



South of Embley project

Expression of interest

HPPE Pipe and Fittings

Package Number: 25977-000-MRA-PX09-00001

Package Title: HPPE Pipe and Fittings

General Description

Rio Tinto's proposed South of Embley (SoE) project is located approximately 40 km south-west of Weipa in far North Queensland, Australia. Suppliers are requested to furnish all labour, materials and services for the design, fabrication, testing, preparation for shipment and delivery of HPPE Pipe and Fittings.

Specific Scope Requirements

The total quantities of HPPE pipe is approximate 95,300m in 35 different categories and approximate 9,500 pieces of fittings in 147 different categories.

Standard HPPE pipe sizes (Outside Diameter) shall be as follows (mm):

32, 63, 110, 160, 225, 280, 315, 355, 400, 450, 500, 630, 710, 800, 900, 1000

Non-Standard HPPE sizes (Outside Diameter) as follows (mm) shall not be used:

16, 20, 25, 40, 50, 75, 90, 125, 180, 200.

PIPE TABLE

| Pipe Material Description | Rating | Size (mm) | Remarks |
|---------------------------|---------------------------------|-----------|-----------------------|
| HPPE PE100 | 63 mH ₂ O (PN 6.3) | 32-1000 | |
| HPPE PE100 | 80 mH ₂ O (PN 8) | 32-1000 | |
| HPPE PE100 | 100 mH ₂ O (PN 10) | 32-1000 | |
| HPPE PE100 | 100 mH ₂ O (PN 10) | 32-355 | Potable Water Service |
| HPPE PE100 | 125 mH ₂ O (PN 12.5) | 32-1000 | |
| HPPE PE100 | 160 mH ₂ O (PN 16) | 32-1000 | |

Polyethylene pipe material shall conform to AS 4130, Series -1, PE 100, for general pressure applications. Polyethylene fittings shall conform to AS 4129. Both polyethylene pipe and fittings shall be manufactured from compounds conforming to AS 4131.

HPPE piping in potable water service shall be black with blue stripes. HPPE piping in all other pressurised services (excluding potable water & air) shall be black.

Internal diameter of loose backing rings for HPPE stub flanges to AS 2129 Table E shall comply with PIPA Guideline POP007.

Pressure ratings of HPPE fittings shall be the equivalent of the nominated PN/SDR of corresponding pipe class; after all applicable manufacturing de-rating factors have been applied in accordance with AS 4129 & PIPA POP006 guidelines.

Based on PIPA Industry Guidelines POP001 Table 1, electro fusion welded fittings shall have a minimum rating of PN 16 for sizes OD 32 to OD 63.

For HPPE Piping systems in non-compressed air service, electro-fusion weld shall be used for size ranges up to OD 63. For higher size ranges, butt fusion weld shall be used.

Materials in contact with drinking water, recycled water or any combinations of these water supplies shall comply with AS/NZS 3500.1. All materials in contact with drinking water shall comply with AS 4020 and shall be watermark certified.

Delivery Schedule

Forecast Award Date: 1Q, 2016

In 2015, Rio Tinto is undertaking a detailed feasibility study on the Project that will inform a final investment decision. A decision is expected to be received in the final quarter of 2015. Future procurement decisions are dependent on board approval.

Construction of associated mine infrastructure is anticipated to take 36 months once final board approval is granted.

Instructions to suppliers

If your business possesses the capability and capacity to perform the stated scope of work, please submit a registration of interest via the ICN Gateway at www.southofembley.icn.org.au.

Please ensure that:

- Your company profile on ICN Gateway is complete, up-to-date and accurate
- You register your interest as a Full Scope or Partial Scope supplier (where applicable), and
- You respond to all project-specific questions via the ICN Gateway.

More Information

Please contact the Industry Capability Network Queensland on +61 (7) 3364 0676 should you have any enquiries regarding this scope of work.

More information about the South of Embley Project can be found on the Rio Tinto website www.riotinto.com

Disclaimer

Scope of Work is indicative only and is intended to be used as a summary description of work which may be required by Rio Tinto and may be subject to change. Full scopes of work will be made available to parties that are invited to tender. There is no undertaking to contract or proceed to a competitive process implied by this form. Further contact with interested suppliers will be at Rio Tinto's discretion.