



API Energy Excellence®
Implementation Analysis Tool

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1. Introduction

A. What is API Energy Excellence?

API and its members are committed to advancing safe and responsible petroleum production, transportation, refining, marketing and use, while leading the world in meeting its growing demand for affordable, reliable and ever cleaner energy. API and its members are also committed to enhancing the integrity of operations across the oil and natural gas industry. The API Energy Excellence framework is designed to drive continuous improvement in operational integrity through the application of its thirteen elements. Conformance with the framework's elements are an obligation of API membership for affiliated U.S. assets, and members periodically self-assess and report their progress against each of the thirteen elements to API. The framework and its elements are designed to be flexible and scalable such that members of all sizes and types of operations can effectively utilize it, while leveraging internal management systems and other industry standards and programs.

B. Purpose of API Energy Excellence

The API Energy Excellence framework is designed to drive continuous improvement in operational integrity across the industry through the application of its thirteen elements, which support the API Principles adopted by the Board of Directors in 2019. An ongoing, systematic culture of excellence in driving operational integrity throughout the industry will pay dividends in advancing safety, environmental protection, efficiency and sustainability, while providing a performance foundation for API's advocacy and communications. API Energy Excellence embodies the core values by which API members operate. It is API's commitment to lead the industry through continuously improve performance and safeguard our employees, communities and the environment. API Energy Excellence does not address specific performance-related issues or guarantee particular results. Rather, it fosters a culture of continuous improvement and will allow API to hold members accountable for demonstrating their commitment to operational excellence through annual reporting. In doing so, API Energy Excellence also creates a new lens through which API standards and programs can be leveraged to drive operational integrity.

C. What is Operational Integrity Management?

API Energy Excellence defines Operational Integrity Management as systematically managing safety, health, security, and environmental impacts to achieve continuous improvement of oil and gas production, transportation and refining operations

D. Purpose of Implementation Analysis Tool

The API Energy Excellence Implementation Analysis Tool provides a means to evaluate the maturity of a company's management system against the API Energy Excellence elements using an internal assessment approach. It is designed to provide a means to analyze implementation of the specific elements, considering operations by segment. For each segment, the Tool includes specific references to the primary source [API Segment-Based Performance Management Systems Approaches](#) (e.g. API Recommended Practice 75, API Recommended Practice 74, API Bulletin 75L, API Recommended Practice 1173, the Process Safety Site Assessment Program protocols, API Spec Q1, and API Spec Q2). Each of these segment-specific systems standards and programs include many of the core components of API Energy Excellence and can be leveraged, if implemented, to demonstrate significant conformance to the 13 elements of API Energy Excellence. There is a table included in the Appendix that maps the segment-specific systems standards and programs to the 13 elements of API Energy Excellence for ease in reference for those organizations implementing API Recommended Practice 75, API Recommended Practice 74, Bulletin 75L, API Recommended Practice 1173, the Process Safety Site Assessment Program protocols, API Spec Q1, and API Spec Q2.

Each company will determine its desired level of systems scope, depth, detail and performance objectives and how best to achieve the desired result. The Implementation Analysis Tool is meant to help companies determine their level of implementation to complete and submit the API Energy Excellence Self-Assessment Form to API on an annual basis.

API provides API Member Companies and the public with access to the key industry standards used to support participation in API Energy Excellence and referenced in this Tool. Through the [API Energy Excellence Reading Room](#), representatives can review standards related to systematically managing safety, health, security, and environmental impacts across all segments of the natural gas and oil industry. The standards included cover key areas of operations, including process safety, refinery and chemical plant operations and equipment, offshore drilling, onshore safety, pipeline safety, and public awareness programs. These standards are available for review only, and hard copies and printable versions will continue to be available for purchase at the [API Publications Store](#).

E. What Does “Conformance” to API Energy Excellence Mean?

API Energy Excellence is designed to advance operational integrity in a flexible, scalable way and through the provision of segment-specific resources and support mechanisms. To maintain flexibility for the broad range of API member companies, API does not prescribe minimum requirements for demonstrating “conformance.” Companies can utilize a mixture of internal management systems, API standards, and other programs to support implementation of the 13 core elements of API Energy Excellence. Engineers and Environment, Health, Safety (EHS) experts are encouraged to determine the implementation status for each element based on their subject matter expertise and knowledge of their company’s internal practices.

2. How to Use the Implementation Analysis Tool

A. Explanation of Questions in Implementation Analysis Tool

The Implementation Analysis Tool is organized by segment (e.g. Integrated, Upstream, Midstream, Downstream, and Service/Supply/Manufacturing) and includes each of the 13 elements of API Energy Excellence. The questions included in the Implementation Analysis Tool focus on key areas of implementation for each element and are not meant to all encompassing, but rather a starting point for analysis of implementation progress. The questions included for each element can help a company determine how to complete its Self-Assessment form.

How to Use Implementation Analysis Tool – Examples

Company representatives can use the questions in the Implementation Analysis Tool to evaluate their existing management systems compared to the 13 elements of API Energy Excellence. Based on the responses to the questions, the company can identify the level of implementation for each element (see categories below, which are included in the self-assessment form). In areas where they are facing challenges, API can provide assistance and resources to support each member company's progress towards full implementation.

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options)

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to my company's API membership

Example 1: Downstream Company, Asset Design and Integrity Element

Asset Design and Integrity – The organization manages the integrity of its assets so they are fit for purpose and perform their intended functions throughout their life cycle.

- System Integrity - New operating systems and components are designed and operated together, consistent with specified requirements, recognized engineering practices, and applicable standards. Existing systems are upgraded, serviced and maintained to operate consistent with specified requirements, recognized engineering practices, and applicable standards.
- Mechanical Integrity - The organization implements a process or method for management of equipment and well integrity such that equipment and wells are maintained to operate consistent with specified requirements.

Implementation Analysis Question	Response/Comments (EXAMPLE)
Does the organization maintain current, complete documentation of asset and process design parameters and procedures?	Yes
Has the organization established and implemented a process such that critical equipment is identified,	Yes, but needs to be updated

designed, installed, tested, inspected and maintained in a way that it remains reliable and fit for service?	
Has the organization established a process for facility design, construction and maintenance using recognized engineering practices consistent applicable codes and standards?	Yes
Has the organization established maintenance and inspection programs for equipment, wells and systems so that they operate consistent with specified requirements?	Yes
Does the organization have a process in place for management of safety-critical devices (e.g. PRVs, pressure instrumentation, sensors, etc.)?	Yes
Does the organization conduct safety reviews on new and modified facilities and systems during design and prior to start-up?	No, developing a process.
Does the organization deploy a layers of protection approach through engineering technology, instruments, equipment, facilities, and employees to prevent escalation from a single failure to a catastrophic event?	In process of adding additional technology to prevent escalation of failed equipment.
Does the organization utilize the API 500 series standards, or an equivalent standard, if applicable?	No, in process of upgrading equipment to meet API 500 series requirements.
Does the organization utilize the API 600 series standards, or an equivalent standard, if applicable?	No, in process of upgrading equipment to meet API 600 series requirements.
Does the organization utilize API Standard 653, <i>Tank Inspection, Repair, Alteration, and Reconstruction</i> , or an equivalent standard, if applicable?	No, in process of upgrading equipment to meet API Std 653
Does the organization utilize API Recommended Practice 970, <i>Corrosion Control Documents</i> , or an equivalent standard, if applicable?	Yes
Has the organization utilized the PSSAP Mechanical Integrity Protocol?	No, PSSAP assessment scheduled for 2022.
Has the organization utilized the PSSAP Hydrofluoric Acid (HF) Alkylation/API 751 Protocol, if applicable?	No, PSSAP assessment scheduled for 2022.

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Company Notes/Comments: We estimate we are in partial implementation (approximately **50% implementation**), given some gaps including the fact that we are in the process of upgrading our technology systems and equipment to meet requirements set forth in the API 600 series.

Example 2: Upstream Company, Planning & Risk Management

Planning and Risk Management – The organization identifies hazards, assesses risk, determines and implements mitigating measures, and communicates required actions to affected personnel.

Implementation Analysis Question	Response/Comments
Has the organization developed and implemented a robust process or methods for identifying hazards and assessing risks in onshore and offshore operations?	Yes
Does the organization have a process or methods for periodic assessment and documentation of operational hazards, and implementation of actions to minimize risks, including the assessment of human factors?	Yes
Has the organization developed and implemented a process or methods for identifying and applying risk mitigation measures as appropriate across operations?	Yes
Does the organization evaluate safety risks and make decisions on how to manage it through preventive controls, monitoring, and mitigation measures?	Yes
Does the organization apply a “layers of protection” approach to mitigate operational risks?	Yes
Has the risk management and mitigation process been applied across onshore and/or offshore facilities and operations?	Yes. No onshore operations.
Does the organization have a process for communicating risk mitigation measures to affected employees?	Yes
Does the organization have a process in place where new, unusual, infrequently performed tasks require a risk review with all involved parties, and appropriate management approval before proceeding?	Yes
Does the organization have an effective means to clearly communicate to all employees and contractors the most critical safety systems and work processes in place to ensure life safety? (An example of an approach used by some companies is to develop a set of Life Critical Rules/Life Saving Rules).	Yes. We utilize the IOGP Life Saving Rules as a basis for offshore operations. Each employee goes through training on the Life Saving Rules.
Does the organization utilize the Risk Assessment & Risk Controls and Procedures Elements of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets</i> , or an equivalent standard, if applicable?	Yes
Does the organization utilize API Recommended Practice 14J, <i>Recommended Practice for Design and Hazards Analysis for Offshore Production Facilities</i> , or an equivalent standard, if applicable?	Yes

Does the organization utilize API Recommended Practice 1145, <i>Preparation of Response Plans for Oil Spills from Offshore Facilities</i> , or an equivalent standard, if applicable?	Yes
Does the organization utilize the Safety Element of API Recommended Practice 74, <i>Recommended Practice for Occupational Safety for Onshore Oil and Gas Production Operation</i> , or an equivalent standard, if applicable?	Not applicable – no onshore operations.
Does the organization utilize the Hazard Analysis Element of API Bulletin 75L, <i>Guidance Document for the Development of a Safety and Environmental Management System for Onshore Oil and Natural Gas Production Operations and Associated Activities</i> , or an equivalent document, if applicable?	Not applicable – no onshore operations.
Does the organization utilize OSA Participation Action 5: <i>Perform Risk Assessment for Common Safety Hazards</i> , or an equivalent program, if applicable?	Not applicable – no onshore operations
Does the organization utilize API Recommended Practice 99, <i>Flash Fire Risk Assessment for the Upstream Oil and Gas Industry</i> , or an equivalent standard, if applicable?	We use our own methodology for conducting a Flash Fire Risk Assessment while meeting all requirements of API RP 75.
Does the organization utilize API Bulletin D16, <i>Suggested Procedure for Development of a Spill Prevention and Countermeasure Plan</i> , or an equivalent standard, if applicable?	Yes – as a basis for policies and procedures.

