fact and duration of debarment for violation of this Order by any procuring entity are promptly brought to the notice of the Member-Convenor of the Standing Committee and the Department of Expenditure through the concerned Ministry /Department or in some other manner;

- i. on a periodical basis such cases are consolidated and a centralized list or decentralized lists of such suppliers with the period of debarment is maintained and displayed on website(s);
- ii. in respect of procuring entities other than the one which has carried out the debarment the

debarment takes effect prospectively from the date of uploading on the website(s) in the such a manner that ongoing procurements are not disrupted,

10. Specifications in Tenders and other procurement solicitations:

- Every procuring entity shall ensure that the eligibility conditions in respect of previous experience fixed in any tender or solicitation do not require proof of supply in other countries or proof of exports
- b. Procuring entities shall endeavor to see that eligibility conditions, including on matters like turnover, production capability and financial strength do not result in unreasonable exclusion of local suppliers who would otherwise be eligible, beyond what is essential for ensuring quality or creditworthiness of the supplier.
- c. Procuring entitles shall, within 2 months of the issue of this Order review all existing eligibility norms and conditions with reference to sub-paragraphs 'a' and 'b' above
- d. If a Nodal Ministry is satisfied that Indian suppliers of an item are not allowed to participate and/ or compete in procurement by any foreign government, it may, if it deems appropriate. restrict or exclude bidders from that country from eligibility for procurement of that item and/ or other items relating to that Nodal Ministry. A copy of every instruction or decision taken in this regard shall be sent to the Chairman of the Standing Committee.
- e. For the purpose of sub-paragraph 10 d above, a supplier or bidder shall be considered to be from a country if (i) the entity is incorporated in that country, or ii) a majority of its shareholding or effective control of the entity is exercised from that country; or (iii) more that 50% of the value of the item being supplied has been added in that country. Indian suppliers shall mean those entities which meet any of these tests with respect to India."
- 11. **Assessment of supply base by Nodal Ministries:**The Nodal Ministry shall keep in view the domestic manufacturing *I* supply base and assess the available capacity and the extent of local competition while identifying items and prescribing minimum local content or the manner of its calculation, with a view to avoiding cost increase from the operation of this Order.
- 12. **Increase in minimum local content** The Nodal Ministry may annually review the local content requirements with a view to increasing them, subject to availability of sufficient local competition with adequate quality.
- 13. Manufacture under license/ technology collaboration agreements with phased indigenization: While notifying the minimum local content, Nodal Ministries may make special provisions for exempting suppliers from meeting the stipulated local content if the product is being manufactured in India under a license from a foreign manufacturer who holds intellectual property rights and where there isatechnology collaboration agreement / transfer of technology agreement for indigenous manufacture of a product developed abroad with clear phasing of increase in local content.
- 14. **Powers to grant exemption and to reduce minimum local content:** Ministries / Departments of Government of India and the Boards of Directors of Government companies or autonomous bodies may, by written order,
 - a. reduce the minimum local content below the prescribed level:
 - b. reduce the margin of purchase preference below 20% ;
 - c. exempt any particular item or procuring or supplying entities or class or classes of items or procuring or supplying entities from the operation of this Order or any part of the Order.

A copy of every such order shall be marked to the Member-Convenor of the Standing Committee constituted under this Order.

- 15. Directions to Government companies: In respect of Government companies and other procuring entities not governed by the General Financial Rules, the administrative Ministry or Department shall issue policy directions requiring compliance with this Order.
- 16. Standing Committee: A standing committee is hereby constituted with the following membership:

Secretary, Department of Industrial Policy and Promotion-Chairman Secretary, Commerce-Member Secretary, Ministry of Electronics and Information Technology- Member Joint Secretary (Public Procurement). Department of Expenditure-Member Joint Secretary (DIPP)-Member-Convenor

The Secretary of the Department concerned with a particular item shall be a member in respect of issues relating to such item. The Chairman of the Committee may co-opt technical experts as relevant to any issue or class of issues under its consideration.

