KUWAIT OIL COMPANY (K.S.C.)

A subsidiary of Kuwait Petroleum Corporation



PRODUCTION & PROJECTS (GAS) GROUP

GAS PROJECTS TEAM-II

Mutriba remote boosting facility (MRBF)
At North Kuwait

Appendix 8A

List of Company Codes & Standards

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Rev.	**Date**	**Description**	**Prepared By**	**Reviewed By**	**Approved By**

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(Register of Commerce No. 21835)

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COMPANY CODES & STANDARDS

Listed below are the latest Company Codes and Standards applicable for this Project and its Soft copies are provided in CD.

For HSE Related Company Codes & Standards, refer to **Appendix -9** (Preliminary Project Execution HSE Plan).

Sl. No.	DOCUMENT NO.	DESCRIPTION
ARCHITECTURAL :		
1.	KOC-AR-001	KOC Recommended Practice for Architectural Design Basis
2.	KOC-AR-002	KOC Recommended Practice for Architectural Finishes
CIVIL & STRUCTURAL :		
1.	KOC-C-001	KOC Standard for Basic Civil Engineering Design Data (Formerly 015-MH-1001)
2.	KOC-C-002	KOC Recommended Practice for Engineering Design Basis of Civil and Structural Work
3.	KOC-C-003	KOC Standard for Geotechnical Investigation (Onshore) (Supersedes 015-SH-1005)
4.	KOC-C-004	KOC Recommended Practice for Topographical Survey (Onshore) (Supersedes 015-SH-1006)
5.	KOC-C-005	KOC Standard for Materials and Workmanship-Site Preparation and Earthworks (Supersedes 015-SH-1002 & KOC-DES-C-001)
6.	KOC-C-006	KOC Standard for Concrete Work - Materials and Construction (Formerly 015-QH-1001 & DES-C-002)
7.	KOC-C-007	KOC Standard for Structural Steel Work-Materials, Fabrication and Erection (Formerly 015-MH-1002)
8.	KOC-C-008	KOC Standard for Masonry Works and Plastering - Materials and Workmanship (Formerly DES-C-003 & DES-C-005),(Supersedes Sections III & V of 381/022) & (Supersedes Sections 4.0 & 10.0 of 015-RH-1001)
9.	KOC-C-009	KOC Standard for Pre-Engineered Metal Buildings / Shelters
10.	KOC-C-023	KOC Standard for Grouting for Bases - Materials and Workmanship
11.	KOC-C-024 Part 1	KOC Standard for Materials and Workmanship - Roadways, Paving and Hard Standing: Part 1: Flexible Pavement (Supersedes 015-SH-1003)

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Sl. No.	DOCUMENT NO.	DESCRIPTION
12.	KOC-C-024 Part 2	KOC Standard for Materials and Workmanship - Roadways, Paving and Hard Standing: Part 2: Miscellaneous Works & Rigid Pavement
13.	KOC-C-025	KOC Recommended Practice for Drainage Systems - Design, Materials and Construction
14.	KOC-C-026	KOC Standard for Storage Tank Foundation (Supersedes 015-SH-1001)
15.	KOC-C-027	KOC Standard for Fireproofing of Structural Steelwork
16.	KOC-C-030	KOC Recommended Practice for Blast Resistant Design of Buildings
17.	KOC-C-033	KOC Standard for Bund Walls for Storage Tanks - Materials and Workmanship
18.	KOC-C-035	KOC Standard for Porta Cabins
ELECTRICAL :		
1.	KOC-E-001	KOC Standard for High Voltage Induction Motors
2.	KOC-E-002 Part 1	KOC Standard for High Voltage Switchgear and Controlgear (1kV to 11kV)
3.	KOC-E-003 Part 1	KOC Recommended Practice for Design Basis and Selection of Electrical Systems
4.	KOC-E-003 Part 2	KOC Recommended Practice for Installation and Testing of Electrical Equipment
5.	KOC-E-004 Part 1	KOC Recommended Practice for Selection, Installation and Maintenance of Electrical Equipment in Hazardous Areas: General Requirements (Formerly COP-E-001 Part 1)
6.	KOC-E-004 Part 2	KOC Recommended Practice for Selection, Installation and Maintenance of Electrical Equipment in Hazardous Areas, (Flameproof Enclosure ‘d’) (Formerly COP-E-001 Part 3)
7.	KOC-E-004 Part 3	KOC Recommended Practice for Selection, Installation and Maintenance of Electrical Equipment in Hazardous Areas, (Intrinsic Safety 'i') (Formerly COP-E-001 Part 4)
8.	KOC-E-004 Part 4	KOC Recommended Practice for Selection, Installation and Maintenance of Electrical Equipment in Hazardous Areas, (Increased Safety 'e') (Formerly COP-E-001 Part 6)
9.	KOC-E-004 Part 5	KOC Recommended Practice for Selection, Installation and Maintenance of Electrical Equipment in Hazardous Areas , (Non-Sparking Type Ex'n')

