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| km%20clr%20blend***Project Manager’s Project OQ Covered Task Checklist (DOT 192 – Gas)******KM Operator Qualification Plan, Appendix E, Attachment 1****Revised 5/26/2023* |
| Project Name      | Date | Project Manager | Contractor |
|       |       |       |
| **OQ Covered Tasks on this project?:** [ ] Yes [ ]  No If **yes**, complete remainder of form to accompany bid process and attach to final contract. If **no**, print only the **1st page** and file with final contract.**Directions for Project Manager:** Check the “To Be Performed” column for every covered task to be performed during this project by Company or Contract personnel.**Directions for Contractor**: For each covered task with a check in the “To Be Performed by Contractor” column, check the box in the fourth column if OQ qualified personnel will be available when the task(s) must be performed.**Span of Control**: This column identifies the span of control for directing and observing non-qualified workers on each covered task. It is expressed in the form of a ratio. For example, 1:1 span of control means that 1 OQ qualified employee can direct and observe only 1 unqualified worker performing that specific task. |

| **KMI Covered Task** | **Span of Control** | **To Be Performed by Company** | **To Be Performed by Contractor** | **OQ Qualified Personnel Available** |
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| 01.01.01 | Abnormal Operating Conditions (AOC) - Outside of Control Room **(always required if other covered tasks are performed)** | N/A | [ ]  | [ ]  | [ ]  |
| 02.01.01 | Gas Detection & Alarm System Maintenance & Performance Test | 1:1 | [ ]  | [ ]  | [ ]  |
| 02.02.01 | Isolation of Compressor Units | 1:1 | [ ]  | [ ]  | [ ]  |
| 02.03.01 | Compressor Station Inspection & Testing of Remote Control Shutdown Devices | 1:1 | [ ]  | [ ]  | [ ]  |
| 02.04.01 | Provide Security for Pipeline Facilities | 1:1 | [ ]  | [ ]  | [ ]  |
| 03.01.01 | Operating Compressor Units: Remote | 1:1 | [ ]  | [ ]  | [ ]  |
| 03.01.02 | Operating Compressor Units: Manual | 1:1 | [ ]  | [ ]  | [ ]  |
| 03.02.01 | Shutting Down Compressor Units: Remote  | 1:1 | [ ]  | [ ]  | [ ]  |
| 03.02.02 | Shutting Down Compressor Units: Manual | 1:1 | [ ]  | [ ]  | [ ]  |
| 03.03.01 | Starting Compressor Units: Remote  | 1:1 | [ ]  | [ ]  | [ ]  |
| 03.03.02 | Starting Compressor Units: Manual | 1:1 | [ ]  | [ ]  | [ ]  |
| 04.01.01 | Measure Damage on Installed Pipe and Components | 1:1 | [ ]  | [ ]  | [ ]  |
| 04.01.02 | Corrosion Monitoring – Atmospheric, External, and Internal: Offshore Pipelines | 1:1 | [ ]  | [ ]  | [ ]  |
| 04.01.03 | Visual Inspection of Buried Pipe and Components When Exposed | 1:1 | [ ]  | [ ]  | [ ]  |
| 04.01.04 | Visual Inspection of Internal Surface of Pipe | 1:1 | [ ]  | [ ]  | [ ]  |
| 04.01.05 | Visual Inspection for External/Atmospheric Corrosion  | 1:1 | [ ]  | [ ]  | [ ]  |
| 04.01.06 | Insert and Remove Coupons/Probes for Internal Corrosion Monitoring  | 1:1 | [ ]  | [ ]  | [ ]  |
