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Scope of Work – Contract for hiring classified workers for handling radiation sources SRTA 2016

1. INTRODUCTION

1.1 M/s. Orpic, Oman Oil Refineries and Petroleum Industries Company (Sohar Refinery, Aromatic plant and Polypropylene plant) here after called as 'Company' are intends to engage Contractor for removal and re-fixing of fixed radiation sources (SR-2 Instruments and PP- 11 instruments having 17 sources)inside the Sohar refinery and poly propylene plants during T/A 2016.

1.2 This Scope of Work provides a summary of the technical scope, requirements for radiation sources to be handled by the competent agency here after called as 'contractor'.

2. GENERAL INFORMATION

2.1 The Contractor shall fully comply with all Omani laws and regulations and shall be responsible for any and all penalties, fines, claims or losses arising from Contractor's obligations with respect to all such laws and regulations.

2.2 This work shall be done by suitably qualified and well experienced technicians with minimum ASNT level II qualifications in Radiography in accordance with ASNT SNNT –TC –1AA, ANSI/ASNT CP 1899 or ACCP and MEECA guidelines MD (2499/97) amended by MD(281/2003), dated December 31, 2003 .

2.3 Suitably qualified Radiographers designated as Classified workers as per MECCA guidelines MD (249/997) amended by MMD (281/2003) dated December 31, 2003 can do this job.

2.4 Classified workers should be of good and sound physical health and to be able to handle the radiation sources during the T&I period.

2.5 Contact persons for the project shall be Manager- Instrument services or his assigned designate.

2.6 The Contractor shall be deemed to have obtained all information that is required to provide services covered by this scope of work and agreement. No claims whatsoever for the cost of alterations or amendments to the services arising from the failure by the contractor to comply with this requirement shall be entertained by the company.

2.7 The Contractor shall arrange for food, accommodation, transportation, personnel protection equipment, Visa, medical, insurance etc for their staff.

2.8 The access to SIPC area is controlled by ROP and hence contractor shall take in to account time required to complete all security and safety formalities to reach place of work in time.

2.9 All personnel entering SIPC area shall have work visa and valid resident card / labor card. Visit and business visa holders and taxis are not permitted inside SIPC area.

2.10 Gate passes will be issued by Owner's security office only after completing the safety induction course. Normally one to two days are required to complete all formalities before work can be started.

2.11 The contractor is responsible for following good environment, health and safety (EHS) standards at site and all the activities conducted by his manpower shall confirm to Owner's HSE rules and regulations in addition to applicable government rules and regulations.

3. BACK GROUND AND SCOPE OF WORK

3.1 **Background:** Oman Oil Refineries and Petroleum Industries Company have installed fixed type of Nucleonic Sources for level measurements purposes inside the Sohar refinery and poly propylene plants (Refer to Table-1 &2 for details). We are going to have scheduled plant shutdown from last week of February, 2016 to second week of April, 2016, however exact dates will be confirmed one week prior to the T&I. As a personnel safety measure, the fixed radiation sources will have to be physically removed from their respective location and transported to Radiation pit to be stored during the T&I period. There after the sources have to be brought back to the site and re-installed, before the start of the plant.

3.2 **Scope of work**: The work shall be done with full allowance being made for all minor and incidental items necessary even though not specifically detailed below. The contractor shall provide technically qualified and experienced persons henceforth called "Classified workers ", who can undertake the following jobs:

- After the shutdown of the plant expected in last week of February, 2016, cordon off the areas in the Sohar refinery and Poly propylene plants with caution tapes and radiation sign boards, as per MECAA guidelines.
- Close the sources using levers at site and unbolt the radiation sources from their respective locations. Bring down to ground with the help of crane (the crane will be provided by Orpic)
- Carry out Radiation survey near the sources.
- Load all the sources in the contractor's designated vehicle and transport to the Orpic radiation safety pit located near the Sohar Aromatics plant. If the space in Orpic pit room is not sufficient, contractor to arrange for shifting of the sources to contractor's own pit room in Sohar.**(Please note that the Contractor shall have Approved vehicle for transportation of radiation sources and radiation safety pit in Sohar)**
- Unload the sources safely in the radiation safety pit, carry out the radiation survey.

- Again before start of the plant, expected in second week of April, 2016, bring these sources back to the plant site from the Radiation pit, in the designated vehicle.
- Take them up one by one with Orpic provided crane and re-fix/re-bolt at their respective locations.
- Open the sources with the help of levers and carry out radiation survey for each source.
- Miscellaneous job shall be rendered by the Contractor such as removal of bended shutter assembly of radiation source for 21-LT-012, and hand it over to Instrument team for repair. Safety handling of radiation source should be taken care while the shutter is not in place during the repair (i.e. covering the radiation source by lead blanket). This exercise should be done when the radiation source is already lying in the pit room.
- The tentative date for mobilization will be notified one month in advance but the actual date of mobilization will be notified one week in advance.
- The contract shall be valid for a period of one year starting from 1st Jan 2016 to cover Turnaround duration of 45 days.