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10.	KOC-E-004 Part 6	KOC Recommended Practice for Selection, Installation and Maintenance of Electrical Equipment in Hazardous Areas, (Oil Immersion 'O')
11.	KOC-E-005	KOC Standard for Power Transformers (Formerly 015-PH-1903)
12.	KOC-E-006	KOC Recommended Practice for Power System Studies, Protection and Control
13.	KOC-E-007	KOC Standard for Generator Sets (Formerly 015-PH-1904)
14.	KOC-E-008	KOC Recommended Practice for Selection and Installation of Electric Cables
15.	KOC-E-009	KOC Standard for Low Voltage Switchgear
16.	KOC-E-010	KOC Standard for Low Voltage Induction Motors
17.	KOC-E-011	KOC Standard for Uninterruptible Power Supply System
18.	KOC-E-012	KOC Standard for DC Power Supply Units
19.	KOC-E-013	KOC Standard for Motor Operated Valve Actuators
20.	KOC-E-014	KOC Standard for Variable Speed Drive (VSD) Controller and Soft Starter (Supersedes 015-PH-1911)
21.	KOC-E-017	KOC Recommended Practice for Lighting and Small Power Supply Systems
22.	KOC-E-018	KOC Recommended Practice for Electric Surface Heating System
23.	KOC-E-020	KOC Recommended Practice for Electrical Installations on Packaged Equipment
24.	KOC-E-023	KOC Standard for Electric Cables
25.	KOC-E-024	KOC Recommended Practice for Earthing and Bonding
26.	KOC-E-027	KOC Standard for Electrical Supervisory Control and Data Acquisition (E-SCADA) System for Substation
GENERAL & MISCELLANEOUS :		
1.	KOC-G-001	KOC Recommended Practice for Green Buildings (New & Existing)
2.	KOC-G-002	KOC Standard for Hazardous Area Classification
3.	KOC-G-004	KOC Standard for Packing, Marking and Documentation (Formerly 015-UH-1001)

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4.	KOC-G-006	KOC Standard for Thermal and Acoustic Insulation (Supersedes 015-NH-1003)
5.	KOC-G-007	KOC Standard for Basic Design Data
6.	KOC-G-009	KOC Standard for Spare Parts and Maintenance Data
7.	KOC-G-010	KOC Standard for Conversion Factors for Oil and Process Industries (Formerly 381/018)
8.	KOC-G-011	KOC Standard for Test Water for Site Hydrostatic Testing and Lay-up (Formerly 015-CG-1001)
9.	KOC-G-012	KOC Standard for Plant Equipment Identification, Nameplates and Pipeline Markers
10.	KOC-G-015 Part 1	KOC Procedure for Plant Shutdown - Gathering Centers
11.	KOC-G-016	KOC Procedure for Damage Assessment
12.	KOC-G-017 Part 1	KOC Guideline for Mothballing of Process Plant
13.	KOC-G-019 Part 1	KOC Standard for Security Systems: Part 1: KOC Concept for Integrated Security Systems at All KOC Facilities
14.	KOC-G-019 Part 2	KOC Standard for Security Systems: Part 2: Physical Security & Facility Requirements
15.	KOC-G-019 Part 3	KOC Standards for Security Systems: Part 3: Electronic Security Systems for All KOC Facilities.
INSTRUMENTATION :		
1.	KOC-I-001	KOC Standard for Instrumentation and Control System Design
2.	KOC-I-002	KOC Standard for Instrument Installation
3.	KOC-I-004	KOC Standard for Shutdown Systems
4.	KOC-I-005	KOC Recommended Practice for Fire & Gas System Panels (Formerly 015-JH-1906)
5.	KOC-I-006	KOC Standard for Distributed Control System (DCS) (Supersedes 015-JH-1904)
6.	KOC-I-007	KOC Standard for Telecommunication, Instrumentation and Control System Cabinets