| 04.01.07 | Nondestructive Testing – Magnetic Particle Testing of Pipe | 1:0 | [ ]  | N/A | [ ]  |
| 04.01.08 | Evaluating Anomalies UsingHandyscan 700® | 1:0 | N/A | [ ]  | [ ]  |
| 04.02.01 | Coating Maintenance/Application and Repair- Sprayed, Brushed or Rolled  | 1:5 | [ ]  | [ ]  | [ ]  |
| 04.02.02 | Coating Maintenance/Repair-Wrapped  | 1:5 | [ ]  | [ ]  | [ ]  |
| 04.03.01 | Electronic Holiday Detection | 1:1 | [ ]  | [ ]  | [ ]  |
| 05.01.01 | Cathodic Protection System Maintenance: Rectifiers | 1:1 | [ ]  | [ ]  | [ ]  |
| 05.01.02 | Cathodic Protection System Maintenance: Electrical Isolation | 1:1 | [ ]  | [ ]  | [ ]  |
| 05.01.03 | Cathodic Protection System Maintenance: Anodes & Anode Ground Beds | 1:1 | [ ]  | [ ]  | [ ]  |
| 05.01.04 | Inspect or Test Cathodic Protection Bonds | 1:1 | [ ]  | [ ]  | [ ]  |
| 05.01.05 | Cathodic Protection System Maintenance: Reverse Current Switches | 1:1 | [ ]  | [ ]  | [ ]  |
| 05.01.06 | Cathodic Protection System Maintenance: Automatic Potential Controlled Protection Systems | 1:1 | [ ]  | [ ]  | [ ]  |
| 05.01.07 | Cathodic Protection System Maintenance: AC Voltage Mitigation System | 1:1 | [ ]  | [ ]  | [ ]  |
| 05.01.08 | Cathodic Protection: Read Rectifier | 1:1 | [ ]  | [ ]  | [ ]  |
| 05.02.01 | Cathodic Protection System – Electrical Connections | 1:1 | [ ]  | [ ]  | [ ]  |
| 05.02.02  | Maintain Cathodic Test Leads  | 1:1 | [ ]  | [ ]  | [ ]  |
| 05.03.01 | Cathodic Protection System Testing: Test Stations | 1:1 | [ ]  | [ ]  | [ ]  |
| 05.03.02 | Indirect Inspection – Measure Structure-to Electrolyte Potential | 1:1 | [ ]  | [ ]  | [ ]  |
| 06.01.01 | Indirect Inspection: Close Interval Survey | 1:1 | [ ]  | [ ]  | [ ]  |
| 06.01.02 | Indirect Inspection: Direct Current Voltage Gradient (DCVG) Survey | 1:1 | [ ]  | [ ]  | [ ]  |
| 06.01.03 | Indirect Inspection: Voltage Gradient (ACVG) Survey | 1:1 | [ ]  | [ ]  | [ ]  |
| 06.01.04 | Indirect Inspection: AC Current Attenuation (ACCA or PCM) Survey | 1:1 | [ ]  | [ ]  | [ ]  |
| 07.01.01 | Locating, Installing & Protecting Customer Meters & Regulators: Residential & Small Commercial | 1:1 | [ ]  | [ ]  | [ ]  |
| 07.01.02 | Locating, Installing & Protecting Customer Meters & Regulators: Large Commercial | 1:1 | [ ]  | [ ]  | [ ]  |
| 07.02.01 | Customer Pressure Regulating, Limiting & Relief Device: Residential & Small Commercial  | 1:1 | [ ]  | [ ]  | [ ]  |
| 07.02.02 | Customer Pressure Regulating, Limiting & Relief Device: Large Commercial & Industrial  | 1:1 | [ ]  | [ ]  | [ ]  |
| 08.01.01 | Locating Pipelines  | 1:1 | [ ]  | [ ]  | [ ]  |
| 08.02.01 | Damage Prevention During Excavation Activities  | 1:1 | [ ]  | [ ]  | [ ]  |
| 09.01.01 | System Patrolling | 1:1 | [ ]  | [ ]  | [ ]  |
| 10.01.01 | Plastic Pipe – Electrofusion: Couplings | 1:0 | [ ]  | [ ]  | [ ]  |
| 10.01.02 | Plastic Pipe – Electrofusion: Sidewall | 1:0 | [ ]  | [ ]  | [ ]  |
| 10.02.01 | Plastic Pipe – Butt Heat Fusion | 1:0 | [ ]  | [ ]  | [ ]  |
| 10.03.01 | Plastic Pipe – Sidewall Heat Fusion | 1:0 | [ ]  | [ ]  | [ ]  |
| 10.04.01 | Plastic Pipe – Mechanical Joints: Stab Fittings | 1:0 | [ ]  | [ ]  | [ ]  |
