

EXPRESSION OF INTEREST (EOI)

Project	Burrup Urea Project
Company / Client	Perdaman Chemicals and Fertilisers Pty Ltd
Requisition Number	45826-M-70015
Package Title	15 x Field Fabricated Tanks (Welded & Bolted)
1. SUBMISSION PROCEDURE	
EOI Instructions	<p>Supplier(s) are invited to express interest by registering on ICN Gateway where competency and previous positive experiences of similar supply of goods / services can be demonstrated.</p> <p>When submitting interest registrants will be asked to complete an expression of interest document. The registrant's response will form their Expression of Interest (EOI) for material and/or services.</p> <p>Suppliers will only be considered for Prequalification should they satisfy stated criteria, including but not limited to Health, Safety & Environmental Management, Quality management, financial standing, relevant experience and availability (if required).</p>
EOI Closing Date	Please submit by close of business on 7 th September 2023
Returnable Schedules	Where the EOI calls for any Returnable Schedules, please ensure all schedules are submitted.
Contact	<p>All initial enquiries should be made through the Industry Capability Network Western Australia (ICNWA).</p> <p>Andie Pfaff Andie.Pfaff@icnwa.org.au +61 (08) 9365 7442</p>
URL	<p>For more information regarding the Perdaman, refer</p> <ul style="list-style-type: none"> • https://www.perdamanindustries.com.au/scjv/
2. INDICATIVE SCOPE OF WORK	
Package Description	<p>Overview</p> <p>Saipem Australia Pty Ltd and Clough Projects Australia Pty Ltd Joint Venture (herein referred to as the "CONTRACTOR") has reached an agreement with Perdaman Chemicals and Fertilisers Pty Ltd (herein referred to as the "OWNER") for the Engineering, Procurement, Construction and Commissioning of the BURRUP UREA PROJECT.</p> <p>Perdaman Chemicals and Fertilisers Pty Ltd (OWNER) is focused on the development of the Perdaman Project which shall be the world's largest gas stream ammonia-urea plant with a production capacity of 2.14 MMTPA granular urea. The plant is located within the Burrup Strategic Industrial Area, Burrup Peninsula, approximately 10 km from Dampier and 20 km north-west of Karratha on the Northwest coastline of Western Australia.</p>

General Scope of Supply / Services

The SUBCONTRACTOR shall quote for the complete supply of the equipment/materials as listed below, including the furnishing of all labour, supervision, materials, equipment, tools, supplies and services required to design, manufacture, paint, assemble, inspect, test, store prior to shipping (if required), pack/protect for shipment, and deliver the equipment/materials to the contractual delivery point. The installation and pre commissioning of the equipment/materials listed below, in addition to the resolution of issues/punch list items is to be completed by the Tank SUBCONTRACTOR.

The TANK SUBCONTRACTOR shall be completely responsible for all the design and reliability of the scope of supply as whole. SUBCONTRACTOR shall guarantee and demonstrate that the goods meet the design requirements contained in this equipment specification. Prototypes are not allowed, only a proven design is acceptable.

The tanks shall be erected on concrete (slab / ring) foundation as applicable at project site. The concrete (slab or ring) foundation design and construction at site will be done by CONTRACTOR. However, input (loading) data information for Tank foundation design shall be provided by tank SUBCONTRACTOR to CONTRACTOR.

TANK SUBCONTRACTOR shall carry out the scope of EPC scope of the Field Fabricated Tanks at the project below;

- Tank EPC works include detail engineering, procurement, construction of tanks up to pre-commissioning works.