Based on your responses above, please now consider where you fall according to these categories:

- EV** - Evaluating existing company systems against the element
- Partial Implementation (Three Options)**
 - A. 1 – 33%: Initial stages of implementation
 - B. 34 – 66%: Midway through implementation
 - C. 67 – 99%: Implementation almost complete
- FI** – Full implementation of the element
- NA** – Element does not apply to API operations.

Company Notes/Comments: We estimate we are **fully implementing** this element. While we do not utilize API RP 99, we have an internal flash fire risk assessment procedure that is fully documented and followed in order to meet the requirements of API RP 75 and the applicable regulations.

Example 3: Midstream Company – Emergency Preparedness and Response

Emergency Preparedness and Response – The organization prepares for and responds to emergency situations using preparedness plans and procedures that are accessible and communicated to relevant personnel, contractors, emergency responders, and community members.

Implementation Analysis Question	Response/Comments
Has the organization identified the response resources and interfaces, including local emergency responders, for each facility and operation with an emergency response plan?	Yes
Are emergency preparedness and response plans in place and ready for immediate activation at relevant facilities and operations?	Yes
Has the organization communicated emergency response plans and procedures with individuals and organizations with roles and responsibilities?	No. We have internal notification requirements, but are working to finalize the external notification requirements. We expect to have this completed by EOY 2020.
Do the emergency preparedness and response procedures include internal and external notification requirements?	No. We have internal notification requirements, but are working to finalize the external notification requirements. We expect to have this completed by EOY 2020.
Has training and/or drills been conducted with affected personnel and emergency response personnel?	No
Do the emergency preparedness and response procedures include periodic review and updating of the plans?	No, we plan to incorporate periodic review into the finalized plans. Expected by EOY 2020.
Does the organization utilize the Emergency Preparedness and Response Element of API Recommended Practice 1173, <i>Pipeline Safety Management Systems</i> , or an equivalent standard, if applicable?	Yes. We are in the beginning stages of building our Pipeline SMS based on RP 1173.
Does the organization utilize API Recommended Practice 1112, <i>Developing a Highway Emergency Response Plan for Incidents Involving Hazardous Materials</i> , if applicable?	Not applicable as we are a pipeline operator.
Does the organization utilize API Recommended Practice 1174, <i>Recommended Practice for Onshore Hazardous Liquid Pipeline Emergency Preparedness and Response</i> , or an equivalent standard, if applicable?	Yes, we are using this standard as we develop our emergency preparedness and response procedures as part of the PSMS.

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options)

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Company Notes/Comments: We are in the partial implementation stage (**approximately 30% complete**) as we are still finalizing our emergency preparedness plans using guidance from API RP 1173. We expect to have plans finalized by the end of 2020 and a public awareness plan by the end of 2021.

3. Integrated Company Guide

A. Introduction

The questions included for each element relate to integrated companies’ operations. The questions included in the Implementation Analysis Tool focus on key areas of implementation for each element and are not meant to all encompassing, but rather a starting point for analysis of implementation progress. The questions included for each element can help a company determine how to complete its Self-Assessment form.

B. API Energy Excellence Elements and Implementation Analysis Questions

1. **Leadership Commitment to Operational Integrity** – The organization establishes, implements, and maintains an effective performance management system that drives improvement of operational integrity. Management builds a culture of operational integrity and communicates expectations by documenting policies, goals, and commitments, as well as identifying responsibilities of personnel at all levels.

Implementation Analysis Question	Response/Comments
Has the organization established and documented the operational integrity goals and objectives for the organization’s performance management system?	
Does the organization have policies in place that cover operational integrity?	
Does the organization periodically review progress against established goals and adjust policies, goals and commitments as needed to drive improvement in operational integrity?	
Has the organization established a culture of operational integrity throughout the organization in which employees understand goals and responsibilities, and have access to resources for implementation?	
Has the organization ensured that the 13 elements of the performance management framework are in place, with clear expectations and accountability established for implementation?	
Does the organization encourage engagement and responsibility for operational integrity at all levels of the organization?	
Does leadership clearly articulate that all employees and contractors have the authority to stop unsafe work, and has leadership demonstrated through their actions their support for this concept?	
Does leadership clearly articulate and demonstrate that stop work authority can be exercised without fear of retaliation?	

For upstream offshore operations, does the organization utilize the Leadership Element of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets</i> , or an equivalent standard, if applicable?	
For upstream onshore operations, does the organization utilize API Bulletin 75L, <i>Guidance Document for the Development of a Safety and Environmental Management System for Onshore Oil and Natural Gas Production Operations and Associated Activities</i> or an equivalent standard, if applicable?	
For midstream operations, does the organization utilize the Leadership and Management Commitment Element API Recommended Practice 1173, <i>Pipeline Safety Management Systems</i> , or an equivalent standard, if applicable?	
For downstream operations, has the organization utilized the API Process Safety Site Assessment Program (PSSAP) Process Safety Leadership Protocol?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element
Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

2. **System Establishment, Assessment and Continuous Improvement** – The organization establishes targets for its performance management system and implements a process to periodically evaluate its conformance to system elements and progress toward operational integrity goals. The organization uses the evaluation results to take actions to address non-conformances and continuously improve its performance management system and drive operational integrity.

Implementation Analysis Question	Response/Comments
Does the organization establish operational integrity goals to be achieved through implementation of its management system?	
Does the organization periodically assess its progress against its operational integrity goals and make adjustments as appropriate?	
Does the organization execute a process to evaluate its conformance with its management system?	
Has the organization identified system and/or performance gaps against objectives and associated corrective actions to address them?	
Does the organization implement systems improvements to achieve operational integrity goals?	
For upstream offshore operations, does the organization utilize the Evaluation and Improvement of SEMS Element of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets</i> , or an equivalent standard, if applicable?	
For upstream onshore operations, does the organization utilize the Audit of SEMS Elements Element of API Bulletin 75L, <i>Guidance Document for the Development of a Safety and Environmental Management System for Onshore Oil and Natural Gas Production Operations and Associated Activities</i> , or an equivalent document, if applicable?	
For midstream operations, does the organization utilize the Safety Assurance and Management Review & Continuous Improvement Elements of API Recommended Practice 1173, <i>Pipeline Safety Management Systems</i> , or an equivalent standard, if applicable?	
For downstream operations, has the organization utilized the PSSAP Process Safety Leadership Protocol?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options)

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

3. **Planning and Risk Management** – The organization identifies hazards, assesses risk, determines and implements mitigating measures, and communicates required actions to affected personnel.

Implementation Analysis Question	Response/Comments
Has the organization developed and implemented a robust process for identifying hazards and assessing risks?	
Does the organization have a process for periodic assessment and documentation of operational hazards, and implementation of actions to minimize risks, including the assessment of human factors?	
Has the organization developed and implemented a process for identifying and applying risk mitigation measures as appropriate across operations?	
Does the organization evaluate safety risks and make decisions on how to manage it through preventive controls, monitoring, and mitigation measures?	
Does the organization apply a “layers of protection” approach to mitigate operational risks?	
Has the risk management and mitigation process been applied across facilities and operations?	
Does the organization have a process for communicating risk mitigation measures to affected employees?	
Does the organization have a process in place where new, unusual, infrequently performed tasks require a risk review with all involved parties, and appropriate management approval before proceeding?	
Does the organization have an effective means to clearly communicate to all employees and contractors the most critical safety systems and work processes in place to ensure life safety? (An example of an approach used by some companies is to develop a set of Life Critical Rules/Life Saving Rules).	
For upstream offshore operations, does the organization utilize the Risk Assessment & Risk Controls and Procedures Elements of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets</i> , or an equivalent standard, if applicable?	

<p>For upstream onshore operations, does the organization utilize the Hazard Analysis Element of API Bulletin 75L, <i>Guidance Document for the Development of a Safety and Environmental Management System for Onshore Oil and Natural Gas Production Operations and Associated Activities</i>, or an equivalent document, if applicable?</p>	
<p>For midstream operations, does the organization utilize the Risk Management Element of API Recommended Practice 1173, <i>Pipeline Safety Management System</i>, or an equivalent standard, if applicable?</p>	
<p>For downstream operations, has the organization utilized the PSSAP Process Hazards Analysis (PHA) Protocol and/or the PSSAP Facility Siting Protocol?</p>	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

4. **Asset Design and Integrity** – The organization manages the integrity of its assets so they are fit for purpose and perform their intended functions throughout their life cycle.
- System Integrity - New operating systems and components are designed and operated together, consistent with specified requirements, recognized engineering practices, and applicable standards. Existing systems are upgraded, serviced and maintained to operate consistent with specified requirements, recognized engineering practices, and applicable standards.
 - Mechanical Integrity - The organization implements a process or method for management of equipment and well integrity such that equipment and wells are maintained to operate consistent with specified requirements.