| 10.04.02 | Plastic Pipe – Mechanical Joints: Compression Couplings 2” & Less | 1:0 | [ ]  | [ ]  | [ ]  |
| 10.04.03 | Plastic Pipe – Mechanical Joints: Compression Couplings Greater Than 2” | 1:0 | [ ]  | [ ]  | [ ]  |
| 10.05.01 | Joining of Pipe- Flange Assembly | 1:3 | [ ]  | [ ]  | [ ]  |
| 10.05.02 | Joining of Pipe/Tubing - Threaded Fittings  | 1:3 | [ ]  | [ ]  | [ ]  |
| 10.07.01 | Solvent Cement Joints | 1:0 | [ ]  | [ ]  | [ ]  |
| 11.01.01 | Direct/Inspect In-service Pipeline Lowering | 1:0 | [ ]  | [ ]  | [ ]  |
| 11.02.01 | Direct/Inspect/Mitigate Hydrate Formation in Pipeline | 1:1 | [ ]  | [ ]  | [ ]  |
| 12.01.01 | Leakage Survey: Walking | 1:1 | [ ]  | [ ]  | [ ]  |
| 12.01.02 | Leakage Survey: Mobile | 1:1 | [ ]  | [ ]  | [ ]  |
| 12.02.01 | Outside Leakage Investigation, Pinpointing and Grading | 1:1 | [ ]  | [ ]  | [ ]  |
| 12.03.01 | Inside Gas Leakage Investigation  | 1:1 | [ ]  | [ ]  | [ ]  |
| 13.01.01 | Leak & Strength Test – Service Lines, Mains & Transmission Lines: Gaseous: Test Pressures ≤ 100 psi | 1:2 | [ ]  | [ ]  | [ ]  |
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| 14.01.01 | Abandonment or Inactivation of Facilities - Transmission | 1:3 | [ ]  | [ ]  | [ ]  |
| 14.02.01 | Backfilling | 1:3 | [ ]  | [ ]  | [ ]  |
| 14.03.01 | Installation of Steel Pipe – Field Bends  | 1:1 | [ ]  | [ ]  | [ ]  |
| 14.04.01 | Casing Vents and Seals | 1:3 | [ ]  | [ ]  | [ ]  |
| 14.05.01 | Underground Clearances | 1:3 | [ ]  | [ ]  | [ ]  |
| 14.06.01 | Installation of Plastic Pipe: Direct Burial  | 1:5 | [ ]  | [ ]  | [ ]  |
| 14.06.02 | Installation of Plastic Pipe: Boring | 1:2 | [ ]  | [ ]  | [ ]  |
| 14.06.03 | Installation of Plastic Pipe: Plowing/Planting | 1:2 | [ ]  | [ ]  | [ ]  |
| 14.06.04 | Installation of Plastic Pipe: Plowing/Pull-In | 1:2 | [ ]  | [ ]  | [ ]  |
| 14.06.05 | Installation of Plastic Pipe: Above Ground | 1:3 | [ ]  | [ ]  | [ ]  |
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| 14.07.03 | Installation of Steel Pipe: Plowing/Pull-In | 1:2 | [ ]  | [ ]  | [ ]  |
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| 14.11.03 | Pipeline Shutdown, Startup or Pressure Change: Operating Identified Valve(s) | 1:3 | [ ]  | [ ]  | [ ]  |
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| 14.13.01 | Protection When Minimum Cover Not Met  | 1:3 | [ ]  | [ ]  | [ ]  |
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| 15.01.01 | Odorization – Mains & Transmission Lines: Periodic Sampling | 1:1 | [ ]  | [ ]  | [ ]  |
| 15.01.02 | Odorization – Mains & Transmission Lines: Odorizer Maintenance | 1:5 | [ ]  | [ ]  | [ ]  |
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| 16.01.02 | Gas Quality: Maintain/Service Chromatographs | 1:1 | [ ]  | [ ]  | [ ]  |
| 16.01.03 | Gas Quality: Operate/Test/Maintain (O2) Analyzers | 1:1 | [ ]  | [ ]  | [ ]  |
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| 16.01.05 | Gas Quality: Operate/Test/Maintain Moisture Analyzers | 1:1 | [ ]  | [ ]  | [ ]  |
| 16.01.07 | Gas Quality: Operate and Maintain Gas Samplers | 1:1 | [ ]  | [ ]  | [ ]  |
