

Mapping of API Segment-Based Performance Management Systems Approaches to the API Energy Excellence® Elements

| API EE Element | Upstream Offshore - API RP 75 | Upstream Onshore – Onshore Safety Alliance, API RP 74, API Bulletin 75L | Midstream API RP 1173 Elements | Downstream PSSAP Protocols | Service & Supply Spec Q1/Q2 Provisions |
|---|--|--|--|---|--|
| Leadership Commitment to Operational Integrity | ✓ Leadership Element | <ul style="list-style-type: none"> ✓ OSA Participation Action 1: Participation Commitment to Participate in and support the Onshore Safety Alliance ✓ Bulletin 75L – Safety and Environmental Information Element | <ul style="list-style-type: none"> ✓ Leadership and Management Commitment Element | <ul style="list-style-type: none"> ✓ Process Safety Leadership Protocol | <ul style="list-style-type: none"> ✓ QMS Requirement: Management Responsibility |
| System Establishment, Assessment and Continuous Improvement | <ul style="list-style-type: none"> ✓ Evaluation and Improvement of SEMS Element | <ul style="list-style-type: none"> ✓ OSA Participation Action 4: Apply reporting, Investigation and Learning Processes, Tools or Methods to Learn and Improve to Prevent SIF ✓ OSA Participation Action 6: Improve in Preventing and Mitigating High Consequence Well Control incidents ✓ RP 74 – Safety Element ✓ Bulletin 75L – Audit of SEMS Elements Element | <ul style="list-style-type: none"> ✓ Safety Assurance Element ✓ Management Review and Continuous Improvement Element | <ul style="list-style-type: none"> ✓ Process Safety Leadership Protocol | <ul style="list-style-type: none"> ✓ QMS Requirement: Quality Management System ✓ QMS Monitoring, Measurement, Analysis, & Improvement |
| Planning and Risk Management | <ul style="list-style-type: none"> ✓ Risk Assessment and Risk Controls Element ✓ Procedures Element | <ul style="list-style-type: none"> ✓ OSA Participation Action 5: Perform Risk Assessment for Common Safety Hazards ✓ RP 74 – Safety Element ✓ Bulletin 75L – Hazard Analysis Element | <ul style="list-style-type: none"> ✓ Risk Management Element | <ul style="list-style-type: none"> ✓ Process Hazards Analysis (PHA) Protocol ✓ Facility Siting Protocol | <ul style="list-style-type: none"> ✓ Product/Service Realization: Planning ✓ Product/Service Realization: Risk Assessment and Management |
| Asset Design and Integrity <ul style="list-style-type: none"> ➤ System Integrity ➤ Mechanical Integrity | <ul style="list-style-type: none"> ✓ Asset Design & Integrity Element ✓ Pre-startup Review (PSR) Element | <ul style="list-style-type: none"> ✓ OSA Participation Action 6: Improve in Preventing and Mitigating High Consequence Well Control incidents ✓ RP 74 – Design Element ✓ RP 74 Maintenance Element ✓ Bulletin 75L – Assurance of Quality & Mechanical Integrity of Critical Equipment Element ✓ Bulletin 75L – Pre-startup Review Element | <ul style="list-style-type: none"> ✓ Operational Controls Element | <ul style="list-style-type: none"> ✓ Mechanical Integrity Protocol ✓ Hydrofluoric Acid (HF) Alkylation/API RP 751 | <ul style="list-style-type: none"> ✓ Product/Service Realization: Design and Development ✓ Product/Service Realization: Production and Servicing Provision (Q1) / Execution of Service(Q2) ✓ Product/Service Realization: Control of Testing, Measuring, and Monitoring Equipment |
| Operational Controls | <ul style="list-style-type: none"> ✓ Procedures Element | <ul style="list-style-type: none"> ✓ OSA Participation Action 2: Implement a Life Saving Actions Program ✓ OSA Participation Action 4: Apply reporting, Investigation and Learning | <ul style="list-style-type: none"> ✓ Operational Controls Element | <ul style="list-style-type: none"> ✓ Operating Practices Protocol ✓ Product Storage & Transfer Protocol ✓ Hydrofluoric Acid (HF) Alkylation/API RP 751 | <ul style="list-style-type: none"> ✓ QMS Requirement: Operational Capability ✓ Product/Service Realization: Purchasing |

