

## EXPRESSION OF INTEREST (EOI)

<b>Project</b>	CERES
<b>Company / Client</b>	Perdaman Chemicals and Fertilisers Pty Ltd
<b>Package Material Requisition Number</b>	0000-PA-E-89005
<b>Package Title</b>	Bulk Flow Cooler System
<b>1. SUBMISSION PROCEDURE</b>	
<b>EOI Instructions</b>	<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 &amp; Environmental Management, Quality management, financial standing, relevant experience and availability.</p>
<b>EOI Closing Date</b>	Please submit by close of business on 14/08/2023
<b>Returnable Schedules</b>	Where the EOI calls for any Returnable Schedules, please ensure all schedules are submitted.
<b>Contact</b>	<p>All initial enquiries should be made through the Industry Capability Network Western Australia (ICNWA).</p> <p>Andie Pfaff  <a href="mailto:Andie.Pfaff@icnwa.org.au">Andie.Pfaff@icnwa.org.au</a>  +61 (08) 9365 7442</p>
<b>URL</b>	<p>For more information regarding the Perdaman, refer</p> <ul style="list-style-type: none"> <li><a href="https://www.perdamanindustries.com.au/scjv/">https://www.perdamanindustries.com.au/scjv/</a></li> </ul>
<b>2. INDICATIVE SCOPE OF WORK</b>	
<b>Package Description</b>	<p><b>Overview</b></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 PROJECT CERES located in Burrup Strategic Industrial Area, Burrup Peninsula, Western Australia.</p> <p>Perdaman Chemicals and Fertilisers Pty Ltd (OWNER) is focused on the development of Perdaman - Project CERES which shall be the world's largest gas stream ammonia-urea plant with a production capacity of 2.14 MMTPA granular urea.</p> <p><b>General Scope of Supply / Services</b></p> <p>Design, Materials, Fabrication, Testing, Inspection, Painting, Packing, Marking and Supply of <b>BULK FLOW COOLER SYSTEM</b> listed in ANNEXURE-1.</p>

	<p>The following must be provided:</p> <ul style="list-style-type: none"> <li>• Technical deviations list</li> <li>• Special tools list</li> <li>• Schedule of rates</li> <li>• Erection, Pre-commissioning, Commissioning and Start-up Spares (Base scope)</li> <li>• Capital spares if any to be considered in base scope with separate price list</li> <li>• Two Years operational Spares price list</li> <li>• Quality assurance</li> <li>• Site Supervision (Per Diem rates for site supervision during erection, pre-commissioning, commissioning, Start-up and site performance testing)</li> </ul>
<b>Standards</b>	Compliance with National, International and Industry Standards, Australian and WA Regulatory requirements.
<b>Key Dates</b>	RFQ expected to be issued during 3rd week of August 2023
<b>Point of Delivery</b>	Module Fabrication Yard (South-east Asia)
<b>3. RETURNABLE DOCUMENTS</b>	
<b>List of Returnable Schedules</b>	List of experience on similar equipment supply projects
<b>4. DISCLAIMER</b>	
This Expression of Interest to gain an insight into the capabilities of potential suppliers and/or 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.	

## ANNEXURE - 1

S.No	Tag number	Description	Total Quantity
<b>A</b>	<b>2620-PK-204 / 2720-PK-204</b>	<b>Bulk Flow cooler system package (Train 1 &amp; Train 2)</b>	
1		Feed Hopper	2 sets
2	2620-E-204 / 2720-E-204	Heat Exchanger plates bank	2 sets
3	2620-H-204 / 2720-H-204	Extractor - Discharge Hopper, Chute & its accessories, Vibrator, actuators & positioners	2 sets
4	2620-MH-204 / 2720-MH-204	Motor for vibrator	2 sets
5	2620-H-204 / 2720-H-204	Product Outlet diverter	2 sets
6	-	Bulk Flow cooler all Process Nozzle connections within the B/L	2 sets
7	2620-P-208 A/B & 2720-P-208 A/B	CW Circulation pumps Skid for 2620-E-204 & 2720-E-204 (If required)	4 No's
8	2620-P-208 A/B & 2720-P-208 A/B	Motor for CW Circulation pumps (2620-P-208 A/B & 2720-P-208 A/B)	4 No's
9	2620-K-206 & 2720-K-206	Purge air fan for 2620-E-204 & 2720-E-204 (If required)	2 No's
10	2620-MK-206 & 2720-MK-206	Motor for Purge air fan (2620-K-206 & 2720-K-206)	2 No's
11	-	Instrumentation & Control system for the package	2 sets

### DESIGN CRITERIA: DESIGN DATA FOR UREA PRODUCT

- *Flow rate:*

- Operating: 129167 kg/h
- Turndown: 77500 kg/h
- Max: 142083 kg/h

- *Solids nature:* granular urea

- *Solids temperature:*

- Inlet operating: 65 °C
- Inlet máx.: 75 °C
- Outlet: 45 °C
- Design: 100 °C

- Solids moisture content: 0.25%wt. max

- Solids bulk density: 750 kg/m<sup>3</sup>

- Solids size distribution:

- size between 2 - 4 mm: 95%wt min.
- size < 1.0 mm 0.5%wt max.
- mean size: 3 mm

- Solids crushing strength: 3 kgf

- Solids angle of repose: 27 - 29° (30° max.)

- Design duty: 1356 kW (estimated – note P2)

**NOTES**

**P1** The generation of fine particles has to be minimized.

**P2** To be defined by the Manufacturer. Manufacturer shall define all the flow rates (the only fixed flow is the hot granulated urea to be cooled down without any product loss) and outlet conditions.

**P3** Copper and/or copper alloys, Viton and asbestos materials are not allowed. Alloys with a copper content above 1.5%wt are subject to Licensor's approval. Nickel alloys are not allowed in urea service.

**P5** Manufacturer has to provide an optional quotation for a dedicated purge air system.

**P6** Admissible pressure drop following network simulation.