- 17. **Functions of the Standing Committee:** The Standing Committee shall meet as often as necessary but not less than once in six months. The Committee
 - a. shall oversee the implementation of this order and issues arising there from, and make recommendations to Nodal Ministries and procuring entities.
 - b. shall annually assess and periodically monitor compliance with this Order
 - c. shall identify Nodal Ministries and the allocation of items among them for issue of notifications on minimum local content
 - d. may require furnishing of details or returns regarding compliance with this Order and related matters
 - e. may, during the annual review or otherwise, assess issues, if any, where it is felt that the manner of implementation of the order results in any restrictive practices, cartelization or increase in public expenditure and suggest remedial measures
 - f. may examine cases covered by paragraph 13 above relating to manufacture under license/ technology transfer agreements with a view to satisfying itself that adequate mechanisms exist for enforcement of such agreements and for attaining the underlying objective of progressive indigenization
 - g. may consider any other issue relating to this Order which may arise.
 - 18. **Removal of difficulties:** Ministries /Departments and the Boards of Directors of Government companies may issue such clarifications and instructions as may be necessary for the removal of any difficulties arising in the implementation of this Order.
 - 19. Ministries having existing policies: Where any Ministry or Department has its own policy tor preference to local content approved by the Cabinet after 1⁵¹January 2015, such policies will prevail over the provisions of this Order. All other existing orders on preference to local content shall be reviewed by the Nodal Ministries and revised as needed to conform to this Order, within two months of the issue of this Order.

20. **Transitional provision:** This Order shall not apply to any tender or procurement for which notice inviting tender or other form of procurement solicitation has been issued before the issue of this Order.

Hojam Navak)

(B.S.Nayak) Under Secretary to Government of India Ph.23061257

EX- 20

APPENDIX

SL. No.	Broad Parameters	Information
1	Raw Coal throughput Capacity (Mty)	4.0 Mtyon 'as received basis' (arb)
2	Raw Coal Quality	
2.1	Monthly average ash% ('adb')	38.6%
2.2	Range of day-to-day ash% ('adb')	38.6±4%
2.3	Average Total Moisture% (day-to-day)	6.0%
2.4	Range of Total Moisture% (day-to-day)	From 5.2% to 6.8%
2.5	Raw coal size,	Top Size 1000 mm
3	Product Quality	
3.1	Washed Coal	
a)	Monthly Average Ash% (adb)	5 to 6% less than the monthly average ash of raw coal supplied
b)	Range of Ash% (adb) on daily basis	-
c)	Total Moisture% (on consignment basis). Total Moisture shall not exceed 11%	(to be quoted by the bidder)
3.2	Reject	
a)	Monthly Average Ash% (adb). Ash% shall be more than 60%	(to be quoted by the bidder)
b)	Total Moisture% on day-to-day basis	(to be quoted by the bidder)
3.3	Product size (mm): Not more than 50	(to be quoted by the bidder)
4	Operating Conditions	
	No. of days per year: commensurate with the mine operation	330
4.1	Raw Coal Section	
4.1.1	No. of shifts per day	3
4.1.2	No. of hours per shift	8
4.1.3	Daily (te) on 'arb'	15000
4.1.4	Hourly (tph) on 'arb'	900
4.2	Washing Section	
4.2.1	Daily (te) on 'arb'	12000
4.2.2	Hourly (tph) on 'arb'	750
5	Evacuation of Washed Coal	WO's responsibility
5.1	Mode of transportation	Road
6	Evacuation of Reject from identified reject storage site	CCL's responsibility
6.1	Mode of transportation	Road(tipper/dumper)
6.3	Distance (km) of storage site for reject dumping	Adjacent to Washery/CPP site
7	Railway Siding (Location & distance from Washery/CPP site)	Approximately 7-8kms.
8	Details of Force Majeure condition, if any, existing in the place of operation at the time of submission of offer and consideration taken into account for them as per CI. 4.34	(to be quoted by Bidder)

APPENDIX - II :

A. Description of Washing Scheme along with Flow Diagram

B. Detailed work programme(PERT Network and Bar Chart with different activities and time schedule)

APPENDIX - III	: A. Format for Furnishing Technical Details of Main Mechanical &
	Electrical Equipment

SI. No.	Name of the Equipment	Туре	No.	Capacity of each	Technical Specification
1	Primary Crusher				
2	Feeders/ Reclaimers				
3	Secondary Crusher				
4	Classification Screen				
5	Main Beneficiation equipment				
6	Dewatering Equipment				
7	Rapid loading system				
8	Power transformers				
9	OCB' s/ACB' s				
10	H.T./ L.T. Motors				
11	PLC control				
12	Instrumentation (solid/ liquid level sensors, belt weighers, ash & moisture monitor, density monitor, etc.)				
13	Cables (Power control)				
14	Illumination				
15	Communication system				
16	DG set				
17	Any other				

Appendix - III (contd.)