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7.	KOC-I-008	KOC Standard for Instrumentation for Packaged Equipment (Supersedes 015-JH-1909)
8.	KOC-I-009	KOC Recommended Practice for Mechanical Completion of Instrument Systems (Supersedes 015-JH-1910)
9.	KOC-I-010	KOC Standard for Control and Shutdown Valves
10.	KOC-I-011	KOC Standard for Instrument Cables (Formerly 015-JH-1912)
11.	KOC-I-016	KOC Standard for Public Address System
12.	KOC-I-017	KOC Recommended Practice for Implementation of Safety Instrumented Functions (SIF)
13.	KOC-I-019	KOC Standard for Integrated Control and Safety System (ICSS)
14.	KOC-I-020	KOC Standard for Vibration, Temperature & Condition Monitoring System (CMS) (Supersedes 015-ZH-1002)
15.	KOC-I-021	KOC Recommended Practice for Alarm Management System (Note1)
16.	Note1	KOC Alarm Management Philosophy (reference Document for KOC-I-021 rev1)
17.	KOC-I-022 Part 4	KOC Standard for Crude Oil Measurement for Fiscal and Allocation Metering: Part 4: Coriolis Metering System
18.	KOC-I-022 Part 5	KOC Standard for Crude Oil Measurement for Fiscal and Allocation Metering: Part 5: Ultrasonic Metering System
19.	KOC-I-022 Part 6	KOC Standard for Crude Oil Measurement for Fiscal and Allocation Metering: Part 6: Orifice Metering System
20.	KOC-I-022 Part 8	KOC Standard for Crude Oil Measurement for Fiscal and Allocation Metering: Part 8: Sampling Systems
21.	KOC-I-022 Part 9	KOC Standard for Crude Oil Measurement for Fiscal and Allocation Metering: Part 9: Computer Measurement Systems
22.	KOC-I-023	KOC Standard for Multi-Phase Floe Meter (MPFM)
23.	KOC-I-024	KOC Standard for Process Pressure Measurement Instruments
24.	KOC-I-025	KOC Standard for Process Temperature Measurement Instruments
25.	KOC-I-026	KOC Standard for Process Flow Measurement

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Sl. No.	DOCUMENT NO.	DESCRIPTION
26.	KOC-I-027	KOC Standard for Process Level Measurement Instruments
27.	KOC-I-028	KOC Standard for Process Analysers
LOSS PREVENTION :		
1.	KOC-L-002	KOC Recommended Practice for the Protection of KOC Services: Clearance Requirements for Buried Pipelines, Cables, Underground Structures, Buildings and Housing Projects (Formerly 381/13 Pt. 3 & 381/26)
2.	KOC-L-006	KOC Standard for Fire & Gas Detection Equipment (Formerly 015-YH-1001)
3.	KOC-L-008	KOC Standard for Fluoroprotein Foam Liquid Concentrate for Fire-Fighting (Formerly 381/15)
4.	KOC-L-009	KOC Standard for Fire Protection Systems and Safety Equipment
5.	KOC-L-010	KOC Standard for Personal Protective Equipment (PPE)
6.	KOC-L-012	KOC Standard for Cathodic Protection Material
7.	KOC-L-015	KOC Standard for External Cathodic Protection of Underground Steel Pipelines & Piping Networks
8.	KOC-L-017	KOC Recommended Practice for HAZOP Studies
9.	KOC-L-018	KOC Standard for Cathodic Protection of Internal Surfaces of Steel Tanks & Vessels
10.	KOC-L-019	KOC Recommended Practice for External Cathodic Protection of Submerged Offshore Pipelines and Structures
11.	KOC-L-020	KOC Standard for Fire Protection in Non-Plant Buildings
12.	KOC-L-024	KOC Recommended Practice for Seclection, Design and Installation of Clean Agent Based Fire Extinguishing Systems
13.	KOC-L-025	KOC Recommended Practice for Scaffolding
14.	KOC-L-026	KOC Recommended Practice for External Cathodic Protection of On-Grade Steel Tank Bottom
15.	KOC-L-028	KOC Recommended Practice for Plant Layout
16.	KOC-L-036	KOC Recommended Practice for Design, Selection and Location of Fire & Gas Detection System