Implementation Analysis Question	Response/Comments
Does the organization maintain current, complete documentation of asset and process design parameters and procedures?	
Has the organization established and implemented a process such that critical equipment is identified, designed, installed, tested, inspected and maintained in a way that it remains reliable and fit for service?	
Has the organization established a process for facility design, construction and maintenance using recognized engineering practices, consistent applicable codes and standards?	
Has the organization established maintenance and inspection programs for equipment, wells and systems so that they operate consistent with specified requirements?	
Does the organization have a process in place for management of safety-critical devices (e.g. PRVs, pressure instrumentation, sensors, etc.)?	
Does the organization conduct safety reviews on new and modified facilities and systems during design and prior to start-up?	
Does the organization deploy a layers of protection approach through engineering technology, instruments, equipment, facilities, and employees to prevent escalation from a single failure to a catastrophic event?	
Does the organization have a system to manage operation of equipment within safe operating windows?	
Does the organization have a system to properly manage bypassing of safety systems, devices and equipment?	
For upstream offshore operations, does the organization utilize the Asset Design & Integrity and Pre-Startup Review Elements of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets</i> , or an equivalent standard, if applicable?	
For upstream onshore operations, does the organization utilize the Assurance of Quality & Mechanical Integrity of Critical Equipment and the Pre-startup Review Elements of API Bulletin 75L, <i>Guidance Document for the Development of a Safety and Environmental Management System for Onshore Oil and Natural Gas Production</i>	

<i>Operations and Associated Activities</i> , or an equivalent document, if applicable?	
For midstream operations, does the organization utilize the Operational Controls Element of API Recommended Practice 1173, <i>Pipeline Safety Management Systems</i> , or an equivalent standard, if applicable?	
For downstream operations, has the organization utilized the PSSAP Mechanical Integrity Protocol or the PSSAP Hydrofluoric Acid (HF) Alkylation/API 751 Protocol, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

- EV** - Evaluating existing company systems against the element
- Partial Implementation (Three Options)** –
 - A. 1 – 33%: Initial stages of implementation
 - B. 34 – 66%: Midway through implementation
 - C. 67 – 99%: Implementation almost complete
- FI** – Full implementation of the element
- NA** – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

5. **Operational Controls** – The organization develops and implements controls including procedures, practices, and/or training to maintain operational integrity.

Implementation Analysis Question	Response/Comments
Does the organization established and maintain current written operating procedures and processes in place for maintaining operational integrity?	
Do operators and other affected personnel receive written operating procedures during their initial job certification or training?	
In cases where an employee believes that following a procedure will cause an unsafe condition, does he/she have authority to stop work and seek permission to deviate?	
Does the organization have in place a training program for employees that includes initial and ongoing training to provide knowledge on safely performing their job functions?	
Do operators and other affected personnel review operating procedures as a requirement for refresher training?	

Does the organization conduct behavioral job analyses or other audits to determine if written procedures are followed?	
For upstream offshore operations, does the organization utilize the Procedures Element of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets</i> , or an equivalent standard, if applicable?	
For upstream onshore operations, does the organization utilize the Operating Procedures Element of API Bulletin 75L, <i>Guidance Document for the Development of a Safety and Environmental Management System for Onshore Oil and Natural Gas Production Operations and Associated Activities</i> , or an equivalent document, if applicable?	
For midstream operations, does the organization utilize the Operational Controls Element of API Recommended Practice 1173, <i>Pipeline Safety Management Systems</i> , or an equivalent standard, if applicable?	
For downstream operations, has the organization used the PSSAP Operating Practices Protocol, the PSSAP Product Storage & Transfer Protocol, and/or the PSSAP Hydrofluoric Acid (HF) Alkylation/API 751 Protocol, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

6. **Safe Work Management** – The organization establishes, documents and executes processes, procedures, and practices to maintain control of work and minimize potential risk to people, the environment and property.

Implementation Analysis Question	Response/Comments
Does the organization maintain procedures that address safe work practices to assure the safe conduct of operating, maintenance, and emergency response activities and the control of materials that impact operational integrity?	
Does the organization implement work permit procedures and conduct audits against them?	
Does the organization implement a behavioral-based safety program or equivalent program to determine whether safe work is being implemented in the field?	
Does the organization have a process whereby high-risk work is reviewed and requires higher level sign-off before the work can begin?	
Does the organization control access to high risk areas and have a process in place for identifying those areas, and for managing times of higher risk such as startups, shutdowns and upset operations?	
Are training programs developed and implemented for safe work procedures?	
Are refresher training programs provided to ensure continual adherence to all safe work procedures?	
Does the organization have in place robust work permit and hazardous energy control procedures?	
For upstream offshore operations, does the organization utilize the Safe Work Management and Safe Work Practices Element of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets</i> , or an equivalent standard, if applicable?	
For upstream onshore operations, does the organization utilize the Safe Work Practices Element of API Bulletin 75L, <i>Guidance Document for the Development of a Safety and Environmental Management System for Onshore Oil and Natural Gas Production Operations and Associated Activities</i> , or an equivalent document, if applicable?	
For midstream operations, does the organization utilize the Operational Controls Element of API Recommended Practice 1173, <i>Pipeline Safety Management Systems</i> , or an equivalent standard, if applicable?	
For downstream operations, has the organization used the PSSAP Safe Work Practices Protocol, the PSSAP Product Storage & Transfer Protocol, and/or the PSSAP Hydrofluoric Acid (HF) Alkylation/API 751 Protocol, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

- 7. **Management of Change** – The organization implements a process to manage changes that can affect operational integrity, including initiating actions, required analysis, and necessary approvals prior to introduction of changes. Changes can include changes in processes, equipment, and personnel.

Implementation Analysis Question	Response/Comments
Does the organization implement processes to manage changes to processes, equipment and personnel to maintain or enhance operational integrity design and conditions?	
Are there clearly established initiating actions that trigger the organization’s management of change process?	
Are there requirements authorizing both temporary and permanent changes in processes, equipment, or personnel?	
Are there clearly defined roles and responsibilities for initiating, assessing and approving changes to equipment, processes and personnel to maintain or enhance operational integrity?	
Does the organization’s management of change process address organizational and personnel changes as well as equipment and process changes?	
Has the organization’s management of change processes been audited or assessed, either internally or by an external party?	
For upstream offshore operations, does the organization utilize the Management of Change Element of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets</i> , or an equivalent standard, if applicable?	

For upstream onshore operations, does the organization utilize the Procedures to Manage Change Element of API Bulletin 75L, <i>Guidance Document for the Development of a Safety and Environmental Management System for Onshore Oil and Natural Gas Production Operations and Associated Activities</i> , or an equivalent document, if applicable?	
For midstream operations, does the organization utilize the Operational Controls Element of API Recommended Practice 1173, <i>Pipeline Safety Management Systems</i> , or an equivalent standard, if applicable?	
For downstream operations, has the organization utilized the PSSAP Management of Change Protocol?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

- 8. **Knowledge, Skills, and Training** – The organization implements a process to define required knowledge and skills and executes training such that individuals who make operational integrity decisions can perform their assigned roles and tasks.

Implementation Analysis Question	Response/Comments
Has the organization developed an inventory of required knowledge and skills by function related to operational integrity?	
Does the organization have a process for the identification of new skills and knowledge requirements related to operational integrity when operations and assets change?	
Does the organization provide training for affected employees to reach and maintain proficiency in safe work practices and the skills and knowledge necessary to perform their job?	

Does the organization have programs designed to assure that employees in safety critical jobs are fit for duty and are not compromised by external influences, including alcohol and drug abuse?	
Are training programs developed and used for safe work procedures?	
Does the organization provide training to managers required to make critical operational integrity decisions?	
Is periodic face-to-face or hands-on training provided for work processes that are in place in support of life critical rules?	
For upstream offshore operations, does the organization utilize the Knowledge & Skills Element of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets</i> , or an equivalent standard, if applicable?	
For upstream onshore operations, does the organization utilize the Training Element of API Bulletin 75L, <i>Guidance Document for the Development of a Safety and Environmental Management System for Onshore Oil and Natural Gas Production Operations and Associated Activities</i> , or an equivalent document, if applicable?	
For midstream operations, does the organization utilize the Competence, Awareness, and Training Element of API Recommended Practice 1173, <i>Pipeline Safety Management Systems</i> , or an equivalent standard, if applicable?	
For downstream operations, has the organization utilized the PSSAP Operating Practices Protocol?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

9. **Contractor Management** – The organization establishes requirements and implements processes to plan, coordinate, and execute work with contractors and subcontractors in adherence with performance management system targets.

Implementation Analysis Question	Response/Comments
Where contractors are in a function critical to operational integrity, does the organization assure that they have the requisite competency?	
Does the organization have procedures to ensure contractors implement programs consistent with its own operational integrity requirements?	
Does the organization have a process for reviewing contractor safety performance prior to hiring (e.g., pre-qualification process)?	
Does the organization have a process to ensure contractors are adequately trained in the skills to safely execute their work?	
Are contractors adequately trained in the company’s permitting, safe work and other procedures such that work can be safely performed, consistent with the organization’s operational integrity expectations?	
Does the organization clearly define roles and responsibilities with its critical contractors and subcontractors to maintain operational integrity?	
Does the organization have a process in place to periodically review contractor programs and performance, and make improvements if needed?	
For upstream offshore operations, does the organization utilize the SEMS Interface Management Element of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets</i> , or an equivalent standard, if applicable?	
For upstream onshore operations, does the organization utilize the Contractor Safety & Training Element of API Recommended Practice 74, <i>Recommended Practice for Occupational Safety for Onshore Oil and Gas Production Operation</i> , or an equivalent standard, if applicable?	
For midstream operations, does the organization utilize the Operational Controls Element of API Recommended Practice 1173, <i>Pipeline Safety Management Systems</i> , or an equivalent standard, if applicable?	
For downstream operations, does the organization utilize API Recommended Practice 2221, <i>Contractor and Owner Safety Program Implementation</i> , or an equivalent standard, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

10. Incident Investigation, Evaluation, and Lessons Learned – The organization investigates integrity incidents to identify causes and implements actions to mitigate future incidents.