SI. No.	Name of Building/ structure	Туре	Cap./size details	&	other	Any information	other
1	Raw coal receiving hopper						
2	Primary crushing unit						
3	Secondary crushing unit						
4	Raw coal storage system						
5	Beneficiation plant						
6	Thickener						
7	Storage system for saleable product						
8	Reject bunker/ hopper						
9	Slime pond						
10	Fresh water reservoir						
11	Fire-fighting storage tank						
12	Service buildings						
13	Roads and culverts						
14	Any other						

B. Format for Furnishing Details of Civil Buildings & Structurals

SI. No.	Particulars	Electricity requirement
1	During construction of Washery/CPP (kW)	
2	During regular operation of Washery/CPP (kWh/ tonne of raw coal on 'arb')	

APPENDIX - IV : A. Format for Furnishing the Requirement of Power

B. Format for Furnishing the Requirement of Water

SI. No.	Particulars	Water requirement
1	During construction of Washery/CPP (cum/ day)	
2	During regular operation of Washery/CPP (cum/ tonne of raw coal on 'arb')	

APPENDIX - V : List of Recommended Spares & Critical Spares as per Cl. No. 4.32 of Section 4 of the Bid Document

ENCLOSURES

ENCLOSURE-I

PROFORMA FOR LETTER OF BID TO BE UPLOADED BY BIDDER DURING SUBMISSION OF BID ON-LINE

LETTER HEAD OF BIDDER (As enrolled on the e-Procurement Portal of CIL)

"Letter of Bid"

To,

General Manager (Washery),

Darbhanga House,

Central Coalfields Limited, Ranchi.

Sub. : Letter of Bid for the work "Setting up of Ashok Coal Washery/CPPof capacity 4.0 Mtyat PIPARWAR Area, CCL (name of the place & Coal Company), on BOO concept."

Ref.: E-Tender Notice No.: dated

Dear Sir,

I/We offer to execute the above referred subject work in accordance with the conditions of the Bid document as available in the website as applicable.

I/We hereby confirm our acceptance of all the terms and conditions of the Bid document as available in the website as applicable as well as any communication sent by Coal Company (CCL) unconditionally. **I/We** also confirm to comply with all the legal requirements.

All the items and works specified in the bid document and any other equipment or work found necessary but not covered will be deemed to have been covered in the scope of supply and works of the tender without any increase in the contract price for washing charges.

If any information furnished by **me/us** on-line in the offer for this tender is found to be incorrect at any time, penal action as deemed fit may be taken against **me/us** for which **I/we** shall have no claim against Coal Company.

I/We hereby confirm that this Bid complies with the Bid validity and Bid security required as per bid document as applicable.

This Bid and your subsequent Letter of Acceptance/Letter of Award/ Work Order shall constitute a binding contract between us.

Yours faithfully,

(Signature of Bidder OR Authorized person of bidder OR DSC Holder bidding on-line with authorization from bidder)

(This document is digitally signed by the DSC holder authorised by the bidder and therefore no physical signature is required)

ENCLOSURE-II

FORMAT FOR BANK GUARANTEE FOR SECURITY DEPOSIT TO BE FURNISHED BY SOLE BIDDER/ LEAD MEMBER

(TO BE FURNISHED IN NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE IN ACCORDANCE WITH STAMP ACT BEFORE SIGNING OF AGREEMENT)

Sub: Setting up of Ashok Coal Washery/CPP of capacity 4.0 Mty at PIPARWAR Area, CCL on BOO concept

Ref: E-Tender Notice No.: dated

Bank Guarantee No.