POS.	Item Tag	Services	Qty
1	1200-T-601	Off-Spec Condensate Tank	1
2	1300-T-301	Solution Storage Tank	1
3	2610-T-101	Urea Solution Tank	1
4	2620-T-201	UF85 - Storage Tanks	1
5	2630-T-125	Process Off Spec Common Cond. Tank	1
6	2710-T-101	Urea Solution Tank	1
7	2720-T-201	UF85 - Storage Tanks	1
8	2730-T-210	Ammonium Sulphate Storage Tank	1
9	3750-T-101	Process Condensate tank	1
10	3750-T-102	Steam Condensate tank	1

POS.	Item Tag	Services	Qty
1	3720-T-001	Potable Water Tank	1
2	3730-T-001	Demineralized Water Tank	1

3	3740-T-001	Plant Water Tank	1
4	3930-T-001A	Fire Water Tank	1
5	3930-T-001B	Fire Water Tank	1

SUBCONTRACTOR activities include, but may not be limited to:

- Detailed Engineering, Procurement and Construction of tanks including the associated piping works.
- SUBCONTRACTOR will procure all the items required for the construction of tanks will be detailed in the RFQ.
- Other associated Piping, Structural, Painting and Insulation works within the Tank battery limit. Tank construction scope will be up to nozzle flanges.
- Subsequent piping works from Tank nozzle shall be by others.
- Setup of Prefabrication shop near to the site location as necessary to complete the scope of works.
- Pre-fabrication and installation of tank parts such as shell plates, suspended decks, supports, stair ways, all access platforms as required, bottom and annular plates, anchor chairs, piping and other parts as per drawings and project specifications as applicable.
- Pre-fabrication and installation of all structural works including but not limited to stair ways/stair tower, access platforms, walkways as per drawings and project specifications.
- Execution of all material handling activities of Tank material including Piping, Structural, Painting and Insulation works.
- Proper raw material storage and preservation
- Collection and loading of material and other items if any with suitable cranes and other equipment by SUBCONTRACTOR from Contractor warehouse / Storage Area.
- Transportation and storing of materials in fabrication areas.
- Any other intermediate handling activities including loading and unloading at various locations as applicable including the area of sandblasting and painting.
- Any intermediate handling activities of fabricated items inside the fabrication and installation areas
- Delivery of fabricated structures/ items from SUBCONTRACTOR's workshop location (including loading, transportation and using of cranes and other equipment are at SUBCONTRACTOR's charge) to the respective erection locations of Ammonia Plant.
- Handling, cutting, bevelling, fit-up and welding of structures, piping and other items as applicable.
- Tracing, bevelling, cutting, fit-up, welding for every type of derivation (including splicing/ reinforcing pads if required as applicable)
- Galvanizing of fabricated structures/ items as required in accordance with client's specifications.
- NDT and stress relieving works of fabricated items and tank joints as per project specifications.
- Hydrotesting of Tank, piping, and other items as applicable.
- Hydrotesting of Valves if applicable as per client requirement

- Pneumatic Test of piping/other parts of tanks as applicable.
- Vacuum Box test as applicable for the tank
- Installation of Scaffolding works as necessary to complete the tank construction works including preparation of scaffolding drawings, design calculation and material.
- Installation of all kinds of valves as required in the scope of works.
- Proper tagging of fabricated structures
- Cleaning & preservation
- Ensuring the fabricated structural members are in accordance with the drawings and specifications.
- Material Traceability including cut-offs and scraps.
- End protection and preservation of piping and other items.
- Ensuring the free issue and all other materials is in accordance with the project drawings/ documents and specification.
- QC inspection including Dimensional checking of all constructed items.
- Wrapping for buried piping as necessary.
- Prefabrication/installation of buried piping if applicable with jointing, wrapping and testing and making good of external surface protection with polyethylene tapes and testing.
- Erection of all steel structures and Pipe supports including racks if any.
- Assembly/erection of piping supports consisting of prefabricated basic parts.
- Assembly/erection of supports such as special supports, spring supports, load cell, Teflon pads, etc.
- Dismantling and rerouting of pipe works, and pipe supports if required based on site condition to complete the scope of works.
- Dismantling and rerouting of underground pipe works if required based on site condition to complete the scope of works.
- Arrangements for barricading etc. as necessary to meet construction HSE requirements.
- Reinstatement activities after testing and/or pre-commissioning activities of all items described in the relevant drawing such as but not limited to permanent gasket, bolt, flanges, orifice plate, etc.
- Construction shall be carried out as per various documents with the RFQ Package, national/international codes, and standards.
- SUBCONTRACTOR shall take precautionary measures to protect construction work and material if any issued to them against damage due to construction activities, pilferage, and theft etc.
- Housekeeping of work location at site: Prior to, during & after completion of construction activities, SUBCONTRACTOR shall clear the site of all left out construction materials, construction equipment, debris etc. All serviceable material shall be deposited in the OWNER's store & unserviceable material to be taken outside the premises and shall be disposed of at the designated location approved by Owner/PMC/Statutory authorities.
- SUBCONTRACTOR shall consider all necessary safety barricading for the safe execution of work. The height of the barricade shall be defined by the site HSE directives.
- Some part of the work may have to be executed within existing plant and in the plant running condition or during shut down period as required.

