



Package Title	Scarborough Project Monoethylene Glycol (MEG) First Fill
Package Number	4610004039
Scope of Supply	<p>Woodside has a once-off requirement for the supply of Lean Monoethylene Glycol (MEG) in 2025 using at least one Platform Supply Vessel (PSV) to facilitate First Fill of the MEG storage inventory for the Scarborough Floating Production Unit (FPU) in the most efficient and cost-effective manner. Waste disposal of Rich MEG will also be required Post Well clean up.</p> <p>The successful Contractor shall be responsible for the following:</p> <ol style="list-style-type: none"> 1. Supply and operate at least one PSV to support the delivery of Fibre Grade Lean MEG to Woodside's FPU. 2. Waste disposal of Rich MEG conforming to Woodside's Waste Management Strategy and Australian regulatory requirements. <p>The deliverable will include the MEG itself, vessel/s, personnel and supporting services. Woodside will consider local manufacture or if unavailable, international options to meet the required specifications. The product specifications and estimated volumes are outlined in APPENDIX 1.</p> <p>Specific scope requirements will be communicated to suitable Contractors via an Invitation to Tender.</p>
Specifications and Standards	<p>Compliance with National, International and Industry Standards, Australian and WA Regulatory requirements. Refer to the Supplier Information Portal for Woodside's Technical Specification and Standards.</p> <p>Specific Technical requirements will be communicated to suitable Contractors via an Invitation to Tender.</p>
Minimum Scope of Work Requirements:	The successful Contractor must have the resource to be able to deliver the MEG itself, vessels, personnel and supporting services.
Delivery Place	Western Australia
Supplier EOI Instructions	<p>Please note this is an Expression of Interest (EOI) only, the content of this work is subject to change pending project demand and timelines.</p> <p>Supplier(s) are invited to express interest by registering on ICN Gateway where competency and previous positive experiences for offshore oil and gas projects should be demonstrated for the provision of similar goods and services.</p> <p>ICNWA will follow up on full scope registrations by email, once the full scope closing date has passed. The supplier's response to ICNWA's email and their demonstration of capability for the service, will form their Expression of Interest (EOI) for this package.</p> <p>Suppliers will only be considered for prequalification to tender if deemed suitably qualified based on criteria, including but not limited to, previous Work Experience, HSE (Health, Safety and Environment), Quality management, Financial standing, Onshore / Offshore and Workload availability.</p>



	Suppliers selected for prequalification to tender may be asked to deliver a presentation to Woodside outlining the proposed approach for executing the Scope of Work.
Contact	All initial enquiries should be made through the Industry Capability Network Western Australia Ray Loh Ray.Loh@icnwa.org.au +61 (0) 8 9365 7499
URL	For more information about Woodside please refer to the Company's website: www.woodside.com.au
Closing Date	16/11/2023



BASE SCOPE – Material and Services Required

1 SCOPE DESCRIPTION

(a) Materials

Contractor must provide the following materials as part of the Scope of Work (SoW):

- (i) Supply of on-spec Monoethylene Glycol (MEG) to Scarborough Floating Production Unit (FPU) as outlined by Company (refer to Section 3 for MEG Requirements).

(b) Services

Contractor must perform the following services as part of the SoW:

- (i) Supply and operate at least one Platform Supply Vessel (PSV) to support the delivery of MEG to Scarborough FPU (refer to Section 4 for Supply Vessel specifications).
- (ii) Comprehensive sampling and testing will be required during boat loading, transfer, and discharge to ensure MEG quality on receipt is within specification.
- (iii) Waste disposal of Rich MEG conforming to the FPU Waste Management Strategy and Australian regulatory requirements.

Note: The project schedule and MEG volumes are based on best available data at present and may be subject to change as the project progresses.

2 PROJECT SCHEDULE

Delivery of First Fill MEG is expected in 2025 with expected contract award to be by H2 2024

3 MEG SUPPLY SPECIFICATION

Fibre Grade MEG is required for First Fill of the Scarborough MEG system. The typical specification for Fibre Grade MEG is provided in Table 1.

Table 1: Fibre Grade MEG typical specification

SPECIFICATION	ETHYLENE GLYCOL POLYESTER GRADE
Purity, %wt, minimum	99.9
Diethylene Glycol, %wt, maximum	0.05
Acidity, parts per million (ppm), maximum, as Acetic Acid	20
Iron, ppm, maximum	0.1
Chlorides, ppm, maximum	0.2
UV Transmit @ 220nm, %T, minimum	70
UV Transmit @ 250nm, %T, minimum	90
UV Transmit @ 275nm, %T, minimum	94
UV Transmit @ 350nm, %T, minimum	98
Water, %wt, maximum	0.05
Color, Platinum-Cobalt Units, maximum	5
Appearance	Pass

Typical values for specific Gravity (20/20°C): 1.1151 to 1.1156
 Typical values for Refractive Index at 20°C: - 1.4305 to 1.4330
 Typical values for Ash content: < 40ppm
 Typical values for Distillation Range 196C – 200C



3.1 MEG Oxygen Specification

Oxygen management is required across the supply chain to deliver MEG at the lowest Oxygen content to the FPU as practicable with a nominal target of <50ppb Oxygen in MEG at receipt on the FPU.

3.2 First Fill Volume Estimates

Table 2 provides an estimate of the total First Fill requirements for commissioning and start-up of the MEG Recovery Unit.

All supplied MEG is to be 85wt% Lean MEG.

Table 2: First Fill MEG Estimated Volumes

System	Estimate Volumes Required
Topside Process Flush	50 m ³
MRU Fill	50 m ³
Rich MEG Tanks (x1) ^{Note 1}	572 m ³
Lean MEG Tanks (x2) ^{Note 2}	824 m ³
Lean MEG Losses due to well clean up	90 m ³
Subsea Umbilicals & Flowlines	NA ^{Note 3}
First Fill Total (Base Scope)	1600 m³
Contingency Replacement 85wt% Lean MEG	600 m ³
First Fill Contingency Total	600 m³ ^{Note 4}
Total Supply Volume including Contingency	2200 m³ ^{Note 5}
Contingency Rich MEG Waste Disposal Volume	600 m³

Note 1: Rich MEG tanks to be filled with 85 wt% Lean MEG for supply chain simplification. Assuming 90 % initial fill level for single 636 m³ Rich MEG Tank.

Note 2: Assuming 90% level for both 458 m³ Lean MEG tanks.

Note 3: Subsea Umbilical, Riser & Flowline (SURF) Pre-commissioning and Commissioning MEG requirements will be provided by SURF contractor SIA.

Note 4: A contingency 600 m³ Lean MEG may be required as an optional delivery to replace any Rich MEG disposed of post well clean up.

Note 5: Construction & Commissioning volumes will be provided by EPC engineering contractor and are out of scope for this enquiry.

Supply Vessel Requirements

3.3 Supply Vessel



Supply vessel should be compliant with International marine regulations and local Australian & company standards. Bulk MEG is expected to be supplied in double lined tanks with a Nitrogen blanket applied to maintain MEG quality during transport.

All respondents will require approval to engage with Company assets through Marine Assurance and comply with Company standards and procedures.

This is to be completed prior to mobilisation and vessel operators are required to provide / facilitate the appropriate information, which includes but is not limited to:

- Safety Management System assessment
- Dynamic Positioning (DP) system verification
- Vessel Inspections
- Project support for tender review, evaluation, pre/post contract award
- Any other relevant requirements / certificates based on vessel class & regulatory requirements.

In addition, all vessels will need to meet the Company's IMS (Invasive Marine Species) requirements at their own cost.