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PETRONAS RAPID PROJECT
PACKAGE 14 - UTILITIES, INTERCONNECTING, OFFSITE UNITS

JOB SPECIFICATION
PROCESS GAS CHROMATOGRAPH

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PETRONAS

OUI JV

JOB SPECIFICATION - PROCESS GAS CHROMATOGRAPH

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JOB SPECIFICATION - PROCESS GAS CHROMATOGRAPH

1. PURPOSE

PETRONAS intends to build a grass root integrated Refinery and Petrochemicals Complex by developing the RAPID PROJECT (Refinery and Petrochemical Integrated Development) to meet both domestic and Asia's energy and chemicals demand. The RAPID PROJECT consists of a world scale integrated site which includes Refinery with a deep conversion scheme, 300 000 barrels per stream day capacity, Naphtha Steam Cracker of 1.28 million tons of ethylene per year capacity; Petrochemical Derivative Units, utilities, off site and jetty installations.

The RAPID PROJECT is a fundamental component of the Pengerang Integrated Complex (PIC) which also includes the following major projects; Pengerang Cogeneration Plant (PCP), a new LNG Regasification Terminal (RGT2), Raw Water Supply Project (PAMER), Pengerang Deep Water Terminal (PDWT) and Air Separation Unit (ASU) which provides oxygen and nitrogen gases to the Complex and to the local market.

The RAPID PROJECT is located at Pengerang, Mukim of Pengerang, Kota Tinggi District, Johor and is in close proximity to the international shipping lane connecting the Straits of Malacca, Singapore and the South China Sea.

The purpose of this document is to define EPCM CONTRACTOR's requirements in terms of design, sizing, supply, fabrication, expediting, inspection & testing and / or construction and commissioning for Process Gas Chromatograph to be supplied and / or constructed / installed for the UIO PROJECT.

2. REFERENCE DOCUMENTS

2.1 SUPPLEMENT TO PETRONAS STANDARDS (PTS)

Applicable Supplement to PTS in this document as below:

DOCUMENT TITLE	DOCUMENT NUMBER
Protective Coating and Lining	RAPID-P0014-OUI-CVS-DES-0001-9003
Instruments for Measurement and Control	RAPID-P0014-OUI-INC-DES-0001-9007
Instrument Engineering Procedures	RAPID-P0014-OUI-INC-PRC-0001-9001
Instrumentation Documents and Drawings	RAPID-P0014-OUI-INC-PRC-0001-9002
Electromagnetic Compatibility (EMC) Requirements	RAPID-P0014-OUI-ELE-DES-0001-0012
Inspection and Functional Testing of Instruments	RAPID-P0014-OUI-INC-DES-0001-9002
Instrumentation Symbols and Identification on P&ID, DCS, Engineering Tools and MMS	RAPID-P0014-OUI-INC-DES-0001-9001
On-line process stream analysis – Sample take-off and transportation	RAPID-P0014-OUI-INC-DES-0001-9013
On-line process stream analysis – Sample conditioning	RAPID-P0014-OUI-INC-DES-0001-9014
On-line process stream analysis – Analysers	RAPID-P0014-OUI-INC-DES-0001-9015

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Guidelines for Acceptance Test of Analyzer and Analyzer System	RAPID-P0014-OUI-INC-DES-0001-9016
Guidelines on Selection and Installation of Continuous Emission Monitoring System (CEMS)	RAPID-P0014-OUI-INC-DES-0001-9017
Instrument Signal Lines	RAPID-P0014-OUI-INC-DES-0001-9019
On-line process stream analysis – Analysers Houses	RAPID-P0014-OUI-INC-DES-0001-9024
Piping General Requirements	RAPID-P0014-OUI-PIP-SPN-0001-9014

2.2 PROJECT DOCUMENT

DOCUMENT TITLE	DOCUMENT NUMBER
PROJECT DOCUMENTS:	
Project Procedure- General Design Specification	RAPID-P0014-OUI-ENG-PRC-0001-6032
Project Procedure - Applicable Codes and Industry Standards	RAPID-P0014-OUI-ENG-PRC-0001-6024
PROCUREMENT SPECIFICATION:	
Project Procedure - Instruction for Packing, Marking and Shipping (PMS)	RAPID-P0014-OUI-PUR-PRC-0001-7003
Project Procedure – Spare Parts Procurement Procedure	RAPID-P0014-OUI-PUR-PRC-0001-7005
INSTRUMENT AND CONTROL SPECIFICATION:	
Project Specification – Instrument & Control Design Basis	RAPID-P0014-OUI-INC-DES-0001-0002
Project Specification – General Field Instrument Specification	RAPID-P0014-OUI-INC-DES-0001-0006
Project Specification – Quality Measurement Instrument Specification (Analyser and Analyser House)	RAPID-P0014-OUI-INC-DES-0001-0010
Project Specification – Instrument/Piping Interface Standard	RAPID-P0014-OUI-INC-DES-0001-0012
Project Specification – Lightning Surge and Transient Protection	RAPID-P0014-OUI-INC-DES-0001-0017

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Project Specification – Instrument Asset Management System (IAMS) Specification	RAPID-P0014-OUI-INC-SPN-0001-0005
Project Specification – Instrument & Telecom Cables and Fibre Optic Cables Specification	RAPID-P0014-OUI-INC-SPN-0001-0011
Project Specification – On-Line Analyser Management and Data Acquisition System (AMADAS)	RAPID-P0014-OUI-INC-SPN-0001-0702
Drawing – Instrument Earthing Philosophy Diagram	RAPID-P0014-OUI-INC-DWG-0001-0006
PIPING PROJECT SPECIFICATION:	
Project Specification – Piping Material Specification	RAPID-P0014-OUI-PIP-SPN-0001-0019
Project Specification – Carbon Steel Piping and Equipment in “Wet H2S” Service	RAPID-P0014-OUI-MCI-SPN-0001-0002
Project Specification – Positive Material Identification for Piping Components	RAPID-P0014-OUI-PIP-SPN-0001-0049

3. ACRONYM AND DEFINITIONS

OWNER:	PRPC Utilities and Facilities Sdn. Bhd.
EPCM CONTRACTOR:	OUI JV: Joint venture appointed by OWNER with specified authority to perform the EPCM Services of the UIO Project.
PROJECT or UIO PROJECT:	EPCM of utilities, interconnecting and offsite facilities (UIO) Package 14 for RAPID PROJECT at Pengerang, Johor
EPCM:	Engineering, Procurement and Construction Management
PACKAGE WORK:	The works, services or supplies, or any or all of the foregoing, to be undertaken by a PACKAGE CONTRACTOR or PACKAGE VENDOR, as applicable. "SCOPE OF WORK" may also be used instead of "PACKAGE WORK" to facilitate the understanding of all the parties.
PACKAGE:	means each package of works or supplies forming part or parts of the PROJECT.
PACKAGE VENDOR:	means any Vendor engaged by OWNER to supply Equipment and Materials or Spare Parts, which may include associated services.
PURCHASE ORDER:	means the contract by which a PACKAGE VENDOR is engaged by OWNER.
PACKAGE CONTRACTOR:	means any Contractor engaged by OWNER to undertake the PACKAGE WORKS for a PACKAGE.

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