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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 9/26/2019* | | | |
| 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** |
| --- | --- | --- | --- | --- | --- |
| 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 |  |  |  |
| 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 Using  Handyscan 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 (effective 11/15/19) | 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 |  |  |  |
| 13.01.02 | Leak & Strength Test – Service Lines, Mains & Transmission Lines: Gaseous: Test Pressures > 100 psi | 1:2 |  |  |  |
| 13.01.03 | Leak & Strength Test – Service Lines, Mains & Transmission Lines: Hydrostatic Test | 1:2 |  |  |  |
| 13.01.04 | Leak & Strength Test – Service Lines, Mains & Transmission Lines: Test at Operation Pressure | 1:1 |  |  |  |
| 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 |  |  |  |
| 14.06.06 | Installation of Plastic Pipe: Insertion | 1:3 |  |  |  |
| 14.07.01 | Installation of Steel Pipe: Direct Burial | 1:5 |  |  |  |
| 14.07.02 | Installation of Steel Pipe: Boring | 1:2 |  |  |  |
| 14.07.03 | Installation of Steel Pipe: Plowing/Pull-In | 1:2 |  |  |  |
| 14.07.04 | Installation of Steel Pipe: Above Ground | 1:3 |  |  |  |
| 14.07.05 | Installation of Steel Pipe: Insertion | 1:3 |  |  |  |
| 14.08.01 | Cover – Service Lines, Mains & Transmission Lines | 1:3 |  |  |  |
| 14.08.02 | Cover – Offshore Pipelines | 1:1 |  |  |  |
| 14.09.01 | Inspection: Compliance with Procedures & Standards | 1:2 |  |  |  |
| 14.09.02 | Inspection: Inspection of Materials | 1:2 |  |  |  |
| 14.10.01 | Line Markers | 1:4 |  |  |  |
| 14.11.02 | Pipeline Shutdown, Startup or Pressure Change: Stopple Fitting | 1:2 |  |  |  |
| 14.11.03 | Pipeline Shutdown, Startup or Pressure Change: Operating Identified Valve(s) | 1:3 |  |  |  |
| 14.11.04 | Pipeline Shutdown, Startup or Pressure Change: Method(s) Required for Other Pipe Materials | 1:2 |  |  |  |
| 14.11.05 | Launching and Receiving Internal Devices | 1:2 |  |  |  |
| 14.12.01 | Protection from Hazards | 1:3 |  |  |  |
| 14.13.01 | Protection When Minimum Cover Not Met | 1:3 |  |  |  |
| 14.14.01 | Purging: Large Volume, i.e. Segment of Main or Transmission Line, etc. | 1:3 |  |  |  |
| 14.14.02 | Purging: Small Volume, i.e. Service Line, Short Pipeline Segments, Compressor, Component, etc. | 1:3 |  |  |  |
| 14.15.01 | Uprating: Reinforce or Anchor Offsets, Bends and Dead Ends – Longitudinal Straps | 1:3 |  |  |  |
| 14.15.02 | Uprating: Reinforce or Anchor Offsets, Bends and Dead Ends – Anchoring & Buttressing | 1:3 |  |  |  |
| 14.16.01 | Installation of Steel Pipe – Repair of Imperfections or Damage by Grinding | 1:1 |  |  |  |
| 14.18.01 | Support, Expansion Joint and Anchor Maintenance – Exposed Pipeline | 1:4 |  |  |  |
| 14.19.01 | Tapping Steel and Plastic Pipe: Manual (Self-Tapping) | 1:2 |  |  |  |
| 14.19.02 | Tapping Steel and Plastic Pipe: Mechanical Tapping Equipment | 1:2 |  |  |  |
| 14.20.01 | DOT Inspection of Valves | 1:2 |  |  |  |
| 14.20.02 | Repair Valves | 1:2 |  |  |  |
| 14.20.05 | Lubricate Valves | 1:2 |  |  |  |
| 14.21.01 | Segment Removal | 1:5 |  |  |  |
| 14.22.01 | Leak Clamps & Sleeves: Bolt-On Type | 1:2 |  |  |  |
| 14.22.02 | Composite Sleeve Application - ClockSpring® | 1:0 |  |  |  |
| 14.22.03 | Composite Sleeve Application - Armor Plate® | 1:0 |  |  |  |
| 15.01.01 | Odorization – Mains & Transmission Lines: Periodic Sampling | 1:1 |  |  |  |
| 15.01.02 | Odorization – Mains & Transmission Lines: Odorizer Maintenance | 1:5 |  |  |  |
| 16.01.01 | Gas Quality: Operate/Test/Maintain (CO2) Analyzers | 1:1 |  |  |  |
| 16.01.02 | Gas Quality: Maintain/Service Chromatographs | 1:1 |  |  |  |
| 16.01.03 | Gas Quality: Operate/Test/Maintain (O2) Analyzers | 1:1 |  |  |  |
| 16.01.04 | Gas Quality: Operate/Test/Maintain Sulfur Analyzers | 1:1 |  |  |  |
| 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 |  |  |  |
| 24.03.01 | Nondestructive Testing of Welds | 1:3 |  |  |  |
| 24.04.01 | Miter Joints | 1:1 |  |  |  |
| 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

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