Implementation Analysis Question	Response/Comments
Does the organization implement a process so that incidents with actual or potential serious operational integrity consequences are investigated to learn and prevent a recurrence of similar incidents?	
Are incidents reported to management and tracked over time?	
Are near misses investigated?	
Does the investigation process take human factors into account?	
Does the incident investigation determine the cause(s) of the incidents?	
Does the incident investigation process include communicating the incident learnings to affected personnel and taking action to prevent recurrence?	
Has management created a culture within the organization that encourages openness and dialogue that encourages reporting of incidents and near misses such that the risk of recurrence is reduced?	
Does management have a no-retaliation policy in place for reporting incidents and near-misses?	
Are corrective actions identified and implemented to reasonably reduce the likelihood of a repeat occurrence, including findings applicable across like operations/processes within the organization?	

For upstream offshore operations, does the organization utilize the Investigating and Learning from Incidents Element of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets</i> , or an equivalent standard, if applicable?	
For upstream onshore operations, does the organization utilize the Investigation of Incidents Element of API Bulletin 75L, <i>Guidance Document for the Development of a Safety and Environmental Management System for Onshore Oil and Natural Gas Production Operations and Associated Activities</i> , or an equivalent document, if applicable?	
For midstream operations, does the organization utilize the Incident Investigation, Evaluation, and Lessons Learned Element of API Recommended Practice 1173, <i>Pipeline Safety Management Systems</i> , or an equivalent standard, if applicable?	
For downstream operations, has the organization utilized the PSSAP Incident Learning Protocol?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

11. **Emergency Preparedness and Response** – The organization prepares for and responds to emergency situations using preparedness plans and procedures that are accessible and communicated to relevant personnel, contractors, emergency responders, and community members.

Implementation Analysis Question	Response/Comments
Has the organization identified the response resources and interfaces, including local emergency responders, for each facility and operation with an emergency response plan?	
Are emergency preparedness and response plans in place and ready for immediate activation at relevant facilities and operations?	
Has the organization communicated emergency response plans and procedures with individuals and organizations with roles and responsibilities?	
Do the emergency preparedness and response procedures include internal and external notification requirements?	
Has training and/or drills been conducted with affected personnel and emergency response personnel?	
Do the emergency preparedness and response procedures include periodic review and updating of the plans?	
For upstream offshore operations, does the organization utilize the Emergency Preparedness and Response Element of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets</i> , or an equivalent standard, if applicable?	
For upstream onshore operations, does the organization utilize the Emergency Response & Control Element of API Bulletin 75L, <i>Guidance Document for the Development of a Safety and Environmental Management System for Onshore Oil and Natural Gas Production Operations and Associated Activities</i> , or an equivalent document, if applicable?	
For midstream operations, does the organization utilize the Emergency Preparedness and Response Element of API Recommended Practice 1173, <i>Pipeline Safety Management Systems</i> , or an equivalent standard, if applicable?	
For downstream operations, does the organization utilize API Recommended Practice 2001, <i>Fire Protection in Refineries</i> , or an equivalent standard, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

12. Integrity Management Information – The organization implements processes for the identification, distribution, and control of critical information related to operating and maintaining operational integrity.

Implementation Analysis Question	Response/Comments
Does the organization maintain a procedure for the identification, distribution, and control of information related to operational integrity?	
Does the information control procedure specify responsibilities for the approval and dissemination of operational integrity information such that policies, procedures and practices are reviewed and approved for adequacy prior to issue and use?	
Does the organization’s system for maintaining information related to operational integrity allow employees for ready access to current, relevant policies, processes, practices and specifications?	
Does the organization periodically assess whether its operational integrity information management process is effective and operating according to design?	
For upstream offshore operations, does the organization utilize the SEMS Information Element of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets</i> , or an equivalent standard, if applicable?	

For upstream onshore operations, does the organization utilize the Safety & Environmental Information and the Records & Documentation Elements of API Bulletin 75L, <i>Guidance Document for the Development of a Safety and Environmental Management System for Onshore Oil and Natural Gas Production Operations and Associated Activities</i> , or an equivalent document, if applicable?	
For midstream operations, does the organization utilize the Documentation and Record Keeping Element of API Recommended Practice 1173, <i>Pipeline Safety Management Systems</i> , or an equivalent standard, if applicable?	
For downstream operations, has the organization utilized the PSSAP Process Hazards Analysis (PHA) Protocol?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

13. Stakeholder Engagement – The organization develops and implements a process to communicate its commitment to operational integrity through engagement with employees, regulators, community members, customers, suppliers, and other stakeholders.

Implementation Analysis Question	Response/Comments
Has the organization identified key internal and external stakeholders with who it will engage regarding its operational integrity commitment?	
Has the organization communicated its commitment to continuously improving operational integrity with internal and external stakeholders?	
Does the organization implement a process to consult with identified employees on ways to drive continuous improvement in operational integrity?	

Does the organization promote engagement and leadership in driving safety, environmental protection and security at all levels of the organization?	
For upstream offshore operations, does the organization utilize the SEMS Interface Management Element of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets</i> , or an equivalent standard, if applicable?	
For upstream onshore operations, does the organization utilize the Safety Element of API Recommended Practice 74, <i>Recommended Practice for Occupational Safety for Onshore Oil and Gas Production Operation</i> , or an equivalent standard, if applicable?	
For midstream operations, does the organization utilize the Stakeholder Engagement Element of API Recommended Practice 1173, <i>Pipeline Safety Management Systems</i> , or an equivalent standard, if applicable?	
For downstream operations, has the organization utilized the PSSAP Incident Learning Protocol?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

4. Upstream Company Guide

A. Introduction

The questions included for each element related to upstream companies' operations. The questions included in the Implementation Analysis Tool focus on key areas of implementation for each element and are not meant to all encompassing, but rather a starting point for analysis of implementation progress. The questions included for each element can help a company determine how to complete its Self-Assessment form.

As a starting point for implementation for offshore upstream operations, API Recommended Practice 75, *Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets*, includes many of the core components of API Energy Excellence. While API RP 75 mainly focuses on offshore Safety and Environmental Management Systems (SEMS), implementation can be used as a baseline to help companies demonstrate significant conformance to the 13 elements of API Energy Excellence

For API member companies operating offshore and implementing API RP 75, please refer to the Center for Offshore Safety's Guidelines for SEMS Maturity Self-Assessments (COS-3-03) for additional details on evaluating the maturity of their offshore Safety and Environmental Management System (SEMS).

As a starting point for implementation for upstream onshore operations, API RP 74, *Recommended Practice for Occupational Safety for Onshore Oil and Gas Production Operations*, and API Bulletin 75L, *Guidance Document for the Development of a Safety and Environmental Management System for Onshore Oil and Natural Gas Production Operations and Associated Activities*, includes many of the core components of the API Energy Excellence elements. While API RP 74 and API Bulletin 75L mainly focus on onshore Safety and Environmental Management Systems (SEMS) and occupational safety, implementation can help companies demonstrate significant conformance to the 13 elements of API Energy Excellence.

For API members participating in the [Onshore Safety Alliance](#) (OSA), the five focus areas and six participant actions support implementation of many of the 13 elements of API Energy Excellence. The OSA framework is modelled on a simplified safety management foundational framework, which can help demonstrate conformance to the 13 API Energy Excellence elements.

B. API Energy Excellence Elements and Implementation Analysis Questions

Note: In the questions below, all questions in **BLACK INK** apply to upstream operations **both onshore and offshore**. Questions in **BLUE INK** apply to only **upstream offshore operations**. Questions in **RED INK** apply to only **upstream onshore operations**.

1. **Leadership Commitment to Operational Integrity** – The organization establishes, implements, and maintains an effective performance management system that drives improvement of operational integrity. Management builds a culture of operational integrity and communicates expectations by documenting policies, goals, and commitments, as well as identifying responsibilities of personnel at all levels.

Implementation Analysis Question	Response/Comments
Has management established and documented operational integrity goals and objectives for the organization’s performance management system?	
Does the organization have policies or methods in place which cover operational integrity in offshore and onshore operations, as appropriate?	
Does management periodically review progress against established goals and adjust policies, methods, goals and commitments as needed to drive improvement in operational integrity?	
Has management established a culture of operational integrity throughout the organization in which employees understand goals and responsibilities, and have access to resources for implementation?	
Has management ensured that 13 elements of the performance management framework are in place, with clear expectations and accountability established for implementation?	
Does management encourage engagement and responsibility for operational integrity at all levels of the organization?	
Does leadership clearly articulate that all employees and contractors have the authority to stop unsafe work, and has leadership demonstrated through their actions their support for this concept?	
Does leadership clearly articulate and demonstrate that stop work authority can be exercised without fear of retaliation?	
Does the organization utilize the Leadership Element of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets</i> , or an equivalent standard, if applicable?	

<p>Does the organization utilize <i>API Bulletin 75L, Guidance Document for the Development of a Safety and Environmental Management System for Onshore Oil and Natural Gas Production Operations and Associated Activities</i>, or an equivalent document, if applicable?</p>	
<p>Does your organization utilize <i>OSA Participation Action 1: Participation Commitment to Participate in and support the Onshore Safety Alliance</i> or an equivalent program, if applicable?</p>	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

2. **System Establishment, Assessment and Continuous Improvement** – The organization establishes targets for its performance management system and implements a process to periodically evaluate its conformance to system elements and progress toward operational integrity goals. The organization uses the evaluation results to take actions to address non-conformances and continuously improve its performance management system and drive operational integrity.

Implementation Analysis Question	Response/Comments
<p>Does the organization establish operational integrity goals to be achieved through implementation of a management system or applicable practices?</p>	
<p>Does the organization periodically assess its progress against its operational integrity goals and make adjustments as appropriate?</p>	
<p>Does the organization execute a process to evaluate its conformance with its management system?</p>	

Has the organization identified system and/or performance gaps against objectives and associated corrective actions to address them?	
Does the organization implement systems improvements to achieve operational integrity goals?	
Does the organization utilize the Evaluation and Improvement of SEMS Element of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets</i> , or an equivalent standard, if applicable?	
Does the organization utilize the Safety Element of API Recommended Practice 74, <i>Recommended Practice for Occupational Safety for Onshore Oil and Gas Production Operation</i> , or an equivalent standard, if applicable?	
Does the organization utilize the Audit of SEMS Elements Element of API Bulletin 75L, <i>Guidance Document for the Development of a Safety and Environmental Management System for Onshore Oil and Natural Gas Production Operations and Associated Activities</i> , or an equivalent document, if applicable?	
Does the organization utilize <i>OSA Participation Action 4: Appy reporting, Investigation and Learning Processes, Tools or Methods to Learn and Improve to Prevent SIF</i> and <i>OSA Participation Action 6: Improve in Preventing and Mitigating High Consequence Well Control incidents</i> , or an equivalent program, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

3. **Planning and Risk Management** – The organization identifies hazards, assesses risk, determines and implements mitigating measures, and communicates required actions to affected personnel.