Date _____

To,

General Manager (Washery),

Darbhanga House,

Central Coalfields Limited, Ranchi.

Dear Sir,

1. We, (name of the Bank), having its Head Office at (hereinafter referred to as the "Bank" which expression shall, unless repugnant to the context of meaning thereof, include its successors-in-interest, administrators, executors and assigns) do hereby guarantee on behalf of M/s (the WO) and undertake to pay to Company on demand any and all money to the extent of ₹ ---- Million for the plant of capacity 4.0 Mty only as aforesaid at any time upto (i.e., the date, which will be 3 months after the completion of one year of commercial operation) without any demur, reservation, contest recourse or protest and/ or without any reference to M/s (the WO). The bank guarantee shall also be operative at our Ranchi branch located at(Complete postal address with PIN Code, Branch Code, IFSC Code, SWIFT, Tel No., Fax No., E-mail ID) from whom, confirmation regarding issue of this guarantee or extension/ renewal thereof shall be made available on demand. Any such demand made by Company on the Bank shall be conclusive and binding, notwithstanding any difference between Company and M/s (the WO) pending before any Court, Tribunal, Arbitrator or any other Authority. Any notice by way of request, demand or otherwise hereunder may be sent by post/e-mail/Fax addressed to the bank branch/ operative branch, which shall be deemed to be a sufficient demand notice. Bank shall effect payment thereof forthwith. The Bank do hereby undertakes not to revoke this guarantee during its currency without previous written consent of Company and further agrees that the guarantee herein contained shall continue to remain enforceable till Company discharges this guarantee.

2. The Company shall also have the fullest liberty, without affecting this Guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the WO and to exercise the same at any time in any manner, and either to enforce or to forebear or to enforce any covenants, contained or implied, in the Contract, between Company and the WO or any other course or remedy or security available to Company. The Bank shall not be released of its obligations under these presents by an exercise by Company of its liberty with reference to matter aforesaid or any of them or by reason of any other act of forbearance or other acts of omission or commission on the part of Company or any other indulgence shown by Company or any other matter or thing whatsoever which under law would, but for this provision, have the effect of relieving the Bank from its obligations.

3. The Bank also agrees that Company at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against WO and not withstanding any security or other guarantee that Company may have in relation to WO's liabilities.

4. We, the said Bank, lastly undertake not to revoke this Guarantee during the currency except with the previous consent of the Company in writing and agree that any change in the constitution of the said WO or the said Bank, shall not discharge our liability hereunder.

5. Notwithstanding anything contained hereinabove our liability under this Guarantee is restricted to ₹ ---- Million for a plant of capacity 4.0 Mty and shall remain in force upto and including (the date) and shall be suitably replaced from time to time for the period, as may be desired by M/s (the WO) on whose behalf this guarantee has been given.

Dated this day of (month) 20. (year) at (place)

For and on behalf of the Bank
(Authorised Signatories of Bank)
(Signature)
Name & Designation
(Bank's Seal)

Notes :

- 1. The Non-judicial Stamp paper(s) of appropriate value shall be in the name of guarantee issuing bank.
- 2. The Bank Guarantee shall be from any of the Scheduled/ Nationalised Banks
- 3. Structured Financial Messaging System (SFMS)

i) The Bank Guarantee (BG) issued by the issuing Bank on behalf of Washery/CPP operator, contractor, supplier, customer infavour of "Central Coalfields Limited" shall be in paper form as well as issued under "Structured Financial Messaging System (SFMS)".

ii) CCL has chosen State Bank of India to act as advising / beneficiary bank of CCL. The Bank issuing the guarantee shall have to send confirmation through SFMS through this Bank.

iii) The details of beneficiary (i.e. CCL) for issue of Bank Guarantee (BG) under SFMS platform is furnished below:

i.	Name of the Beneficiary and its		Name	Central Coalfields Limited (CCL)					
	details.	ii	Area	CCL - HQ. Ranchi					
		iii	Name of Bank	State Bank of India					
		iv	Bank Account No.	10106155123					
			Department	Washery Construction					
ii.	Beneficiary's Advising Bank, Branch and address for confirmation of BGs through SFMS.	i	Name of Bank	State Bank of India					
		ii	Bank Branch name	SME Branch					
		iii	Branch code	09620					
		iv IFSC Code		SBIN0009620					
		v	Beneficiary Bank	State Bank of India, SME					
			Branch & Address	Branch, Doranda, Ranchi –					
				834 002, JHARKHAND					