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| | | <ul style="list-style-type: none"> Processes, Tools or Methods to Learn and Improve to Prevent SIF ✓ OSA Participation Action 6: Improve in Preventing and Mitigating High Consequence Well Control incidents ✓ RP 74 – Procedures Element ✓ Bulletin 75L – Operating Procedures Element | | | <ul style="list-style-type: none"> ✓ Product/Service Realization: Production and Servicing Provision (Q1) / Execution of Service(Q2) ✓ Product/Service Realization: Control of Testing, Measuring, and Monitoring Equipment |
| Safe Work Management | <ul style="list-style-type: none"> ✓ Safe Work Management and Safe Work Practices Element | <ul style="list-style-type: none"> ✓ OSA Participation Action 3: Ensure Worker Awareness & Knowledge of Life Saving Actions ✓ OSA Participation Action 4: Apply reporting, Investigation and Learning Processes, Tools or Methods to Learn and Improve to Prevent SIF ✓ OSA Participation Action 6: Improve in Preventing and Mitigating High Consequence Well Control incidents ✓ RP 74 – Safe Work Practices Element ✓ Bulletin 75L – Safe Work Practices Element | <ul style="list-style-type: none"> ✓ Operational Controls Element | <ul style="list-style-type: none"> ✓ Safe Work Practices ✓ Product Storage & Transfer Protocol ✓ Hydrofluoric Acid (HF) Alkylation/API RP 751 | <ul style="list-style-type: none"> ✓ QMS Requirement: Operational Capability ✓ Product/Service Realization: Production and Servicing Provision (Q1) / Execution of Service(Q2) |
| Management of Change | <ul style="list-style-type: none"> ✓ Management of Change Element | <ul style="list-style-type: none"> ✓ OSA Participation Action 3: Ensure Worker Awareness & Knowledge of Life Saving Actions ✓ OSA Participation Action 6: Improve in Preventing and Mitigating High Consequence Well Control incidents ✓ RP 74 – Design Element ✓ Bulletin 75L – Procedures to Manage Change Element | <ul style="list-style-type: none"> ✓ Operational Controls Element | <ul style="list-style-type: none"> ✓ Management of Change (MOC) Protocol | <ul style="list-style-type: none"> ✓ Product/Service Realization: Management of Change |
| Knowledge, Skills, and Training | <ul style="list-style-type: none"> ✓ Knowledge and Skills Element | <ul style="list-style-type: none"> ✓ OSA Participation Action 2: Implement a Life Saving Actions Program ✓ OSA Participation Action 4: Apply reporting, Investigation and Learning Processes, Tools or Methods to Learn and Improve to Prevent SIF ✓ RP 74 – Training Element ✓ Bulletin 75L – Training Element | <ul style="list-style-type: none"> ✓ Competence, Awareness, and Training Element | <ul style="list-style-type: none"> ✓ Operating Practices Protocol | <ul style="list-style-type: none"> ✓ QMS Requirement: Operational Capability |

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| Contractor Management | <ul style="list-style-type: none"> ✓ SEMS Interface Management Element | <ul style="list-style-type: none"> ✓ OSA Participation Action 2: Implement a Life Saving Actions Program ✓ OSA Participation Action 3: Ensure Worker Awareness & Knowledge of Life Saving Actions ✓ OSA Participation Action 4: Apply reporting, Investigation and Learning Processes, Tools or Methods to Learn and Improve to Prevent SIF ✓ RP 74 – Contractor Safety & Training Element | <ul style="list-style-type: none"> ✓ Operational Controls Element | <ul style="list-style-type: none"> ✓ Safe Work Practices Protocol | <ul style="list-style-type: none"> ✓ QMS Requirement: Operational Capability ✓ Product/Service Realization: Purchasing ✓ Product/Service Realization: Production and Servicing Provision (Q1) / Execution of Service(Q2) |
| Incident Investigation, Evaluation, and Lessons Learned | <ul style="list-style-type: none"> ✓ Investigating and Learning from Incidents Element | <ul style="list-style-type: none"> ✓ OSA Participation Action 4: Apply reporting, Investigation and Learning Processes, Tools or Methods to Learn and Improve to Prevent SIF ✓ RP 74 – Incident Investigation Element ✓ Bulletin 75L – Investigation of Incidents Element | <ul style="list-style-type: none"> ✓ Incident Investigation, Evaluation, and Lessons Learned Element | <ul style="list-style-type: none"> ✓ Incident Learning Protocol | <ul style="list-style-type: none"> ✓ Product/Service Realization: Control of Nonconforming Product ✓ QMS Monitoring, Measurement, Analysis & Improvement |
| Emergency Preparedness and Response | <ul style="list-style-type: none"> ✓ Emergency Preparedness and Response Element | <ul style="list-style-type: none"> ✓ OSA Participation Action 6: Improve in Preventing and Mitigating High Consequence Well Control incidents ✓ RP 74 – Emergency Response Element ✓ Bulletin 75L – Emergency Response & Control Element | <ul style="list-style-type: none"> ✓ Emergency Preparedness and Response Element | | <ul style="list-style-type: none"> ✓ Product/Service Realization: Contingency Planning ✓ Product/Service Realization: Control of Nonconforming Product |
| Integrity Management Information | <ul style="list-style-type: none"> ✓ SEMS Information Element | <ul style="list-style-type: none"> ✓ OSA Participation Action 4: Apply reporting, Investigation and Learning Processes, Tools or Methods to Learn and Improve to Prevent SIF ✓ OSA Participation Action 6: Improve in Preventing and Mitigating High Consequence Well Control incidents ✓ Bulletin 75L – Safety & Environmental Information Element ✓ Bulletin 75L – Records & Documentation Element | <ul style="list-style-type: none"> ✓ Documentation and Record Keeping Element | <ul style="list-style-type: none"> ✓ Process Hazards Analysis (PHA) Protocol | <ul style="list-style-type: none"> ✓ QMS Requirement: Documentation Requirements ✓ QMS Requirement: Control of Records ✓ Product/Service Realization: Contract Review ✓ QMS Monitoring, Measurement, Analysis, & Improvement |

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| Stakeholder Engagement | <ul style="list-style-type: none"> ✓ SEMS Interface Management Element | <ul style="list-style-type: none"> ✓ OSA Participation Action 1: Participation Commitment to Participate in and support the Onshore Safety Alliance ✓ OSA Participation Action 4: Apply reporting, Investigation and Learning Processes, Tools or Methods to Learn and Improve to Prevent SIF ✓ RP 74 – Safety Element ✓ Bulletin 75L – Audit of SEMS Elements Element | <ul style="list-style-type: none"> ✓ Stakeholder Engagement Element | <ul style="list-style-type: none"> ✓ Incident Learning Protocol | <ul style="list-style-type: none"> ✓ QMS Requirement: Quality Management System ✓ Product/Service Realization: Design and Development ✓ Product/Service Realization: Purchasing ✓ Product/Service Realization: Product Release ✓ Product/Service Realization: Control of Nonconforming Product |