Implementation Analysis Question	Response/Comments
Has the organization developed and implemented a robust process or methods for identifying hazards and assessing risks in onshore and offshore operations?	
Does the organization have a process or methods for periodic assessment and documentation of operational hazards, and implementation of actions to minimize risks, including the assessment of human factors?	
Has the organization developed and implemented a process or methods for identifying and applying risk mitigation measures as appropriate across operations?	
Does the organization evaluate safety risks and make decisions on how to manage it through preventive controls, monitoring, and mitigation measures?	
Does the organization apply a “layers of protection” approach to mitigate operational risks?	
Has the risk management and mitigation process been applied across onshore and/or offshore facilities and operations?	
Does the organization have a process for communicating risk mitigation measures to affected employees?	
Does the organization have a process in place where new, unusual, infrequently performed tasks require a risk review with all involved parties, and appropriate management approval before proceeding?	
Does the organization have an effective means to clearly communicate to all employees and contractors the most critical safety systems and work processes in place to ensure life safety? (An example of an approach used by some companies is to develop a set of Life Critical Rules/Life Saving Rules).	
Does the organization utilize the Risk Assessment & Risk Controls and Procedures Elements of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 14J, <i>Recommended Practice for Design and Hazards Analysis for Offshore Production Facilities</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 1145, <i>Preparation of Response Plans for Oil</i>	

<i>Spills from Offshore Facilities, or an equivalent standard, if applicable?</i>	
<i>Does the organization utilize the Safety Element of API Recommended Practice 74, Recommended Practice for Occupational Safety for Onshore Oil and Gas Production Operation, or an equivalent standard, if applicable?</i>	
<i>Does the organization utilize the Hazard Analysis Element of API Bulletin 75L, Guidance Document for the Development of a Safety and Environmental Management System for Onshore Oil and Natural Gas Production Operations and Associated Activities, or an equivalent document, if applicable?</i>	
<i>Does the organization utilize OSA Participation Action 5: Perform Risk Assessment for Common Safety Hazards, or an equivalent program, if applicable?</i>	
<i>Does the organization utilize API Recommended Practice 99, Flash Fire Risk Assessment for the Upstream Oil and Gas Industry, or an equivalent standard, if applicable?</i>	
<i>Does the organization utilize API Bulletin D16, Suggested Procedure for Development of a Spill Prevention and Countermeasure Plan, or an equivalent standard, if applicable?</i>	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

4. **Asset Design and Integrity** – The organization manages the integrity of its assets so they are fit for purpose and perform their intended functions throughout their life cycle.
- System Integrity - New operating systems and components are designed and operated together, consistent with specified requirements, recognized engineering practices, and applicable standards. Existing systems are upgraded, serviced and maintained to operate consistent with specified requirements, recognized engineering practices, and applicable standards.
 - Mechanical Integrity - The organization implements a process or method for management of equipment and well integrity such that equipment and wells are maintained to operate consistent with specified requirements.

Implementation Analysis Question	Response/Comments
Does the organization maintain current, complete documentation of critical asset and process design parameters and procedures?	
Has the organization established and implemented a process or methods such that critical equipment is identified, designed, installed, tested, inspected and maintained in a way that it remains reliable and fit for service?	
Has the organization established a process or methods for facility design, construction and maintenance using recognized engineering practices, consistent applicable codes or standards?	
Has the organization established maintenance and inspection programs for equipment, wells and systems so that they operate consistent with specified requirements?	
Does the organization have a process in place for management of safety-critical devices (e.g. PRVs, pressure instrumentation, sensors, etc.)?	
Does the organization conduct safety reviews on new and modified facilities and systems during design and prior to start-up?	
Does the organization deploy a layers of protection approach through engineering technology, instruments, equipment, facilities, and employees to prevent escalation from a single failure to a catastrophic event?	
Does the organization have a system or methods to manage operation of equipment within safe operating windows?	
Does the organization have a system to properly manage bypassing of safety systems, devices and equipment?	
Does the organization utilize the Asset Design & Integrity and Pre-Startup Review Elements of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for</i>	

Offshore Operations and Assets, or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 14J, <i>Recommended Practice for Design and Hazards Analysis for Offshore Production Facilities</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 96, <i>Deepwater Well Design and Construction</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 100-1, <i>Hydraulic Fracturing – Well Integrity and Fracture Containment</i> , or an equivalent standard, if applicable?	
Does the organization utilize the Design and Maintenance Elements of API Recommended Practice 74, <i>Recommended Practice for Occupational Safety for Onshore Oil and Gas Production Operation</i> , or an equivalent standard, if applicable?	
Does the organization utilize the Assurance of Quality & Mechanical Integrity of Critical Equipment and the Pre-startup Review Elements of API Bulletin 75L, <i>Guidance Document for the Development of a Safety and Environmental Management System for Onshore Oil and Natural Gas Production Operations and Associated Activities</i> , or an equivalent document, if applicable?	
Does the organization utilize OSA Participation Action 6: <i>Improve in Preventing and Mitigating High Consequence Well Control incidents</i> , or an equivalent program, if applicable?	
Does the organization utilize API Standard 53, <i>Well Control Equipment Systems for Drilling Wells</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Spec 10A, <i>Cements and Materials for Well Cementing</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 59, <i>Recommended Practice for Well Control Operations</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Spec 5CT, <i>Casing and Tubing</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Spec 6A, <i>Specification for Wellhead and Tree Equipment</i> , or an equivalent standard, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

- 5. **Operational Controls** – The organization develops and implements controls including procedures, practices, and/or training to maintain operational integrity.

Implementation Analysis Question	Response/Comments
Does the organization established and maintain current written operating procedures, processes, and/or methods in place for maintaining operational integrity?	
Do operators and other affected personnel receive written operating procedures during their initial job certification or training?	
In cases where an employee believes that following a procedure will cause an unsafe condition, does he/she have authority to stop work and seek permission to deviate?	
Does the organization have in place a training program for employees that includes initial and ongoing training to provide knowledge on safely performing their job functions?	
Do operators and other affected personnel review operating procedures, processes, or methods as a requirement for refresher training?	
Does the organization conduct behavioral job analyses or other audits to determine if methods and written procedures are followed?	
Does the organization utilize Procedures Element of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets</i> , or an equivalent standard, if applicable?	

Does the organization utilize API Recommended Practice 51, <i>Onshore Oil and Gas Production Practices for Protection of the Environment</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 70, <i>Security for Onshore Oil and Natural Gas Operations</i> , or an equivalent standard, if applicable?	
Does the organization utilize the Procedures Element of API Recommended Practice 74, <i>Recommended Practice for Occupational Safety for Onshore Oil and Gas Production Operation</i> , or an equivalent standard, if applicable?	
Does the organization utilize the Operating Procedures Element of API Bulletin 75L, <i>Guidance Document for the Development of a Safety and Environmental Management System for Onshore Oil and Natural Gas Production Operations and Associated Activities</i> , or an equivalent document, if applicable?	
Does the organization utilize API Guide HF2, <i>Water Management Associated with Hydraulic Fracturing</i> , or an equivalent standard, if applicable?	
Does the organization utilize OSA Participation Action 2: <i>Implement a Life-Saving Actions Program</i> , OSA Participation Action 4: <i>Apply reporting, Investigation and Learning Processes, Tools or Methods to Learn and Improve to Prevent SIF</i> , and OSA Participation Action 6: <i>Improve in Preventing and Mitigating High Consequence Well Control incidents</i> , or an equivalent program, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

6. **Safe Work Management** – The organization establishes, documents and executes processes, procedures, and practices to maintain control of work and minimize potential risk to people, the environment and property.

Implementation Analysis Question	Response/Comments
Does the organization maintain procedures and/or methods that address safe work practices to assure the safe conduct of operating, maintenance, and emergency response activities and the control of materials that impact operational integrity?	
Does the organization implement work permit procedures or methods and conduct audits against them?	
Does the organization implement a behavioral-based safety program or equivalent program to determine whether safe work is being implemented in the field?	
Does the organization have a process or method whereby high-risk work is reviewed and requires higher level sign-off before the work can begin?	
Does the organization control access to high risk areas and have a process or method in place for identifying those areas, and for managing times of higher risk such as startups, shutdowns and upset operations?	
Are training programs developed and implemented for safe work procedures?	
Are refresher training programs provided to ensure continual adherence to all safe work procedures?	
Does the organization have in place robust work permit and hazardous energy control procedures or methods?	
Does the organization utilize the Safe Work Management and Safe Work Practices Element of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets</i> , or an equivalent standard, if applicable?	
Does the organization utilize the Safe Work Practices Element of API Recommended Practice 74, <i>Recommended Practice for Occupational Safety for Onshore Oil and Gas Production Operation</i> , or an equivalent standard, if applicable?	
Does the organization utilize the Safe Work Practices Element of API Bulletin 75L, <i>Guidance Document for the Development of a Safety and Environmental Management System for Onshore Oil and Natural Gas Production Operations and Associated Activities</i> , or an equivalent document, if applicable?	

