The Singareni Collieries Company Limited

(A Government Company)

Adriyala Project Area -505212

Ref.No:APA/PD/EOI/ALP/2025 **Date:30.07.2025.**

INVITATION FOR "EXPRESSION OF INTEREST (EOI)" FOR PROCUREMENT OF 10000 LPH RO PLANT WITH CAMC FOR 2 YEARS FOR ALP MINE

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1. ABOUT SCCL:

The Singareni Collieries Company (SCCL) is a Government company with equity participation of 51% by Government of Andhra Pradesh and 49% by Government of India. The Company's mining operations in Godavari Valley Coalfield, extended in six districts of Telangana State.

Godavari Valley Coalfield is having a strike length of 350 km and covers an area of 17,000 square km. The coal reserves are of non-coking and bituminous type.

SCCL supplies coal to a diverse customer base ranging from power utilities, cement plants, captive power plants and pharmaceutical companies to small sector units like brick kilns etc. About 80% of its coal production is linked to power plants situated in the states of Telangana, A.P., Maharashtra and Karnataka.

SCCL is a profit making company and is paying dividend to its shareholders for the last 20 years.

Location:

Adriyala Longwall Project Mine(ALP Mine) of M/sSingareniCollieries Company Limited (SCCL) is an underground mine located towards south side of Ramagundam Coal Belt in Adriyala Longwall Project Area. The area falls in Peddapalli district of Telangana State (India) in Godavari Valley Coalfields.The area of the present Adriyala Longwall Project Mine is 14.25Sq.km.ThemineliesbetweenNorthlatitude$18^0$36'50"to$18^0$41' 17" and East longitude of $79^0$33' 54" to $79^0$36' 42". It covered by Survey of India Topo Sheet No. 56N/10. The nearest railway station is Ramagundam on Kazipet – Ballarsha railway line, which is about 24km away from the mine. Peddapalli the district head quarter is about 20km away from the mine.

2. Technical terms and conditions for the above subject:

List of Items:

Item Sl. No	Item Code	Material Description	Qty	Unit	Store/Plant
1	5410120371	RO PLANT 10,000 LPH CAPACITY	2	NOS	RG-II Area Stores
2		COMPREHENSIVE ANNUAL MAINTENANCE	24	Months	ALP Mine

Specifications for Water Treatment Plant (RO Plant) Capacity 10m^3/Hr(10,000 LPH)

	Specification for Water Treatment Plant Capacity 10m^3/Hr.
1	**Sequence of system required**: Feed Pump-MGF (Multi grade filter)-AFC (activated carbon filter)-10µ cartage filter -5µ filter- HP (High pressure pump) –RO skid- Storage tank.
2	**Skid and pipelines of the plant :** Material for complete skid, pipe lines, frame and supports: Stainless Steel, grade SS-304
3	**Raw water Pump set 14m3/hr at 3.5kg/cm2 MOC: SS316 :** **Make-Kirloskar/CRL/Lubi/Equivalent IS make.** It should be capable to feed the incoming raw water to the MCF. Motor winding should Dual coated F-class copper wire, and Pump with operated stronger suction force and Long life span of high quality Mechanical Seal can use to avoid water leaks. Pump can be of 4 HP with single phase. 2 Nos. of pumps with motor to be provided. In which **1 No. running and 1 No. Stand by.**
4	**Multi grade Media filter make Pentair/ Advanced/ORION/Equipment IS Make**: Filter Vessel: Can be of Epoxy vessel/MSRL vessel with flange type arrangement. Media view glass arrangement to be provided in the vessel. Inlet and out let pressure gauge to be provided. Inlet and out let sampling point should be available. All safety appliances should be available. Media: Gravels, River Sand/Quartz sand. It should be of different grade and size. Valves: Standard quality Multiport value to be provided
5	**Activate carbon Filet- Make-Pentair/ Advanced/ ORION/ Equivalent IS Make :** Filter Vessel: Can be of Epoxy vessel/MSRL vessel with flange type arrangement. Media view glass arrangement to be provided in the vessel. Inlet and out let pressure gauge to be provided. Inlet and out let sampling point should be available. End fitting should be in flange type with pressure relief protection. Media: Provide should contain the iodine value >1000. It should be granular in shape. Valves: Standard quality Multiport value to be provided.
6	**Electronic Dosing pump:** **Make-UKL instruments:** 2Nos. Anti scalent pumps with piping, NRV and storage tanks to be provided. 1No. running and 1No. Standby. Suitable anti scalent solution to be provided. Dosing tanks capacity: min 100 ltrs. Material of construction: MSRL/ HEDP/ Epoxy coated.
7	**Cartridge Filter-** **Make: Gopani/Aquion** : 20'' x 4" Micron PP filter (06 pcs) along with housing to be provided Stage 1: 10 µ filter to be provided to remove particles size >10 µ (micron) Stage 2: 5 µ filter to be provided to remove particles size > 5 µ (micron)
8	**High pressure pump 14m3/hr at 250m head with MOC:SS316 :** **Make-CRI/Lubi/Equivalent IS make:**