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Sl. No.	DOCUMENT NO.	DESCRIPTION
17.	381/13 Part 1	Standards Requirements and Regulations for the Protection of KOC Services (Part 1): Crossings of Roads and Motorways Under Construction.
18.	KOC.PS.025	Guidelines for Risk-Based Field Spacing of Onshore Facilities (Reference Document for KOC-L-028, Rev. 5)
MECHANICAL :		
1.	KOC-ME-005	KOC Standard for Overhead Travelling Cranes and Monorail Cranes (Supersedes 015-TH-1101)
2.	KOC-ME-006 Part 1	KOC Standard for Metering Pump Packages
3.	KOC-ME-006 Part 2	KOC Standard for Reciprocating Pumps
4.	KOC-ME-006 Part 3	KOC Standard for Positive Displacement Pumps - Rotary
5.	KOC-ME-008 Part 1	KOC Recommended Practice for Selection of Pumps
6.	KOC-ME-008 Part 2	KOC Standard for Centrifugal Pumps
7.	KOC-ME-008 Part 3	KOC Standard for Horizontal End Suction Centrifugal Pumps to ASME B73.1
8.	KOC-ME-009	KOC Standard for Stationary Firewater Pumpsets
9.	KOC-ME-011	KOC Standard for Process Gas Centrifugal Compressors
10.	KOC-ME-012	KOC Standard for Gas Turbine Driver (Supersedes 015-KH-1002)
11.	KOC-ME-018	KOC Standard for Reciprocating Compressor and Dryer for Plant and Instrument Air Service (Factory Assembled Package Unit)
12.	KOC-ME-021	KOC Standard for Flare Systems (Supersedes 015-FH-1002)
13.	KOC-MH-001	KOC Standard for HVAC System and Equipment: Direct Expansion (DX) Type
14.	KOC-MP-002 Part 1	KOC Standard for Carbon Steel Pipes for Sour Service (Supersedes KOC-MS-001 Part 1)
15.	KOC-MP-010	KOC Standard for Piping Material Classes (Supersedes 015-LH-1002)

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16.	KOC-MP-011 Part 1	KOC Standard for RTRP Pipes and Fittings: Materials (Supersedes KOC-MP-021 Rev.2)
17.	KOC-MP-011 Part 2	KOC Recommended Practice for RTRP Pipes and Fittings: Engineering Design and Installation (Supersedes KOC-MP-021 Rev.2)
18.	KOC-MP-013	KOC Standard for Gate Valves
19.	KOC-MP-014	KOC Standard for Globe Valves
20.	KOC-MP-015	KOC Standard for Check Valves
21.	KOC-MP-016	KOC Standard for Plug Valves (Formerly KOC 381/21/2)
22.	KOC-MP-018	KOC Standard for Carbon Steel Pipes for Non-Sour Service
23.	KOC-MP-020	KOC Standard for Corrosion Resistant Alloy Pipes for Sour & Non-Sour Service (Seamless & Welded)
24.	KOC-MP-022 Part 1	KOC Standard for HDPE Pipes and Fittings: Materials
25.	KOC-MP-022 Part 2	KOC Recommended Practice for HDPE Pipes and Fittings: Engineering Design and Installation
26.	KOC-MP-023	KOC Standard for Through-Conduit Gate Valves
27.	KOC-MP-025	KOC Standard for Piping and Equipment Pre-Assembly (Supersedes 015-LH-1004)
28.	KOC-MP-026	KOC Standard for Colour Coding of Pipes and Fittings for Material Identification (Formerly 015-LH-1006)
29.	KOC-MP-027 Part 1	KOC Standard for Pressure Relief Devices: Design and Materials (Supersedes Clause 6.0 of 015-JH-1903 and Section 9 of KOC 381/029)
30.	KOC-MP-027 Part 2	KOC Recommended Practice for Pressure Relief Devices: Sizing, Selection, Twinning and Installation
31.	KOC-MP-031 Part 1	KOC Standard for Gaskets for Pipe Flanges: Types, Design and Materials
32.	KOC-MP-031 Part 2	KOC Recommended Practice for Gaskets for Pipe Flanges: Selection Criteria, Handling and Installation
33.	KOC-MP-033 Part 1	KOC Standard for Valves: Part 1 - Ball Valves