	<p>SUBCONTRACTOR shall adhere to all necessary permits & safety measures for working personnel, material etc.</p> <ul style="list-style-type: none"> • SUBCONTRACTOR shall ensure the safety of nearby structures / existing facilities while carrying out their site construction activities.
Standards	Compliance with National, International and Industry Standards, Australian and WA Regulatory requirements.
Key Dates	Tender is planned to be issued around the 18th of September 2023
Point of Delivery	Project Site Burrup Strategic Industrial Area (Western Australia)
3. RETURNABLE DOCUMENTS	
List of Returnable Schedules	<p>Capability Statement and confirmation of ability to provide a high-level service for the type of Service being requested in the above Scope of Work as required by the Project.</p> <p>Brief overview of any Local Partnerships and Facilities.</p>
4. DISCLAIMER	
<p>This Expression of Interest to gain an insight into the capabilities of potential service providers and not a Tender Invitation or offer - the schedule and content of this work is subject to change pending project demand and timelines.</p>	

**Field Fabricated Tanks
DETAILS BOLTED -
Perdaman**

SI No	PO SIZ.	ITEM LIST REVISION	REF. TECHN. DPT	Remarks	PROJECT UNIT/WBS							MATERIAL DESCRIPTION & IDENTIFICATION			BID TAG	EPC ITEM DESCRIPTION	EPC MAIN PACKAGE TAG	TYPE	ID. Diam./Height (mm)	Skid / Overall Dimensions (m x m x m) (L X W X H)	SHELL for STATIC - CASING for ROTATING	Normal Capacity (for gases Nm3/h / for liquids m3/h) - Volume (m3)	Insulation	NR.ITEM REQUESTED	INPUT UNIT WEIGHT	TOTAL WEIGHT	BILL ITEM CODE	ENGINEERING BY	Current Fabrication location	BOLTED (YES / NO)
					01	02	03	04	05	06	07	MAT. ESTIMATE CLASSIFICATION	ESTIMATE CLASSIFICATION CODE	ESTIMATE MAIN CLASSIFICATION DESCRIPTION											kg	kg				
					MAIN PLANT ORDER NR	MAIN PLANT NAME	UNIT	UNIT DESCRIPTION	SUB UNIT NR.	SUB UNIT NAME	UNIT LINE / TRAIN																			
1	1467	STICK BUILT H1	MEC-CLOUGH-APRES		3000	UTILITY	3700	WATER TREATMENT PACKAGE	3730	DEMINERALISATION		EQUIP.		TANKS	3730-TK-0001	Demineralized Water Tank	3730-T-001		28600		CS + Internal lining		1	119,000	119,000	MD 01 01 04	CLOUGH	FIELD	YES	
2	1468	STICK BUILT G3	MEC-CLOUGH-APRES		3000	UTILITY	3900	OTHER UTILITIES	3930	FIRE WATER		EQUIP.		TANKS	3930-TK-0001A/B	Fire Water Tanks	3930-T-001A/B		20310		CS + Internal lining		2	37,000	74,000	MD 01 01 03	CLOUGH	FIELD	YES	
3	1472	STICK BUILT H1	MEC-CLOUGH-APRES		3000	UTILITY	3700	WATER TREATMENT PACKAGE	3720	POTABLE WATER		EQUIP.		TANKS	3720-TK-0001	Potable Water Tank	3720-T-001		8310		CS + Internal lining		1	7,500	7,500	ME 02 01 01	CLOUGH	FIELD	YES	
4	1473	STICK BUILT H1	MEC-CLOUGH-APRES		3000	UTILITY	3700	WATER TREATMENT PACKAGE	3740	PROCESS WATER		EQUIP.		TANKS	3740-TK-0001	Plant Water Tank	3740-T-001		10150		CS + Internal lining		1	12,000	12,000	ME 02 01 01	CLOUGH	FIELD	YES	