	2Nos. 15 HP. High pressure along with SS 316 body Vertical multi stage feed pump. In which 1No. Running and 1 No. Stand by.
9	**Raw water parameters:** pH:7.5-8.5, Cond:1000-1500 µS/cm, TDS:1400PPM Turbidity:5-10 NTU. Iron:0.2 to 1.05 ppm

Technical specifications of 10,000 LPH RO plant :

1	**Plant:** Capacity: 10 m3/Hr, Operating hrs/day: Min 20 Hrs operation. Type: Skid mounted plant.
2	**FRP Membrane Housing 300 PSI, 5E longx4 nos.:** Housing to be such that to accompany the RO membrane as required for the system. It should be of high quality
3	**RO Membrane :** **8040, Hydranautics USA/Japan :** The membrane to be provide should have the capacity of treating the water and giving the output quality of (**pH:6.8 to 7.2, Cond:<10 µS/cm, TDS:,6ppm, TH:nil, Iron:nil. Tubidity:<1NTU)** Salt rejection should be : ≥99.65% Feed water pH range continuous operation: 2-11 Feed water pH range chemical cleaning(30min):1-13 Feed water temperature:45-48 ^{O}C
4	**UV System :**10000 LPH
5	**Instruments :** Flow meter, Pressure Gauge (4 Pcs), Rota meters (3pcs), level sensor, high and low pressure switch level sensors
6	**Pressure switch :** High Pressure Switch, Low Pressure Switch. (1pcs each)
7	**Inter connecting pipes :** SS pipe line with Valves for backwashing
8	**CIP System with SS 304 pumps with piping interconnected :** Tank capacity : min 100 L Type: MSRL/HEDP Pumps Nos:1No
9	**Frontal piping SS 304 :** 1 set
10	**Auto / Manual Electrical Panel :**Volt Meter, Ampere Meter, MCB Switch, PCB
11	**Indicators :** Power, Working, Low Pressure, High Pressure, Current, dry run, TW tank.
12	**TDS:** The unit shall be capable of rejection of approximate of 90-95% TDS of raw water.
13	**Back washing pump :** 3HP SS body Pump ,440/550 V
14	**Control systems :** All alarm and shutdown conditions are indicate on the control panel
15	**Measuring instrument :** Offline: 1)Portable Cond./TDS meter 2) Portable pH meter. 3) SDI measuring Kit. Online: 1) Cond./TDS meter at Inlet as well as outlet of RO.
16	**Sampling points :** 1) Feed water. 2)First stage RO Product 3)Second stage Product

Scope of work:

A. Special Conditions:

1. At Present TDS of the mine water is coming around 1400 PPM. However the firm may test the raw water samples and design the RO plant suitably to produce treated water confirming the stipulated limits of different parameters.
2. Details of various items / components with specifications, drawings, specification of pure water expected from the plant should be furnished.
3. Service and Operation manuals should be furnished.
4. Firm should impart training to SCCL employees for a week period in the operation of R.O Plant.
5. The frame and pipelines of RO plants should be of stainless steel grade SS-304.
6. Trial runs are to be made before putting the plant into actual use to ascertain the quality of the water.
7. Trouble free operation and consistent quality output are to be ensured.
8. During the warranty period of one year, the inlet water and clean water are to be tested monthly to ascertain the quality of output at the cost of the contractor.
9. The plant may work at least 21 hours per day.
10. The firm shall supply all the spares, consumables, including dozing chemicals and others if any for a period of 3 years (1 year warranty+2 years CAMC) years. SCCL will provide only power and raw water with free of cost.
11. The firm should comply first three months the inlet water and clean water are to be tested monthly to ascertain the quality of output like clean water and TDS etc at free of cost.
12. The firm has to give the output water as mentioned in the below table for a period of 3 years
13. Quality control test of inlet water and clean water parameters limits given below as per IS 10500:1994 and IS 14543:2004 or latest IS version are to be complied by the firm/supplier.

Sl No.	Parameter	Raw water level	Required Treated water level	As per IS Permissible limits for treated water	Signature of the suppler
01	Total dissolved solids	1400	Less than 100 PPM	100 ppm	
02	Total hardness	600	Less than 20 PPM	20 ppm	
03	PH	8.5	Less than 8.5 PPM	6.5 to 8.5 ppm	
04	Fluoride	2	Less than 0.5 ppm	0.5 ppm	
05	Microbiological	100	Less than 0.5 ppm	0.5 ppm	

C. Firm scope of work:

1. Purified water shall be within the desirable limits of IS 10500:1991 and IS 14543:2004 or latest IS version available to ALP long wall panel and Air chilling plant equipments.
2. The firm should maintain in whole contractor period purified water TDS below 50 PPM.
3. The firm should give performance guaranty for 12 months from the date of commissioning.
4. (if any repair and spares required during this period is in firms scope).
5. After completion of warranty the firm should take comprehensive annual maintenance contract (CAMC) for a period of two years for RO plant.
6. Rectification of all defects and to keep the plant on line within 24 hours of intimation from the user Mine/Department. Otherwise penalized @ 0.5% of the equipment cost per day/per unit and this will be deducted from the bills to be paid.
7. Firm has to carry out once in a month periodical maintenance and unlimited breakdown calls are to be attended during the Contract warranty period.
8. Free replacement of worn out/exhausted parts like membranes, including candles, filters, pumps, motors, chemicals, flow meters and etc under firm scope.

9. The firm should submit satisfactory maintenance / services report per very month to concerned project office / HOD.
10. The plant should have auto start/ stop based on water level in the supply tank.
11. The plant should have microprocessor based control panel for easy operation.
12. The firm should arrange Electrical control panel with MCB for plant protection.
13. The High pressure pump should have low and high pressure switch.
14. The plant should have all branded measuring meters, control values and multi port values.
15. The Plant should run 24hrsx365 days.
16. The firm should arrange LED display based Electrical control panel with MCB for plant protection.