<p>Does your organization utilize <i>OSA Participation Action 3: Ensure Worker Awareness & Knowledge of Life-Saving Actions, OSA Participation Action 4: Appy reporting, Investigation and Learning Processes, Tools or Methods to Learn and Improve to Prevent SIF, and OSA Participation Action 6: Improve in Preventing and Mitigating High Consequence Well Control incidents</i>, or an equivalent program, if applicable?</p>	
<p>Does the organization utilize API Recommended Practice 54, <i>Occupational Safety and Health for Oil and Gas Well Drilling and Servicing Operation</i>, or an equivalent standard, if applicable?</p>	
<p>Does the organization utilize API Recommended Practice 2207, <i>Preparing Tank Bottoms for Hot Work</i>, or an equivalent standard, if applicable?</p>	
<p>Does the organization utilize API Recommended Practice 2217A, <i>Safe Work in Inert Confined Spaces in the Petroleum and Petrochemical Industries</i>, or an equivalent standard, if applicable?</p>	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

7. **Management of Change** – The organization implements a process to manage changes that can affect operational integrity, including initiating actions, required analysis, and necessary approvals prior to introduction of changes. Changes can include changes in processes, equipment, and personnel.

Implementation Analysis Question	Response/Comments
Does the organization implement processes or methods to manage changes to processes, equipment and personnel to maintain or enhance operational integrity design and conditions?	
Are there clearly established initiating actions that trigger the organization’s management of change process or methods?	
Are there requirements authorizing both temporary and permanent changes in processes, equipment, or personnel?	
Are there clearly defined roles and responsibilities for initiating, assessing and approving changes to equipment, processes and personnel to maintain or enhance operational integrity?	
Does the organization’s management of change process or methods address organizational and personnel changes as well as equipment and process changes?	
For equipment changes, is there field verification that the change meets the technical and design specifications and that the system is safe to start?	
Has the organization’s management of change processes or methods been audited or assessed, either internally or by an external party?	
Does the organization utilize the Management of Change Element of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets</i> , or an equivalent standard, if applicable?	
Does the organization utilize the Design Element of API Recommended Practice 74, <i>Recommended Practice for Occupational Safety for Onshore Oil and Gas Production Operation</i> , or an equivalent standard, if applicable?	
Does the organization utilize the Procedures to Manage Change Element of API Bulletin 75L, <i>Guidance Document for the Development of a Safety and Environmental Management System for Onshore Oil and Natural Gas Production Operations and Associated Activities</i> , or an equivalent document, if applicable?	
Does the organization utilize OSA Participation Action 3: <i>Ensure Worker Awareness & Knowledge of Life-</i>	

Saving Actions and OSA Participation Action 6: Improve in Preventing and Mitigating High Consequence Well Control incidents, or an equivalent program, if applicable?

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

- 8. **Knowledge, Skills, and Training** – The organization implements a process to define required knowledge and skills and executes training such that individuals who make operational integrity decisions can perform their assigned roles and tasks.

Implementation Analysis Question	Response/Comments
Has the organization developed an inventory of required certifications, knowledge, and skill sets for critical functions related to operational integrity?	
Does the organization have a process or methods for the identification of new skills and knowledge requirements related to operational integrity when operations and assets change?	
Does the organization provide training for affected employees to reach and maintain proficiency in safe work practices and the skills and knowledge necessary to perform their job?	
Does the organization have programs or methods designed to assure that employees in safety critical jobs are fit for duty and are not compromised by external influences, including alcohol and drug abuse?	
Are training programs developed and used for safe work procedures?	

Does the organization provide training to managers required to make critical operational integrity decisions?	
Is periodic face-to-face or hands-on training provided for work processes that are in place in support of life critical rules?	
Does the organization utilize the Knowledge & Skills Element of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice T-1, <i>Creating Orientation Programs for Personnel Going Offshore</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice T-8, <i>Fundamental Safety Training for Offshore Personnel</i> , or an equivalent standard, if applicable?	
Does the organization utilize the Safety, Contractor Safety & Training, and Training Elements of API Recommended Practice 74, <i>Recommended Practice for Occupational Safety for Onshore Oil and Gas Production Operation</i> , or an equivalent standard, if applicable?	
Does the organization utilize the Training Element of API Bulletin 75L, <i>Guidance Document for the Development of a Safety and Environmental Management System for Onshore Oil and Natural Gas Production Operations and Associated Activities</i> , or an equivalent document, if applicable?	
Does your organization utilize <i>OSA Participation Action 2: Implement a Life-Saving Actions Program</i> and <i>OSA Participation Action 4: Apply reporting, Investigation, and Learning Processes, Tools or Methods to Learn and Improve to Prevent SIF</i> , or an equivalent program, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element
Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above, considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

9. **Contractor Management** – The organization establishes requirements and implements processes to plan, coordinate, and execute work with contractors and subcontractors in adherence with performance management system targets.

Implementation Analysis Question	Response/Comments
Where contractors are in a function critical to operational integrity, does the organization assure that they have the requisite competency?	
Does the organization have procedures or methods to ensure contractors implement programs consistent with its own operational integrity requirements?	
Does the organization have a process or method for reviewing contractor safety performance prior to hiring (e.g., pre-qualification process)?	
Does the organization have a process or method to ensure contractors are adequately trained in the skills to safely execute their work?	
Are contractors adequately trained in the company's or contractor's permitting, safe work and other procedures such that work can be safely performed, consistent with the organization's operational integrity expectations?	
Does the organization clearly define roles and responsibilities with its critical contractors and subcontractors to maintain operational integrity?	
Does the organization have a process or methods in place to periodically review contractor programs and performance, and make improvements if needed?	
Does the organization utilize the SEMS Interface Management Element of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Bulletin 97, <i>Well Construction Interface Document Guidelines</i> , or an equivalent standard, if applicable?	

<p>Does the organization utilize the Contractor Safety & Training Element of API Recommended Practice 74, <i>Recommended Practice for Occupational Safety for Onshore Oil and Gas Production Operation</i>, or an equivalent standard, if applicable?</p>	
<p>Does the organization utilize <i>OSA Participation OSA Participation Action 2: Implement a Life-Saving Actions Program, Action 3: Ensure Worker Awareness & Knowledge of Life-Saving Actions and OSA Participation, and Action 4: Apply reporting, Investigation and Learning Processes, Tools or Methods to Learn and Improve to Prevent SIF</i>, or an equivalent program, if applicable?</p>	
<p>Does the organization utilize API Recommended Practice 76, <i>Contractor Safety Management for Oil and Gas Drilling and Production Operations</i>, or an equivalent standard, if applicable?</p>	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above, considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

10. Incident Investigation, Evaluation, and Lessons Learned – The organization investigates integrity incidents to identify causes and implements actions to mitigate future incidents.

Implementation Analysis Question	Response/Comments
Does the organization implement a process or method so that incidents with actual or potential serious operational integrity consequences are investigated to learn and prevent a recurrence of similar incidents?	
Are incidents reported to management and tracked over time?	
Are near misses investigated?	
Does the investigation process take human factors into account?	
Does the incident investigation determine the cause(s) of the incidents?	
Does the incident investigation process include communicating the incident learnings to affected personnel and taking action to prevent recurrence?	
Has the organization created a culture which encourages openness and dialogue that encourages reporting of incidents and near misses such that the risk of recurrence is reduced?	
Does management have a no-retaliation policy in place for reporting incidents and near-misses?	
Are corrective actions identified and implemented to reasonably reduce the likelihood of a repeat occurrence, including findings applicable across like operations/processes within the organization?	
Does the organization utilize the Investigating and Learning from Incidents Element of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets</i> , or an equivalent standard, if applicable?	
Does the organization utilize the Incident Investigation Element of API Recommended Practice 74, <i>Recommended Practice for Occupational Safety for Onshore Oil and Gas Production Operation</i> , or an equivalent standard, if applicable?	
Does the organization utilize the Investigation of Incidents Element of API Bulletin 75L, <i>Guidance Document for the Development of a Safety and Environmental Management System for Onshore Oil and Natural Gas Production Operations and Associated Activities</i> , or an equivalent document, if applicable?	

Does the organization utilize *OSA Participation Action 4: Appy reporting, Investigation and Learning Processes, Tools or Methods to Learn and Improve to Prevent SIF*, or an equivalent program, if applicable?

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

11. **Emergency Preparedness and Response** – The organization prepares for and responds to emergency situations using preparedness plans and procedures that are accessible and communicated to relevant personnel, contractors, emergency responders, and community members.

Implementation Analysis Question	Response/Comments
Has the organization identified the response resources and interfaces, including local emergency responders, for each relevant facility and operation with an emergency response plan?	
Are emergency preparedness and response plans in place and ready for immediate activation at relevant facilities and operations?	
Has the organization communicated emergency response plans and procedures with individuals and organizations with roles and responsibilities?	
Do the emergency preparedness and response procedures include internal and external notification requirements?	

Has training and/or drills been conducted with affected personnel and emergency response personnel?	
Do the emergency preparedness and response procedures include periodic review and updating of the plans or methods?	
Does the organization utilize the Emergency Preparedness and Response Element of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 1145, <i>Preparation of Response Plans for Oil Spills from Offshore Facilities</i> , or an equivalent standard, if applicable?	
Does the organization utilize the Emergency Response Element of API Recommended Practice 74, <i>Recommended Practice for Occupational Safety for Onshore Oil and Gas Production Operation</i> , or an equivalent standard, if applicable?	
Does the organization utilize the Emergency Response & Control Element of API Bulletin 75L, <i>Guidance Document for the Development of a Safety and Environmental Management System for Onshore Oil and Natural Gas Production Operations and Associated Activities</i> , or an equivalent document, if applicable?	
Does the organization utilize <i>OSA Participation Action 6: Improve in Preventing and Mitigating High Consequence Well Control incidents</i> , or an equivalent program, if applicable?	
Does the organization utilize API Bulletin D16, <i>Suggested Procedure for Development of a Spill Prevention and Countermeasure Plan</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 98, <i>Personal Protective Equipment Selection for Oil Spill Responder</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 99, <i>Flash Fire Risk Assessment for the Upstream Oil and Gas Industry</i> , or an equivalent standard, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

12. **Integrity Management Information** – The organization implements processes for the identification, distribution, and control of critical information related to operating and maintaining operational integrity.