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Sl. No.	DOCUMENT NO.	DESCRIPTION
34.	KOC-MP-035	KOC Standard for Internal Corrosion Monitoring Equipment for Facilities and Pipelines
35.	KOC-MP-038	KOC Recommended Practice for In-service Welding, Hot-Tapping and Plugging
36.	KOC-MV-001	KOC Standard for Pressure Vessels (Supersedes 015-CH-1001 & 015-CH-1002)
37.	KOC-MV-005	KOC Standard for GRP Tanks (Supersedes 015-DH-1004)
38.	KOC-MV-006 Part 1	KOC Recommended Practice for Selection Criteria of Heat Exchangers
39.	KOC-MV-006 Part 2	KOC Standard for Shell and Tube Heat Exchangers
40.	KOC-MV-006 Part 3	KOC Standard for Plate and Frame Heat Exchangers
41.	KOC-MV-007	KOC Standard for Field Erected Storage Tanks (Supersedes KOC-MV-007 Rev.1 & 015-DH-1003)
42.	KOC-MV-008	KOC Standard for Air-Cooled Heat Exchangers (Formerly 015-EH-1002)
43.	KOC-MV-009	KOC Standard for Indirect Type Oil Heaters
44.	KOC-MV-011	KOC Standard for Tube-To-Tube Sheet Welding (Supersedes 015-WH-1004)
45.	KOC-MW-001	KOC Standard for Welding Procedure and Welding Quality Requirements (Supersedes 015-WH-1001 & 015-WH-1002)
PAINTING AND COATING :		
1.	KOC-P-001	KOC Standard for Painting and Coating of External Metal Surfaces
2.	KOC-P-002 Part 1	KOC Standard for Internal Lining of Tanks and Vessels: Part 1: Gunite Lining of Steel Vessels
3.	KOC-P-002 Part 2	KOC Standard for Internal Lining of Steel Tanks & Vessels: Part 2: Internal Lining of Above Ground Steel Tanks
4.	KOC-P-002 Part 3	KOC Standard for Internal Lining of Steel Tanks & Vessels: Part 3: Internal Lining of Steel Vessels
5.	KOC-P-004 Part 4	KOC Standard for External Coating of Underground Piping / Pipelines: Part 4: Dual Layer Fusion Bonded Epoxy Coating

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Sl. No.	DOCUMENT NO.	DESCRIPTION
6.	KOC-P-004 Part 6	KOC Standard for External Coating of Underground Piping / Pipelines: Part 6: Three Layers Extruded Polyethylene / Polypropylene System
7.	KOC-P-004 Part 7	KOC Standard for Coating of Underground Field Girth Welds, Fittings and Flanges
8.	KOC-P-004 Part 8	KOC Standard for External Coating of Underground Piping / Pipelines - High Build Epoxy Coating
9.	KOC-P-004 Part 9	KOC Standard for External Coating of Underground Piping / Pipelines - High Build Polyurethane Coating
10.	KOC-P-004 Part 10	KOC Standard for Polyurethane Thermal Insulation and Outer Casing of Polyethylene for Underground Pre-Insulated Pipes
11.	KOC-P-005	KOC Standard for Internal Coating of Pipelines
12.	KOC-P-006	KOC Standard for Evaluation and Certification of Blasting and Coating Contractor / Applicator Personnel
13.	KOC-P-017	KOC Standard for Identification of Piping Systems
PROCESS:		
1.	KOC-PR-001	KOC Standard for System Isolation
2.	KOC-PR-003	KOC Recommended Practice for Emergency Shutdown (ESD) and Depressurizing System Requirements (Supersedes 015-YH-1004)
QUALITY ASSURANCE :		
1.	KOC-Q-014	KOC Standard for Project QA/QC General Requirements
2.	KOC-Q-015	KOC Standard for Positive Material Identification (PMI)
3.	KOC-Q-017	KOC Recommended Practice for Inspection of Castings and Forgings for Pressure Service (Supersedes 015-WH-1003)
SAFETY :		
1.	KOC-S-001	KOC Recommended Practice for Safe Roads, Road Closure and Installation of Display Boards / Signs on KOC Roads
TELECOMMUNICATION :		
1.	KOC-T-001	KOC Recommended Practice for Telecommunication and Local Area Network (LAN) Infrastructure for Buildings

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Sl. No.	DOCUMENT NO.	DESCRIPTION
2.	KOC-T-006	KOC Standard for Optical Fibre Cables
3.	KOC-T-007	KOC Standard for Telephone System
4.	KOC-T-008	KOC Recommended Practice for Installation Optical Fibre Cable
015 SERIES OF SPECIFICATION :		
1.	015-UH-1002	Schedule for Laboratory Equipment.