D. COMPREHENSIVE ANNUAL MAINTENANCE SCOPE OF WORK:

1. After completion of warranty the firm should take comprehensive annual maintenance contract (CAMC) for a period of 2 years for RO plant.
2. Rectification of all defects and to keep the plant on line within 24 hours of intimation from the user Mine / Department. Otherwise penalized @ 0.5 % of the equipment cost per day / unit and this will be deducted from the bills to be paid.
3. Firm has to carry out once in a month periodical maintenance and unlimited breakdown call are to be attended during the Contract period.
4. Free replacement of worn out/exhausted parts, membranes, including candles, chemicals, flow meters under firm scope.
5. The firm should submit satisfactory maintenance / service report to concerned project office / HOD.
6. During the CAMC period, the required breakdown spares are to be replaced by the firm.
7. During the CAMC period, the firm has to depute 24 mandatory service visits excluding breakdown visits.
8. The plant should run 24x7.
9. During the monthly CAMC visit, the service engineer has to carry out the following.
    a. Study of plant & mechanical parts inspection.
    b. Opening of membrane housing and physical inspection.
    c. Extended back washing of sand and carbon filter/flushing.
    d. Replacement of micron filter cartridges as and when required.
    e. Cleaning of membrane with chemicals as and when required.
    f. Cleaning and replacing of sand and charcoal, cartridges etc., as and when required.
    g. Supply of required anti-scale agent chemical.
    h. Checking of treated water parameters like TDS, PH values and pure water discharge, within the limits as per order terms and conditions.
    i. The above all parameters values entering in the record and take counter sign by concern super visor/officer and etc.,

3. Scope of work of SCCL:

i. SCCL will provide unskilled manpower during erection and operation of RO Plants, however training to the unskilled manpower for operation is under the scope of contractor.
ii. Electrical power of 3Phase, 440V, 3wire system will be provided to the RO Plants.
iii. After erection of plant SCCL will observe the performance of the plant for one month period, if the plant working satisfactory with all stipulated parameters then only SCCL will give commissioning certificate.
iv. SCCL will supply raw water from filter bed/bore wells, water TDS up to 1400 PPM.

The qualified and interested bidders shall respond and submit their expression of interest in the Format furnished as attachment (ANNEXURE) on or before 09.08.2025 at the following address and may also contact at the following address for further details:

General Manager, Adriyala Project Area
The Singareni Collieries Company Limited,
E-mail id: gm_adriyala@scclmines.com
Website:www.scclmines.com

Office:
Venue: Office of General Manager, Adriyala Projects Area, M/s SCCLtd.
Ramagiri Mandal , Peddapalli District, Telangana State, India
Pin code:505212.
Contact: Sri K. Yadaiah AGM(E&M) (Area Engineer, APA)
Mobile:9491145369

Pre Bid Meeting Points of Discussion:

1. Specifications & Scope of work- Supply of 10000 LPH RO plant with CAMC for 2 years for ALP Mine Adriyala Longwall Project Mine, Adriyala Projects Area, M/s SCCLtd.
2. Place of work- ALP Mine.
3. Delivery Schedule---
    1. To supply the 2 plants within 30days from the date of receipt of order and to Install and commission the 2 plants within 30 days from the date of receipt of equipment at mine site.
    2. The firms shall commence the CAMC immediately after completion of warranty period. CAMC period is 2 years from the date of commencement.

Online:
VC link will be shared on your confirmation of participation.

NOTE:A Vendor meet will be organized with all the interested Firms expressed their interest and the detailed scope will be firmed up accordingly. The exact date and venue will be informed to the firms through their respective mails. Firms are supposed to give a PPT (not more than 10 mins) regarding their experience in the related field, capabilities, credentials and technology details.

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ANNEXURE

FORMAT FORSUBMISSIONOF'EOI'

Date:

Subject: INVITATION FOR "EXPRESSION OF INTEREST (EOI)" FOR ***PROCUREMENT OF 10000 LPH RO PLANT WITH CAMC FOR 2 YEARS FOR ALP MINE*** – Reg.

1)	Name of the Firm	:
2)	Permanent Address	:
3)	Address for correspondence	:
4)	Telephone No.	:
5)	Fax No.	:
6)	E-Mail	:
7)	Official Website	:
8)	Name of the Contact Person	:
9)	Mobile No.of the Contract Person	:
10)	Nature of Business of the Firm	:
11)	Experience in the related field	:
12)	Any other relevant information	:

Signature of Authorized Signatory with Seal