Implementation Analysis Question	Response/Comments
Does the organization maintain a procedure or methods for the identification, distribution, and control of information related to operational integrity?	
Does the information control procedure or method specify responsibilities for the approval and dissemination of operational integrity information such that policies, procedures and practices are reviewed and approved for adequacy prior to issue and use?	
Does the organization’s system or method for maintaining information related to operational integrity allow employees for ready access to current, relevant policies, processes, practices and specifications?	
Do employees and contractors who work on high risk or critical operations have the information they need to operated safely and effectively?	
Does the organization periodically assess whether its operational integrity information management process is effective and operating according to design?	
Does the organization utilize the SEMS Information Element of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets</i> , or an equivalent standard, if applicable?	

<p>Does the organization utilize the Safety & Environmental Information and the Records & Documentation Elements of API Bulletin 75L, <i>Guidance Document for the Development of a Safety and Environmental Management System for Onshore Oil and Natural Gas Production Operations and Associated Activities</i>, or an equivalent document, if applicable?</p>	
<p>Does the organization utilize <i>OSA Participation Action 4: Apply reporting, Investigation and Learning Processes, Tools or Methods to Learn and Improve to Prevent SIF</i> and <i>OSA Participation Action 6: Improve in Preventing and Mitigating High Consequence Well Control incidents</i>, or an equivalent program, if applicable?</p>	

Based on your responses above, please now consider where you fall according to these categories:

- EV** - Evaluating existing company systems against the element
- Partial Implementation (Three Options)** –
 - A. 1 – 33%: Initial stages of implementation
 - B. 34 – 66%: Midway through implementation
 - C. 67 – 99%: Implementation almost complete
- FI** – Full implementation of the element
- NA** – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

13. **Stakeholder Engagement** – The organization develops and implements a process to communicate its commitment to operational integrity through engagement with employees, regulators, community members, customers, suppliers, and other stakeholders.

Implementation Analysis Question	Response/Comments
<p>Has the organization identified key internal and external stakeholders with who it will engage regarding its operational integrity commitment?</p>	
<p>Has the organization communicated its commitment to continuously improving operational integrity with internal and external stakeholders?</p>	

Does the organization implement a process or methods to consult with identified critical employees on ways to drive continuous improvement in operational integrity?	
Has the organization promoted engagement and leadership in driving safety, environmental protection and security at all levels of the organization?	
Does the organization utilize API Bulletin 100-3, <i>Community Engagement Guidelines</i> , or an equivalent, if applicable?	
Does the organization utilize the SEMS Interface Management Element of API Recommended Practice 75, <i>Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets</i> , or an equivalent standard, if applicable?	
Does the organization utilize the Safety Element of API Recommended Practice 74, <i>Recommended Practice for Occupational Safety for Onshore Oil and Gas Production Operation</i> , or an equivalent standard, if applicable?	
Does the organization utilize <i>OSA Participation Action 1: Participation Commitment to Participate in and support the Onshore Safety Alliance and OSA Participation Action 4: Apply reporting, Investigation, and Learning Processes, Tools or Methods to Learn and Improve to Prevent SIF</i> , or equivalent program, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

5. Midstream Company Guide

A. Introduction

The questions included for each element related to midstream companies' operations. The questions included in the Implementation Analysis Tool focus on key areas of implementation for each element and are not meant to all encompassing, but rather a starting point for analysis of implementation progress. The questions included for each element can help a company determine how to complete its Self-Assessment form.

As a starting point for implementation for midstream operations, API Recommended Practice 1173, *Pipeline Safety Management Systems*, incorporates many of the core components of the API Energy Excellence elements. While API RP 1173 focuses on pipeline safety management, implementation can be used as a baseline for companies to demonstrate significant conformance to the 13 elements of API Energy Excellence.

For API member companies operating in the midstream segment and implementing API RP 1173, the [Pipeline Safety Management System \(SMS\) Maturity Model and Tools](#) are resources to help evaluate and demonstrate conformance with the API Energy Excellence elements. While the Pipeline SMS Maturity Model and Tools are specific to evaluating the maturity of their RP 1173 implementation, [Section B](#) below is meant to help pipeline companies connect their Pipeline SMS Maturity Evaluation Score to conformance with the API Energy Excellence elements and the Self-Assessment Tool. If a company assesses their safety management system at an API RP 1173 maturity at a level 3 or higher with supporting evidence, the company should be considered to have fully implemented (FI) the element required for API Energy Excellence and does not need to complete the API Energy Excellence Implementation Analysis Tool.

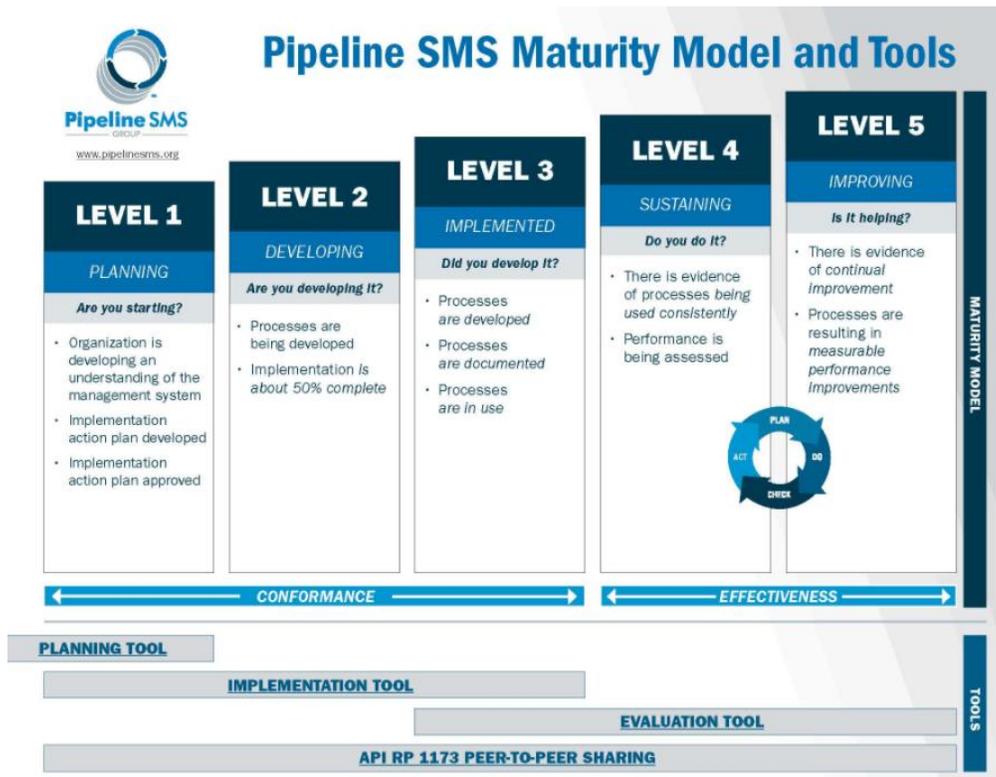
For API member companies with terminal facilities and operations, API recommends utilizing the Midstream Section of the Implementation Analysis Tool to evaluate implementation of the 13 API Energy Excellence elements.

B. Utilization of Pipeline SMS Maturity Model and Tools

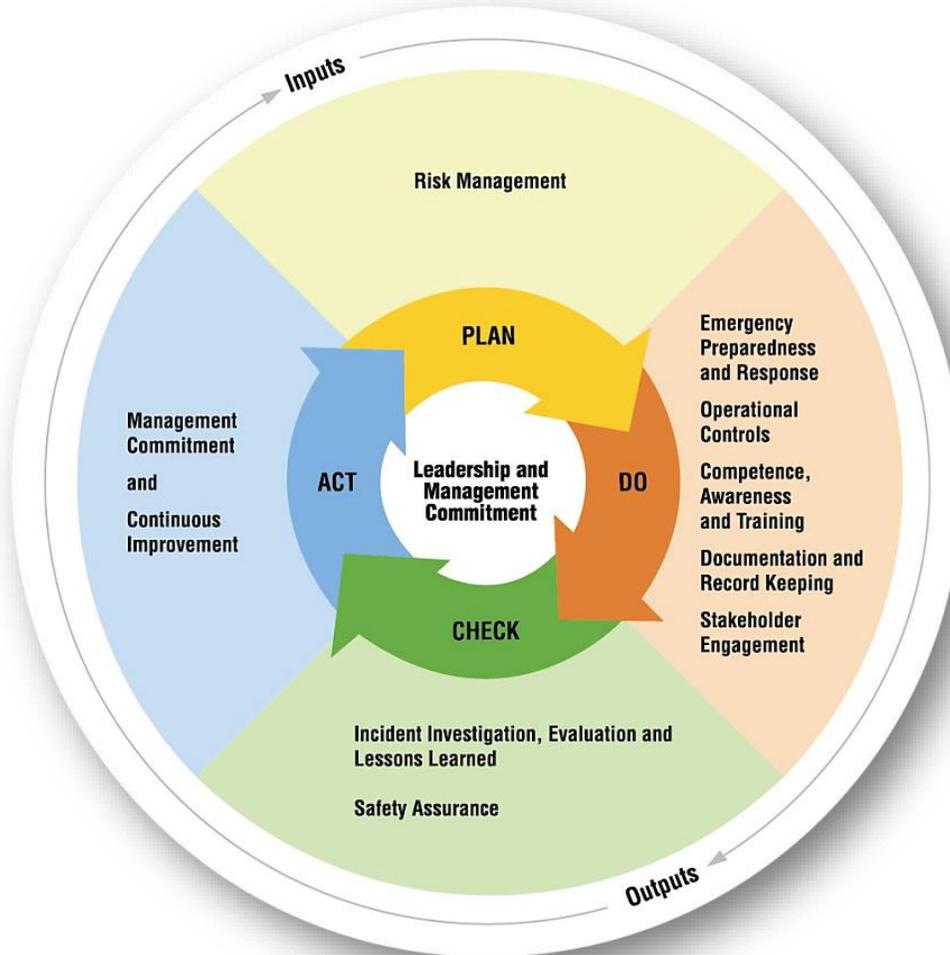
For API member companies operating in the midstream segment and implementing API RP 1173, the [Pipeline Safety Management System \(SMS\) Maturity Model and Tools](#) are primary resources in evaluating conformance with API Energy Excellence elements. Specifically, the Pipeline SMS Maturity Model provides pipeline operators a means to benchmark progress and evaluate the effectiveness of their implementation of safety management systems through RP 1173.

