Sealed tenders are invited from only manufacturers of main mine ventilation fans for supply of materials against tender mentioned below:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Tender No. &amp; Date</th>
<th>Description of Materials</th>
<th>Last Date of receipt &amp; opening of Tender</th>
<th>Estimated Value</th>
<th>Cost of Tender Document</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>BCCL/LA/PUR/09-10/GENL/16 Dated:17/04/2009</td>
<td>Spares of Main Mine Ventilation Fan</td>
<td>29/05/2009</td>
<td>Rs. 7.53 Lakh</td>
<td>Rs.1000/-</td>
</tr>
</tbody>
</table>

Tender document can be obtained from the office of Materials Manager (P), Lodna Area:X, BCCL, P.O.Khasjeenagora, Dist.Dhanbad-828 115 on payment of requisite cost of tender document by Cash to be deposited to Area Cash Section or by Demand Draft of any Scheduled Bank in favour of “BHARAT COKING COAL LIMITED,EXPENSE A/C LODNA AREA-X”, payable at Dhanbad. Tenders will be received upto 1:00PM on the scheduled date mentioned above and will be opened on the same date at 3:00 PM in presence of attending tenderers. Sale of tender document shall close 10(ten) days prior to the due date, if request for tender document is received by post accompanied with requisite amount of cost of tender document in the form of Demand Draft or 02(two) days prior to the due date, in person. BCCL is not responsible for any misprint in the newspaper and delay in receipt of tender documents by post. Tender document can also be obtained by downloading from the Website of BCCL (http://bccl.cmpdi.co.in) and cost of tender document should be deposited along with the tender in the form of Demand Draft.

Materials Manager (P)
Lodna Area
Bharat Coking Coal Limited
(A Subsidiary of Coal India Limited)
Office of the General Manager
Lodna Area: X, P.O.-Khasjeenagora,
Dist.-Dhanbad-828115 (Jharkhand)
(http://www.bccl.co.in)

Tender No. BCCL/IA/PUR/09-10/GENL/ 16

Dated: 17/04/2009

Due Date & Time for Submission of Tender: 29/05/2009; Upto 1.30 P.M.
Due Date & Time for Opening of Tender: 29/05/2009; At 3:00 P.M.

Required amount of Earnest Money: Rs.15060/- (Rs. Fifteen Thousand Sixty only.)

Cost of Tender Document: Rs. 1000/- (Rs. One Thousand only) non refundable

Sealed Tenders are invited from Manufacturers of Main Mine Ventilation Fan only (manufacturers only need quote), in two bid: Techno-commercial & Price Bid separately sealed, and both the sealed envelopes to be sealed in the third envelope addressed to the Materials Manager, Lodna Area, P.O. Khasjeenagora, Dist: Dhanbad 828115 with tender no. & date, due date & time of opening, duly subscribed for the under noted materials.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Description of Items</th>
<th>U/M</th>
<th>Qty. Reqld.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Complete Rotor Assembly consisting of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(i) High Tensile Aluminium Alloy Blade</td>
<td>No.</td>
<td>08</td>
</tr>
<tr>
<td></td>
<td>(ii) M.S. Fabricated Rotor Hub</td>
<td>No.</td>
<td>01</td>
</tr>
<tr>
<td></td>
<td>(iii) Rotor Shaft , EN-24</td>
<td>No.</td>
<td>01</td>
</tr>
<tr>
<td></td>
<td>(iv) Bearings</td>
<td>No.</td>
<td>02</td>
</tr>
<tr>
<td></td>
<td>(v) Plummer Blocks</td>
<td>No.</td>
<td>02</td>
</tr>
<tr>
<td>2</td>
<td>Fan Casing consisting of Guide Vanes &amp; Inner Casing only</td>
<td>Set</td>
<td>01</td>
</tr>
</tbody>
</table>

(Detailed Technical Specification of Items, ANNEXURE-"A")

Terms & Conditions:

General
1. Quotation should be Firm, F.O.R Destination including risk in transits up to Lodna Regional Stores.
2. Price Quoted should be valid for minimum period of 120 days from the date of opening of quotations.
3. Quotation should be free from corrections & erasures. Only type written offer is acceptable.
4. Sealed quotation must be submitted in the Tender Box of Purchase Deptt. Lodna Area, Area: X, BCCL.
5. Techno-Commercial-Bid will be opened on due date & time as mentioned above. Price Bids of only those Tenderers whose Techno commercial bid is found to be acceptable will be opened later on.
6. Cost of Tender Document Rs.1000/- in the form of Bank Draft in favour of "Bharat Coking Coal Limited, Expense A/C Lodna Area" payable at "Dhanbad", must accompany Techno-commercial bid if downloaded from website. Tender document can be purchased by intending tenderers by depositing cash Rs.1000/- in Area Cash Section and submission of Original Money Receipt in Area Purchase Section, Lodna Area.
7. Earnest Money: An earnest money of Rs.15060/- (Rs. Fifteen Thousand Sixty only) in the form of "Bank Draft" only, of any scheduled Bank drawn in favour of "Bharat Coking Coal Limited, Expense A/C Lodna Area" payable at "Dhanbad", must accompany Techno-commercial-Bid, otherwise offer will not be considered for further evaluation. For unsuccessful tenderers, Earnest Money shall be refunded immediately after finalization of the tender.

Concl.Po.-2
5. **Security Money**: Successful Tenderer are required to deposit Security Money in the form of 'BANK DRAFT' only of any scheduled Bank drawn in favour of "BHARAT COKING COAL LIMITED, Expense A/C Lodna Area" payable at "DHANBAD", of 10% value of order (value means F.O.R destination price) within 15 days of receipt of order. For unsatisfactory performance or contractual failure, the security money shall be forfeited.

6. **State/Central Govt. Organization / Public Sector Undertaking / Valid DGS & D / NSIC registered firms** (for tendered item), shall be considered for exemption for submission of Earnest Money & Security Money, If they submit documentary evidence in Techno-commercial-bid.

7. **Payment Terms**: 100% after receipt, inspection and acceptance of material at Lodna Regional Store and submission of final bill (whichever is later) within 30 days.

8. **Delivery**: To be completed in one lot of full ordered items & quantity within 60 to 90 days from the date of order or earlier with Test Certificates.

9. **Tenderers must mention in their offers, C.S.T. No & VAT No. / TIN No. and self-authenticated copies of the registration of the same to be submitted**.

10. **Price Fall Clause & L.D. Clause acceptance must be given in the offer**.

11. **Guarantee**: for a period of 18 (eighteen) months from the date of supply or 12 (twelve) months from the date of fitment, whichever is earlier.

12. **Fitment Guarantee**: Tenderers must give guarantee for fitting of the spares in the existing main mine ventilation fan without any modification, deletion or addition in the spares supplied OR in the ventilation fan.

13. **Tenderers must submit self-attested copies of minimum two (02) Purchase Orders received from Subsidiaries of CIL including BCCL / Govt. Organization during last five financial years (inclusive of current financial year) for only Complete Main Mine Ventilation Fan of 85 m³/Sec. capacity or higher capacity or the order comprising together of all the spares required in this tender for Main Mine Ventilation Fan of 85 m³/Sec. capacity or higher capacity. Any purchase order of lower capacity of main mine ventilation fan or of spares for main mine ventilation fan in piece-meal, will be outright disqualification of the tenderer.

14. **Manufacturers of Main Mine Ventilation Fan quoting against this tender must submit self-attested copy of Factory License/ NSIC Registration Certificate/SSI Registration Certificate**.

15. **BCCL reserves the right to accept or reject any or all of the offers, extend tender opening, modify tender document or cancel the tender without assigning any reason**.

Tender document can be downloaded from BCCL Web site or can be obtained from Purchase Deptt. Lodna Area, BCCL on all working days up to two(02) days prior to due date of opening. Tender document downloaded from BCCL Web site or obtained on request from purchase deptt. must be signed & stamped and to be submitted in Techno-commercial Bid.