| 16.01.08 | Gas Quality: Troubleshoot/Repair Chromatographs | 1:1 | [ ]  | [ ]  | [ ]  |
| 16.01.09 | Gas Quality: Troubleshoot/Repair Sulfur Analyzers | 1:1 | [ ]  | [ ]  | [ ]  |
| 16.01.10 | Gas Quality: Troubleshoot/Repair Moisture Analyzers | 1:1 | [ ]  | [ ]  | [ ]  |
| 16.01.11 | Gas Quality: Troubleshoot/Repair (CO2) Analyzers | 1:1 | [ ]  | [ ]  | [ ]  |
| 16.01.12 | Gas Quality: Troubleshoot/Repair (O2) Analyzers | 1:1 | [ ]  | [ ]  | [ ]  |
| 18.01.01 | Overpressure Safety Devices – Inspect, Test, and Calibrate Relief Valves | 1:1 | [ ]  | [ ]  | [ ]  |
| 18.01.02 | Pressure Limiting Devices – Inspect, Test and Calibrate | 1:1 | [ ]  | [ ]  | [ ]  |
| 18.02.01 | Vault Maintenance | 1:1 | [ ]  | [ ]  | [ ]  |
| 20.01.01 | Service Line Replacement | 1:3 | [ ]  | [ ]  | [ ]  |
| 20.01.02 | Service Line Replacement: Underground Service Entrance (Prerequisite 20.01.01) | 1:3 | [ ]  | [ ]  | [ ]  |
| 20.03.01 | Service Lines Not in Use and Service Discontinuance | 1:1 | [ ]  | [ ]  | [ ]  |
| 24.01.01 | Welding Process | 1:0 | [ ]  | [ ]  | [ ]  |
| 24.01.02 | Installation/Use of Vapor Barriers | 1:1 | [ ]  | [ ]  | [ ]  |
| 24.02.01 | Visual Inspection of Welds | 1:1 | [ ]  | [ ]  | [ ]  |
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| 25.01.01 | Dehydration: Operate/Maintain Liquid Knock-out | 1:1 | [ ]  | [ ]  | [ ]  |
| 25.01.02 | Dehydration: Maintain/Repair Gas Fired Dehydration System Controls | 1:1 | [ ]  | [ ]  | [ ]  |
| 25.01.03 | Dehydration: Operate/Maintain Gas Dehydration System | 1:1 | [ ]  | [ ]  | [ ]  |
| 25.01.04 | Dehydration: Start-up/Shutdown of Dehydration System  | 1:1 | [ ]  | [ ]  | [ ]  |
| 25.01.05 | Dehydration: Troubleshoot/Repair Gas Dehydration System | 1:1 | [ ]  | [ ]  | [ ]  |
| 25.01.06 | Dehydration: Read/Verify/Maintain Operating Parameters for Gas Processing-Amine System  | 1:1 | [ ]  | [ ]  | [ ]  |
| 25.01.07 | Dehydration: Troubleshoot/Correct Gas Processing Amine System | 1:1 | [ ]  | [ ]  | [ ]  |
| 25.01.08 | Dehydration: Maintain/Repair Gas Fired Mole Sieve Dehydration System Controls | 1:1 | [ ]  | [ ]  | [ ]  |
| 25.01.09 | Dehydration: Operate/Maintain Gas Fired Mole Sieve Dehydration System | 1:1 | [ ]  | [ ]  | [ ]  |
| 25.01.10 | Dehydration: Start-up/Shutdown of Mole Sieve Dehydration System | 1:1 | [ ]  | [ ]  | [ ]  |
| 25.01.11 | Dehydration: Troubleshoot/Repair Mole Sieve Dehydration System | 1:1 | [ ]  | [ ]  | [ ]  |
| 27.01.03 | Remote Compressor Station Operations | 1:1 | [ ]  | [ ]  | [ ]  |
| 27.01.04 | Remote Flow Control | 1:1 | [ ]  | [ ]  | [ ]  |

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| **Contractor Name:** |       |
| **By: *(print and sign)*** |       |
|  |  |
| **Phone Number:** |       |

**Questions on OQ?**: Contact the OQ Department, #OQ Department

**Distribution and Retention**: This form is a project record, whether or not OQ Covered Tasks are performed, it must be included in the bid or contractor selection process and become part of the final contract file. There is a five-year record retention rule for all OQ documentation.