Refer to Table-1 for details of Radiation sources in Sohar Refinery and Table-2 for Poly Propylene plant

4. DOCUMENTATION

4.1 Contractor to provide the following documents along with the bid.

Company organization Structure.
Copy of permits from MECAA (MRME) issued for their Radiography purposes.
CV's with qualification/ experience of the Classified workers
Name of the key contract person with full address and contact details.
Statement of compliance to the safety, security and health (HSE) requirements of Orpic.
Emergency Response Plan
Similar or Radiography work done in the last three years with the list of references, if any
Mobilization period required
Availability and List of Emergency tools kit generally used in radiography work
Statement of compliance to the tender document requirements
Bid Validity period

4.2 Contractor shall show proof that a written practice exists to qualify the personnel and it is endorsed by an ASSNT level III person.

4.3 Contractor shall keep one file following documents of their competency of personnel / radiographers who generally performs radiography work for the contractor and designated as classified workers. ORPIC reserves the right to see these records any time or ask for a copy.

- Permit from MECA for use and transportation of nuclear sources. Copy will be supplied to Orpic.
- Training record in accordance to ASNNT –TC-1A, latest edition.
- Examination Paper conforming too ASNT–TCC–1A.
- NDT level-- II certificates in the Radiography work.
- List of tools required in case of emergency including emergency procedures.
- Medical Records for the classified workers.
- HSE, Emergency Procedures and records.
- HSE and accidents records.
- Dose records of the classified workers (Radiographer), any excesses and actions taken.

5. REPORTING

5.1 During the period of contract, the classified workers will be associated with Instrument Services Department and will report to the concerned Instrument Engineer / Radiological Control Officer of the Orpic.

5.2 Before the start of the job, the classified workers will be made aware of the job content and safety and other requirements.

5.3 The working hours are from 7 AM to 4 PM including one hour lunch break.

5.4 The anticipated work duration is one day for removal and one day for re-fixing of the sources, at site.

5.5 One of the senior classified workers will also supervise and coordinate the job.

5.6 The whole exercise will be supervised by ORPIC Classified workers and Radiological Control Officer (RCO)

6. SITE VISIT

6.1 Site visit, if required, can be arranged to show to contractors the actual conditions of work and to familiarize him with the job content. The contractor shall attend site visit with all safety gears -helmet, safety glass, safety shoes and long sleeve shirt or Jacket. This request has to be sent through Orpic Procurement department.

7. PAYMENT

Orpic will make payment within 30 days upon receipt of approved invoice after completion of work both times.

8. PRICING SCHEDULE

S. No.	Description	Lump sum cost (in OMR)	Remarks
1.	Lump sum hiring charges for classified workers two times (once during removal and once during re-fixing) inclusive of all charges including mobilization and de-mobilization, removal, transportation from plant to pit room, storage in the pit room, transportation from pit room to plant and re-fixing of radiation sources (SR-2 Instruments and PP- 11 instruments having 17 sources). This will be total lump sum cost of the project. **(Contractor need to specify the number of personal will be supplied to complete the project)**		

9. EVALUATION CRITERIA

Evaluation of the bidders will be according to the following criteria:

Category	Description	Score	Score	Mandatory Criterion
A-1a	Conformance to Scope of Work	**20%**		
A-1b	Emergency response plan	**10%**		
A-2a	Past performance of the contractor in the Similar or Radiography work done with their respective clients. (Give references)	**10%**		**Yes**
A-2b	Qualification/ experience of the Classified workers to be actually involved in this project specifically related to such contracts and in the field of handling radiation sources	**10%**		**Yes**
A-3	Interview results-Personnel or telephonic	**40%**		**Yes**
A-4	Mobilization	**10%**		

Table-1 Consolidated list of Radiation sources in Sohar Refinery

Tag No	Type and Location	Source			Model
		Material	Strength	Serial Number	
21-LT-012	C-2101 RFCC Main column Level	Cs-137	370 GBq	3058 CG	SHLG-3 Sensor type strip detector
21-LSH-006	C-2101 RFCC Main column Bottom liquid level measurement	Cs-137	74 GBq	7771 CM	SHLG-2 Sensor type point detector

Table-2 Consolidated list of Radiation sources in Poly propylene Plant

Tag No	Type and Location	Source			Model
		Material	Strength	Serial Number	
LS-122A01	Powder discharge vessel 1V-2201	Cs-137	6.0 mCi	1425-07-05	Point source
LS-222A01	Powder discharge vessel 2V-2201	Cs-137	6.0 mCi	1426-07-05	Point source
LT-122A02	Powder discharge vessel 1V-2201	Cs-137	15mCi + 1.5mCi	1427-07-05 + 1429-07-05	Point source
LT-222A02	Powder discharge vessel 2V-2201	Cs-137	15mCi + 1.5mCi	1428-07-05 + 1430-07-05	Point source
LS-220B01	Polymerization reactor 2R-2001	Cs-137	80 mCi	1431-07-05	Point source
LS-120B01	Polymerization reactor 1R-2201	Cs-137	80 mCi	1435-07-05	Point source
LT-220B02	Polymerization reactor 2R-2001	Cs-137	500 mCi	1432-07-05	Point source
LT-120B02	Polymerization reactor 1R-2001	Cs-137	500 mCi	1436-07-05	Point source
LT-224A01	Desorber 2V-2401	Cs-137	6.0 mCi	1437-07-05	Point source
LT-122B01	Powder purge 1V-2202	Cobalt 60	4.16 mCi (3 Parts)	143-07-05 /1,2,3	Rod source
LT-222B01	Powder purge 2V-2201	Cobalt 60	4.16 mCi (3 Parts)	144-07-05 /1,2,3	Rod source