Enclosed: Annexure "A"

Copy to:
1. Area Office Notice Board, Lodna Area
2. A.M.(E&M) All Areas of BCCL Area 1 to 9, 12, Block –II Area, P.B.Area, W.J.Area, E.J.Area
3. A.M. (Pur.), All Areas of BCCL Area 1 to 9, 12, Block –II Area, P.B.Area, W.J.Area, E.J.Area
4. A.M.(E&M) Lodna Area, A.F.M Lodna Area & F.M., Lodna Area
5. Cashier, Lodna Area
6. Office copy & Master Copy

Contd.Pg.-3
Technical Specification of spares required for Main Mine Ventilation Fan PV 200 (2000 mm dia. 85^3 m/Sec. air capacity) for Bagdigi Colliery

General Description:

1. Impeller Assembly: - Impeller hub of the rotor assembly should be fitted with eight (08) number of aerofoil section blades cast from high tensile aluminium alloy, with provision for easy adjustment of blade angle. Main shaft should be fitted to the impeller hub through key. Blade angle should be adjustable having six setting positions. Blades should be locked in position by nylock type nuts.

2. Casing: - The fan casing should be fabricated from heavy gauge steel plates and where necessary in sections with bolted joints, for easy operation and installation. The casing should be supported on frame structure of adequate rigidity, which can take the load of the bearing and have provisions for fixing the casing in grouting.

3. Suction Flaring(Inlet Cone): - Suitably designed MS Fabricated collector (inlet cone) in built up sections, should be provided on the inlet side of the fan. This should be a bolted structure to be fitted to the casing.

4. Guide Vanes: - Fixed guide vanes of MS construction should be provided at the outlet end of the impeller for enhanced efficiency of the fan.

5. Forward & Rear flairings(Cowls): - To avoid shock losses front and rear cowls with inspection openings should be provided.

6. Bearings: - Anti-friction spherical roller self aligning heavy duty bearings of suitable sizes should be provided of SKF/FAG/NTN/ TIMKEN make. These should be capable of withstanding axial thrust, radial load of pulley and belt tension.

7. Bearing Housings: - Bearing Housings should be of heavy duty type and should be enclosed in MS housing in streamlined shape.

Component Data:

A. Impeller

<table>
<thead>
<tr>
<th>Diameter (mm)</th>
<th>2000 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Blades</td>
<td>08</td>
</tr>
<tr>
<td>No. of Blade positions</td>
<td>06</td>
</tr>
<tr>
<td>Material of Blade</td>
<td>Al. alloy</td>
</tr>
<tr>
<td>Material of Hub</td>
<td>Mild Steel</td>
</tr>
<tr>
<td>Blade profile</td>
<td>Aerofoil</td>
</tr>
<tr>
<td>Construction</td>
<td>Composite</td>
</tr>
<tr>
<td>Factor of safety of Blades</td>
<td>5</td>
</tr>
</tbody>
</table>

B. Guide Vanes

<table>
<thead>
<tr>
<th>Material</th>
<th>M.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>Fabricated</td>
</tr>
<tr>
<td>Connecting Arrangement</td>
<td>Welded</td>
</tr>
</tbody>
</table>

C. Casing

| Thickness of Plate | 10 mm |
| Material & Construction | MS Fabricated |

Contd. Pg.-4
D. Shaft
   Material & Construction  |  EN-24 Forged / Machined

E. Bearing
   Description & Qty.  |  Self-aligning spherical roller bearing- 02(two) nos.

F. Support Pillars
   Material & Construction  |  M.S. Double Channel

G. Flaring & Bearing cover
   Description  |  MS fabricated split type V-Belt flaring

H. Diffuser
   Material & Construction  |  M.S. Fabricated

I. Painting
   Anti-corrosive & Spray Paint  |  01(one) coat of Anti-corrosive & 02(two) coats of Spray Paint

TEST CERTIFICATES:
Supply of spares will be accompanied with the following Test Certificates:
1. Test Certificate of Radiology from Govt. Approved Test House for Hub, Shaft & Blades.
2. Test Certificate of Dynamic Balancing of Complete Rotor Assembly from Govt. Approved Test House.

Tenderers are to confirm submission of above Test Certificates with supply.

M.M.(P)
Lodna Area