STATE BANK OF INDIA AS ADVISING BANK OF CCL:

iv) The Supplier/ Contractor/ Customer are required to take note of it that above particulars are to be incorporated by the issuing bank properly while issuing the Bank Guarantee under SFMS mode to avoid any future problem in accepting the BGs.

v) The Guarantor (BG issuing bank) shall send information about issuance of this guarantee through SFMS gateway to the State Bank of India, SME Branch, Doranda, Ranchi – 834002 (IFSC-SBIN0009620), to add in the process of confirmation of Bank Guarantee.

vi) The Guarantor (BG issuing bank) shall also send information about issuance of this guarantee to its local operating branch at Ranchi to add in the process of confirmation as well as claim for encashment of Bank Guarantee.

vii) The original Bank Guarantee issued by the outstation bank shall be sent by the issuing bank to Washery Construction Department, Damodar Building, Central Coalfields Limited, Darbhanga House, Ranchi-834029, Jharkhand by Speed Post/ Registered Post (AD).

* Strike out whichever is not applicable

ENCLOSURE-III .

MANDATE FORM FOR ELECTRONIC FUND TRANSFER / INTERNET BANKING PAYMENT

То

General Manager (Washery), Darbhanga House, Central Coalfields Limited, Ranchi.

Dear Sir,

- Sub : Authorisation for release of payment due from Coal Company (CCL) through Electronic Fund Transfer/ Internet Banking (NEFT / RTGS Transfer).
- Ref : Order No..... Dt..... and / or Tender/ Enquiry/ Letter No..... Dt.....

(Please fill in the information in CAPITAL LETTERS, Please TICK wherever it is applicable)

- 1. Name of the Bidder :
- 2. Address of the Bidder :

.....

City

Pin Code

E-Mail Id

Permanent Account Number

3. Particulars of Bank :

Bank Name		Bran	ch I	Nan	ne								
Branch Place			Bran	ch (City								
Pin Code		Branch Code											
MICR No.			RTG	S C	ode	;							
(9 Digits code number appearing on the MICR Band of the cheque supplied by the Bank. Attach Xerox copy of a cheque of your bank ensuring accuracy of the bank name, Branch name & code number)													
Account Type Savings			ent				Ca	ash	Cre	dit			
Account Number (as appearing in the Cheque Book													

4. Date from which the mandate should be effective

I hereby declare that the particulars given above are correct and complete. If any transaction is delayed or not effected for reasons of incomplete or incorrect information, I shall not hold Coal Company (CCL) responsible. I also undertake to advise any change in the particulars of my account to facilitate updation of records for purpose of credit of amount through NEFT/ RTGS Transfer.

Place :

Date : Signature of the Bidder / Authorised Signatory

Certified that particulars furnished above are correct as per our records.

Banker's Stamp

Date :

Signature of the authorized officials from the banks

ENCLOSURE-IV .

INTEGRITY PACT

Between

Coal Company (CCL) hereinafter referred to as "The Principal"

And

M/s hereinafter referred to as "The Bidder/ Contractor"

Preamble

The principal intends to award, under laid down organizational procedures, contracts for Ashok Coal Washery/CPP (name of the Washery/CPP), on Build-Own-Operate (BOO) basis. The Principal values full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder/s and Contractor/s.

In order to achieve these goals, the Principal co-operates with the "International Non-Governmental Organization" "Transparency International"(TI). Following TI's national and international experience, the Principal will appoint an External Independent Monitor who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

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:
- i) 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 him/herself or third person, any material or immaterial benefit which he/she is not legally entitled to.
- ii) The Principal will, during the tender process treat all Bidders with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidders the same information and will not provide to any Bidder confidential/additional information through which the Bidder could obtain an advantage in relation to the tender process or the contract execution.
- iii) The 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 relevant Anti-Corruption Laws of India, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary action.

