



CAIRN INDIA LIMITED
GLOBAL EXPRESSION OF INTEREST (EOI) UNDER INTERNATIONAL
COMPETITIVE BIDDING (ICB) BASIS FOR SUPPLY
OF
SCHMOO REMOVER CHEMICAL FOR WATER AND OIL FIELD

Cairn India Ltd (“CIL”) is the Operator of the Onshore RJ-ON-90/1 block, on behalf of itself and its Joint Venture (JV) partners Cairn Energy Hydrocarbons Limited (CEHL) and Oil and Natural Gas Corporation Limited (ONGC), located in Barmer district, in the state of Rajasthan, India. The Block contains number of major oil discoveries, including the Mangala, Bhagyam and Aishwariya Fields.

CIL seeks specific Expression of Interest (EOI) for prequalification from suitable parties for supply of oil field schmoos remover chemical for successful dissolution and removal of all oily deposits & debris rich in iron sulfide and bacterial products from the oil and water pipeline/pipings and improve the injectivity and flow assurance, through an International Competitive Bidding Process. To this effect CIL seeks Expressions of Interest (EOI) for Short Term (2-3 years) supply of schmoos remover chemicals. For further details, interested Contractors are requested to visit our website (visit URL: <http://www.cairnindia.com>).

The Companies are requested to submit their credentials as indicated in detailed EOI at <http://www.cairnindia.com>

The Block contains number of major oil discoveries, including the Mangala, Bhagyam and Aishwariya Fields.

Water for sub-surface injection and other use is being extracted from an aquifer called NR1/Thumbli aquifer wells. Oil is being produced from various producer wells. Along with oil produced water used to come and get separated in different process stream on route. Water contains micro-bacterias (especially SRB) to a significant extent. Due to the micro-bacterial effect oil and water line depending upon the severity gets deposited by oily deposits (rich in iron sulfides, bacterial products etc) and cause reduction and flow assurance and other related process problems (viz. reduction in water heat exchanger efficiency, undue load on water filters etc..)

CIL intends to award a contract for the supply of suitable schmoos remover chemical with proper technical supports thro' an International Competitive Bidding Process.

To this effect CIL seeks Expressions of Interest (EOI) for supply of schmoos remover chemical as per the below Technical Specification as minimum :-

1. Technical Purchase Specification of SCHMOO REMOVER Oil field Chemical Product

“Schmoos” is a collective name of oil field organics deposits (viz. hydrocarbon, paraffin, asphaltene, iron sulfides or biomass). Schmoos material builds up usually in produced water, injection water systems and reduces operating performances viz. reduction of injectivity, pore plugging, flow restrictions etc.. The “Schmoos Remover” chemical is supposed to dissolve and remove all these schmoos stuffs and must generate a cleaner water system.

The following should be the minimum technical performance spec. of “Schmoos Remover” chemical:

- It shall have minimum 90% schmoos removal efficiency in least possible time.
- It shall be compatible with all non-metallic items in the system viz. pipe liner, coating etc..
- It shall be non-oxidizing type
- It should be water soluble.
- It shall be able to provide performance under shear conditions (say shear stresses 500 Pascal) with at least 90% protection at a vendor recommended dosage.
- It should be chemically compatible with other standard oil field chemicals like corrosion inhibitor, scale inhibitor, biocides, oxygen scavengers etc..
- The performance of schmoos remover chemical must reflect in “injectivity improvement and “better flow assurance”.
- If applied on injection water walnut shell filters it must be able to clean out the filter media and reduce the next cycles of back-wash frequency and extend the filter operating time without major issues in differential pressures.
- Having some biocidal properties to kill planktonic and sessile colonies of SRB will be an added advantage with this chemical.
- Product shall be non-corrosive to iron and steel and it shall not lower the pH of raw water
- It shall be down-hole /squeeze injectable and should be able to clean and remove hydrocarbon-rich-schmoos from the rock/sand faces by reducing the hydrocarbon droplets to less than 0.1 microns and should increase injectivity by rock pore cleaning .
- It can be used along with pipeline pigging operations.
- Vendor has to propose the minimum maintenance dose requirement per batch with minimum durations to meet the performance standards.
- Vendors must have road safety logistics policy for transportation of schmoos remover containers with well-trained driver and safe vehicles.
- It is supposed to remove schmoos, prevent corrosion, improve injectivity and extend injection water filter life / down-time.

- It shall be a green chemical and safe to use / handle.

2. **Supply Timelines:**

The vendor has to keep an uninterrupted supply chain of schmoos remover. Vendor should be able to supply within 30 days of receipt of order delivered at site.

3. **Performance Specifications:**

Application of Schmoos Remover performance must reflect in continuous improvement in injectivity and flow assurance in terms of reduction of pipeline/piping differential pressure (DP) for extended period of time and better heat transfer performance in heat exchangers and reduction in water filter backwash cycles/ DP if applied on filters.

The Companies are requested, as a minimum, to submit the following documents and details which will serve as techno-commercial pre-bid qualification criteria:

1. Letter of interest with detailed company information as follows:
 - a. State the name of the parent Company
 - b. State the name/address/phone/e-mail of the company that would execute the Contract
 - c. If a Joint Venture to be proposed, state the name/address/phone/e-mail of all Joint Venture partners
 - d. Organization structure
 - e. Size of Departments
 - f. Procurement system & procedure
 - g. Material Control System
 - h. Supply Chain Management System & procedures
2. Company's financial performance documents (including JV partner's financials, if proposed) i.e, Audited Balance Sheets, Profit and Loss Account & Cash Flow Statement for the last 3 years & following details separately;
 - a. Company Turnover based on last 3 audited/Financial statement
 - b. Company's Net Worth based on last 3 audited/Financial statement
 - c. Working Capital based on last 3 audited/Financial statement
 - d. State the banker's name, address and Solvency certificate from the bank indicating the credibility limit in financial terms
3. Experience

- a. Lists of similar projects successfully executed with detail facility in the last five years in India or abroad with completion certificate and those of currency under execution.
 - b. No of years in similar business
 - c. Detail of orders (minimum 3) executed for more than USD 2 Million recently
 - d. Details of current commitments
4. HSE Systems:
- a. For all projects executed in last 5 years
 - b. HSE Manual/Policy
 - c. Project specific HSE Plan for similar project
5. Quality Systems:
- a. Copy of current ISO Certificate provided
 - b. Certification of the companies QA system by an accredited certification body
 - c. QMS of the Company

The envelope should be subscribed with “Reference No. **CIL/PSCM/EOI/SCHMOO REMOVER - 1000032257**”. All information and documentation shall be provided at address below within 14 working days of publication of this EOI by e-mail as attached PDF file and via courier to:

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