**Field Fabricated Tanks
DETAILS WELDED -
Perdaman**

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S I N O	P O S I Z	I T E M L I S T R E V I S I O N	R E F. T E C H N. D P T	R e m a r k s	P R O J E C T U N I T / W B S							M A T E R I A L D E S C R I P T I O N & I D E N T I F I C A T I O N			B I D T A G	E P C I T E M D E S C R I P T I O N	E P C M A I N P A C K A G E T A G	T Y P E	I D. D i a m./ H e i g h t (m m)	S k i d / O v e r a l l D i m e n s i o n s (m x m x m) (L X W X H)	S H E L L f o r S T A T I C - C A S I N G f o r R O T A T I N G	N o r m a l C a p a c i t y (f o r g a s e s N m 3 / h / f o r l i q u i d s m 3 / h) - V o l u m e (m 3)	I n s u l a t i o n	N R. I T E M R E Q U E S T E D	I N P U T U N I T W E I G H T	T O T A L W E I G H T	B I L L I T E M C O D E	E N G I N E E R I N G B Y	C u r r e n t F a b r i c a t i o n l o c a t i o n	B O L T E D (Y E S / N O)
					01	02	03	04	05	06	07	M A T. E S T I M A T E C L A S S I F I C A T I O N	E S T I M A T E C L A S S I F. C O D E	E S T I M A T E M A I N C L A S S I F I C A T I O N D E S C R I P T I O N																
					M A I N P L A N T O R D E R N R	M A I N P L A N T N A M E	U N I T	U N I T D E S C R I P T I O N	S U B U N I T N R.	S U B U N I T N A M E	U N I T L I N E / T R A I N																			
1	124	STICK BUILT C1	MEC - CLOUGH - APR ES		2000	PRODUCT	2600	UREA SYNTHESIS	2,610	TRAIN 1-UREA	T-1	EQUIP.	TANKS	T-101	UREA SOLUTION TANK	2610-T-101	Vertical Cone Roof	ID=1500mm Height = 7000mm	Safco Equivalent Tank is 52-T-401 with dimensions 17m ID x 8m Shell Height (Different from dimensions of T-101). Mechanical Details provided (incl. Weight are for 52-T-401): 17.3 m Overall Dia x 9.75 m Overall Height	AISI-304L	WORKING CAPACITY: 1045 M3	HOT	1	82,300	82,300	MD01010103	SAIPEM	FIELD	NO	