Section 2 – Commitments of the Bidder/contractor

- (1) The Bidder/Contractor commits itself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
- i) The Bidder/Contractor 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 immaterial 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.
- ii) The Bidder/Contractor 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 cartelization in the bidding process.

- iii) The Bidder/Contractor will not commit any offence under the relevant Anti- corruption Laws of India; further the Bidder/Contractor 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.
- iv) The Bidder/Contractor will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- (2) The Bidder/Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 - Disqualification from tender process and execution 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.

- i) If the Bidder/Contractor has committed a transgression through a violation of Section 2 such as to put his reliability or credibility into question, the Principal is entitled also to exclude the Bidder/Contractor 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.
- ii) 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.
- iii) If the Bidder/Contractor 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.
- iv) A transgression is considered to have occurred if in light or available evidence no reasonable doubt is possible.

Section 4 – Compensation for Damages

- i) If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover from the Bidder liquidated damages equivalent to 3% of the value of the offer or the amount equivalent to Earnest Money Deposit/Bid Security, whichever is higher.
- ii) 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 equivalent to Bid security (EMD)/ Security Deposit, whichever is applicable.
- iii) The bidder agrees and undertakes to pay the said amounts without protest or demur subject only to condition that if the Bidder/Contractor can prove and establish that the exclusion of the Bidder from the tender process or the termination of the contract after the contract award has caused no damage or less damage than the

amount of the liquidated damages, the Bidder/Contractor shall compensate the Principal only to the extent of the damage in the amount proved.

Section 5 – Previous transgression

- i) The Bidder declares that no previous transgressions occurred in the last 3 years with any other Company in any country conforming to the TI approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
- ii) If the bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section 6 – Equal treatment of all Bidders/Contractors/ Sub-contractors

- i) The Bidder/Contractor undertakes to demand from all sub-contractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.
- ii) The Principal will enter into agreements with identical conditions as this one with all Bidders, Contractors and Sub-contractors.
- iii) The Principal will disqualify from the tender process all bidders who do not sign the pact or violate its provisions.

Section 7 – Criminal charges against violating Bidders / Contractors/ Sub-contractors

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 Sub-contractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Vigilance Office.

Section 8 – External Independent Monitor/Monitors (three in number depending on the size of the contract) (to be decided by the Chairperson of the Principal)

- i) The Principal appoints competent and credible External Independent Monitor for this Pact. 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.
- ii) The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairperson of the Board of the Principal.
- iii) The Contractors 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 request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Sub-contractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder/Contractor/Sub-contractor with confidentiality.
- iv) 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 Monitor the option to participate in such meetings.
- v) As soon as the monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or heal the violation, 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.

- vi) The Monitor will submit a written report to the Chairperson of the Board of the Principal 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.
- vii) Monitor shall be entitled to compensation on the same terms as being extended to/provide to Outside Expert Committee members/Chairman as prevailing with Principal.
- viii) If the Monitor has reported to the Chairperson of the Board a substantiated suspicion of an offence under relevant Anti-Corruption Laws of India, and the Chairperson has not, within the reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- ix) The work 'Monitor' would include both singular and plural.

Section 9 – Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the respective contract, and for all other Bidders 6 months after the contract has been awarded.

If any claim is made/lodged during this time, the same shall be binding and continueto be valid despite the lapse of this pact as specified above, unless it is discharged/ determined by Chairperson of the Principal.

Section 10 – Other Provisions

- i) This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e.
- ii) Changes and supplements as well as termination notices need to be made in writing. Side agreement have not been made.
- iii) If the Contractor is a partnership or a Joint Venture, all partners must sign this agreement. For Associate/ Consortium route of bidding also, each member must sign this agreement.
- iv) 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.
- v) Person signing Integrity pact shall not approach the Courts while representing the matters to IEMs and he/she will await their decision in the matter.
- vi) In case of sub-contracting, the Principal contractor shall take the responsibility of the adoption of Integrity Pact by the sub-contractor.

For the Principal	For the Bidder/Contractor		
Place:	Witness 1:		
Date :	Witness 2:		

For the Associates (If applicable)

i) Associate-1:

Witness :

ii) Associate-2:

Witness :

iii) Associate-3:

Witness :

ENCLOSURE -V

SAMPLE CONTRACT FORM

Contract No.