2	149	STICK BUILD T C1	MEC - CLOUGH - APR ES	2000	PRODUCT	2600	UREA SYNTHESIS	2,610	TRAIN 1-UREA	T-1	EQUIP.	TANKS	T-125	PROCESS OFF SPEC COMMON CONDENSATE TANK	2630-T-125	Vertical Cone Roof	ID=1100mm Height = 9100m	11.25 m Overall Dia x 11.3 m Overall Height	AISI 304L	WORKING CAPACITY: 742 M3	N	1	31,800	31,800	ME 02 02 01 02	SAIPEM	FIELD	NO
3	284	STICK BUILD D1	MEC - CLOUGH - APR ES	2000	PRODUCT	2700	UREA SYNTHESIS	2710	TRAIN 2-UREA	T-2	EQUIP.	TANKS	T-101	UREA SOLUTION TANK	2710-T-101	Vertical Cone Roof	ID=1500mm Height = 7000m	Safco Equivalent Tank is 52-T-401 with dimensions 17m ID x 8 m Shell Height (Different from dimensions of T-101). Mechanical Details provided (incl. Weight are for 52-T-401): 17.3 m Overall Dia x 9.75 m Overall Height	AISI-304L	WORKING CAPACITY: 1045 M3	HOT	1	82,300	82,300	MD 01 01 01 03	SAIPEM	FIELD	NO
4	418	STICK BUILD T C1	MEC - CLOUGH - APR ES	2000	PRODUCT	2600	UREA GRANULATION	2,620	TRAIN 1-GRAN	T-1	EQUIP.	TANKS	T-201	UF85 STORAGE TANK	2620-T-201	Atmospheric/ CONE Roof	ID=7100m Height = 6900m		AISI 304L	Operating Capacity =218 M3' Geometric Capacity =273 M3	SUN ROOF PROTECTION	1	16,000	16,000	MD 01 01 01 01	SAIPEM	FIELD	NO
5	424	STICK BUILD D1	MEC - CLOUGH - APR ES	2000	PRODUCT	2700	UREA GRANULATION	2720	TRAIN 2-GRAN	T-2	EQUIP.	TANKS	T-226	Ammonium sulphate storage tank	2730-T-210	Atmospheric/ Flat Roof	ID: 15000 mm		AISI 316L	Operating Capacity =1037m3 Geometrical Capacity =1307 m3	HOT	1	50,000	50,000	MD 01 01 01 03	SAIPEM	FIELD	NO
6	535	STICK BUILD D1	MEC - CLOUGH - APR ES	2000	PRODUCT	2700	UREA GRANULATION	2720	TRAIN 2-GRAN	T-2	EQUIP.	TANKS	T-201	UF85 STORAGE TANK	2720-T-201	Atmospheric/ CONE Roof	ID=7100m Height = 6900m		AISI 304L	Operating Capacity =218 M3' Geometric Capacity =273 M3	SUN ROOF PROTECTION	1	16,000	16,000	MD 01 01 01 01	SAIPEM	FIELD	NO
7	695	STICK	MEC -	1000	SYNGAS	1300	CO2 REMOVAL				EQUIP.	TANKS	T-	Solution	1300-T-301	VE= Vertical	13700		CS	-	HOT	1	65000	65,000	MD 01 01 01	SAIPEM	FIELD	NO

SCJV

		BUILT A3	CLOUGH - APR ES				SECTION						301	Storage Tank									0103					
8	699	STICK BUILT G4	MEC - CLOUGH - APR ES		1000	SYNGAS	1200	CO SHIFT					T-601	Off-spec Condensate Tank	1200-T-601	VE= Vertical	ID=914mm H=11000mm	720 (tank volume, m3)	SS304L			1	60000	60,000	MD01010103	SAIPEM	FIELD	NO
9	947	STICK BUILT G4	MEC - APR ES-COC		3000	UTILITY	3700	WATER TREATMENT PACKAGE	3,750	PROCESS CONDENSATE			T-101	PROCESS CONDENSATE TANK	3750-T-101	VE= Vertical	9800		CS			1	45000	45,000	ME02010102	CLOUGH	MOVED TO FIELD	NO
10	1535	STICK BUILT G4	MEC - CLOUGH - APR ES		3000	UTILITY	3700	OTHER UTILITIES	3750	STEAM SYSTEMS			3750-T-102	Steam Condensate Tank	3750-T-102		13000					1	77,000	-	ME02010102	CLOUGH	MOVED TO FIELD	NO