WHEREAS CCL invited bids vide E-Tender Notice No.DatedDatedfor Washery/CPP on BUILD-OWN-OPERATE concept.

WHEREAS the Selected Bidder/ WO submitted the Bid in response to the said invitation of CCL.

WHEREAS CCL accepted the Bid of the Bidder for Washery/CPP on BOO concept.

Now this Contract witnesseth as follows:

- In this Contract, words and expressions shall have the same meaning as are respectively assigned to them in the following documents and shall be deemed to form and be read and construed as integral part of the Contract.
 - (i) Bid document, offer submitted, subsequent correspondences/ clarifications, etc.
 - (ii) Letter of Intimation (LoI) issued to the Lowest Bidder
 - (iii) Letter of Award by CCL& its acceptance by the WO,
 - (iv) Commercial Terms & Other Conditions of Contract for the entire contract period for set up & operation both,

- (v) All Technical Specifications alongwith Contract Drawings/ Finalized Work Programme
- (vi) Proforma of applications for payment to WO for washing charges
- (vii) Lease Agreement between CCL and Selected Bidder and Security Deposit

2) Scope and Conditions of the Contract

The scope and conditions of the Contract shall be in accordance with the Contract Documents specified and as provided in the LoA.

Notwithstanding anything stated elsewhere in the Bid Document the contract to be entered into will consist of two parts i) contract for setting up of Washery/CPP plant (with two years' critical spares for smooth operation of the plant) with the capital funding by WO and ii) contract for operation & maintenance of Washery/CPP plant.

3) Construction of Washery/CPP plant (with 2 years' critical spares for smooth operation of the plant) and commercial operation & maintenance thereof for a period of eighteen (18) years or thereafter extended period on mutually agreed terms and conditions, if any. On expiry of contract period for operation of eighteen years or thereafter extended period on mutually agreed terms and conditions, if any, the WO shall yield to and deliver upon peaceful possession of land leased out to him &Washery/CPPalongwith auxiliaries & infrastructures to CCLwithout any monetary claim.

4) Contract Price

Subject to the contract Documents mentioned above, Contract Price shall mean washing charge payable to the WO by CCL under the contract for the raw coal processed on dry basis by WO for the first year of commercial operation after successful completion of PGT.

5) Terms of Payment for Washing Charges

The payment of washing charges will be based on the quantity of the raw coal processed (on dry basis) during the month and will be paid in terms of per tonne of raw coal processed (on dry basis).

The WO will allow representatives of the CCL to go through their records relevant to their washing charges claimed as and when needed and depute their representatives to explain the doubts, if any.

The other terms & conditions for payment of washing charges to the WO will be in accordance with the provisions made under Clause 4.40 of Section 4 of this bid document.

6) Time schedule for completion towards set up of Washery/CPP

The time schedule for installation & commissioning of proposed Washery/CPP under the Contract (including various clearances from concerned agencies) shall be according to implementation scheme as furnished in the offer and agreed subsequently by CCL.

7) Effective Date of Contract

This Contract shall come into effect upon signing of the contract by the Preferred Bidder or handing over of the site to the WO whichever is later.

9) CCL hereby covenants to pay the(name of the WO) washing charges for the raw coal processed on dry basis by WO in accordance with the terms and conditions of the Contract, the Contract price at the time and in the manner, as provided herein above.

IN WITNESSTH WHEREOF the parties hereto set their hands on the day written herein above.

For and on behalf of	:	For and or	:			
CCL		(Name of the WO)				
Signature	:	: Signature			:	
(Authorised Signatory of C	CCL)	(Authorised Signatory of the WO)				
Name of the Signatory	:	: Name of the Signatory			:	
Designation	:	Designation		:		
CCL's Stamp/ Seal:		WO's Stamp/ Seal		:		
Date	:	I	Date		:	
Place	:	I	Place		:	
Witness: Witness :						
1 (Signature with full name, Designation & address) 1 (Signature with full Designation			ull name, tion & address)			
2 (Signature with full name, Designation & address) 2 (Signature with full name, Designation & address						
* Strike	out	whichever	is	not	applicable.	