As such, the below graphic and explanation in this section will assist pipeline operators in ultimately mapping their Pipeline SMS Maturity Level to their conformance with an API Energy Excellence element. There is not a direct 1:1 correlation between the Maturity Tool and API Energy Excellence Self-Assessment status. Rather, correlation between the maturity level and Self-Assessment will depend on the individual company responses and may differ element to element. This section is meant to provide general guidance on the linkage between the RP 1173 Maturity Levels, as the primary means to demonstrate conformance with the API Energy Excellence elements.

Pipeline SMS Maturity Model:



The Evaluation Tool provides a simple method to document and summarize the evaluator’s evaluation of an Operator’s Pipeline SMS on its conformance to the RP (levels 1 – 3 on the maturity model), its effectiveness in implementation (level 4 on the maturity model), and its effectiveness in improving pipeline safety performance (level 5 on the maturity model). Operators at Levels 4 – 5 on the maturity model are consulting the Plan-Do-Check-Act Cycle and there is evidence of continual improvement.



API Energy Excellence Element Self-Assessment – Implementation Status:

EV - Evaluating existing company systems against the element

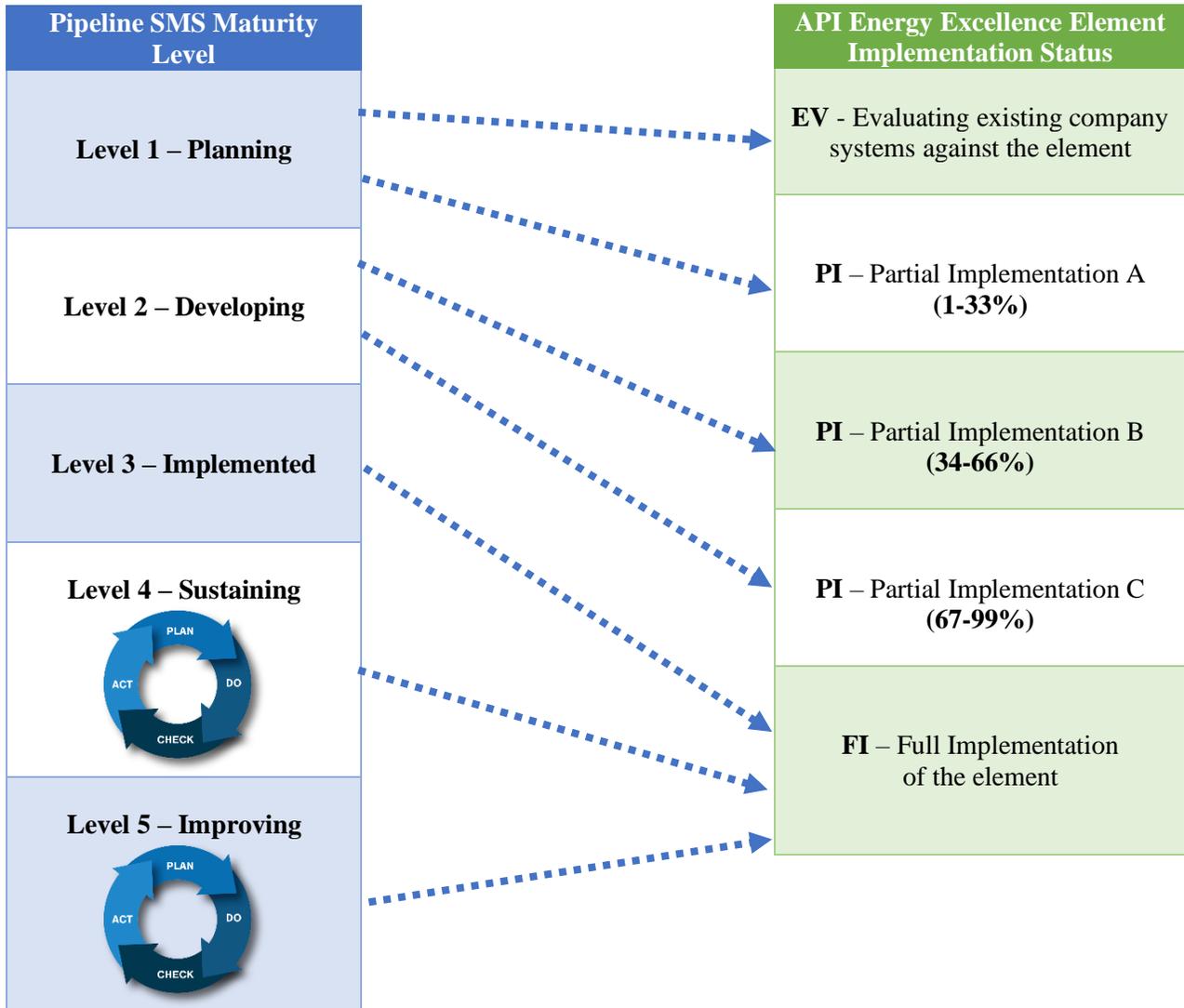
Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Pipeline SMS Maturity Level Linkage to API Energy Excellence Self-Assessment Status:



If a company assesses their API RP 1173 maturity at a level 3 or higher with supporting evidence, the company should be considered to have fully implemented (FI) the element required for API Energy Excellence. Similar to Levels 4-5 on the Pipeline SMS Maturity Tool, companies which have “fully implemented” an API Energy Excellence are encouraged to utilize the Plan-Do-Check-Act cycle to ensure continuous improvement in performance.

C. API Energy Excellence Elements and Implementation Analysis Questions

1. **Leadership Commitment to Operational Integrity** – The organization establishes, implements, and maintains an effective performance management system that drives improvement of operational integrity. Management builds a culture of operational integrity and communicates expectations by documenting policies, goals, and commitments, as well as identifying responsibilities of personnel at all levels.

Implementation Analysis Question	Response/Comments
Has management established and documented operational integrity goals and objectives for the organization’s performance management system?	
Does the organization have policies in place which cover operational integrity in midstream operations, as appropriate?	
Does management periodically review progress against established goals and adjust policies, goals and commitments as needed to drive improvement in operational integrity?	
Has management established a culture of operational integrity throughout the organization in which employees understand goals and responsibilities, and have access to resources for implementation?	
Has management ensured that the 13 elements of the performance management framework are in place, with clear expectations and accountability established for implementation?	
Does management encourage engagement and responsibility for operational integrity at all levels of the organization?	
Does leadership clearly articulate that all employees and contractors have the authority to stop unsafe work, and has leadership demonstrated through their actions their support for this concept?	
Does leadership clearly articulate and demonstrate that stop work authority can be exercised without fear of retaliation?	
Does the organization utilize the Leadership and Management Commitment Element of API Recommended Practice 1173, <i>Pipeline Safety Management Systems</i> , or an equivalent standard, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

2. **System Establishment, Assessment and Continuous Improvement** – The organization establishes requirements for its performance management system and implements a process to periodically evaluate its conformance to system requirements and progress toward operational integrity goals. The organization uses the results of the review process to take actions to address non-conformances and continuously improve its performance management system and drive operational integrity.

Implementation Analysis Question	Response/Comments
Does the organization establish operational integrity goals to be achieved through implementation of its management system?	
Does the organization periodically assess its progress against its operational integrity goals and make adjustments as appropriate?	
Does the organization execute a process to evaluate its conformance with its management system?	
Has the organization identified system and/or performance gaps against objectives and associated corrective actions to address them?	
Does the organization implement systems improvements to achieve operational integrity goals?	
Does the organization utilize the Safety Assurance and Management Review & Continuous Improvement Elements of API Recommended Practice 1173, <i>Pipeline Safety Management Systems</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 754, <i>Process Safety Performance for the Refining and Petrochemical Industries</i> , or an equivalent standard, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

- 3. **Planning and Risk Management** – The organization identifies hazards, assesses risk, determines and implements mitigating measures, and communicates required actions to affected personnel.

Implementation Analysis Question	Response/Comments
Has the organization developed and implemented a robust process for identifying hazards and assessing risks in midstream operations?	
Does the organization have a process for periodic assessment and documentation of operational hazards, and implementation of actions to minimize risks, including the assessment of human factors?	
Has the organization developed and implemented a process for identifying and applying risk mitigation measures as appropriate across operations?	
Does the organization evaluate safety risks and make decisions on how to manage it through preventive controls, monitoring, and mitigation measures?	
Does the organization apply a “layers of protection” approach to mitigate operational risks?	
Has the risk management and mitigation process been applied across midstream operations?	
Does the organization have a process for communicating risk mitigation measures to affected employees?	
Does the organization have a process in place where new, unusual, infrequently performed tasks require a risk review with all involved parties, and appropriate management approval before proceeding?	

Does the organization have an effective means to clearly communicate to all employees and contractors the most critical safety systems and work processes in place to ensure life safety? (An example of an approach used by some companies is to develop a set of Life Critical Rules/Life Saving Rules).	
Does the organization utilize the Risk Management Element of API Recommended Practice 1173, <i>Pipeline Safety Management Systems</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Standard 780, <i>Security Risk Assessment Methodology for the Petroleum and Petrochemical Industries</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 1160, <i>Managing System Integrity for Hazardous Liquid Pipelines</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 1181, <i>Pipeline Operational Status Determinations</i> , or an equivalent standard, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

4. **Asset Design and Integrity** – The organization manages the integrity of its assets so they are fit for purpose and perform their intended functions throughout their life cycle.
 - System Integrity - New operating systems and components are designed and operated together, consistent with specified requirements, recognized engineering practices, and applicable standards. Existing systems are upgraded, serviced and maintained to operate consistent with specified requirements, recognized engineering practices, and applicable standards.
 - Mechanical Integrity - The organization implements a process or method for management of equipment and well integrity such that equipment and wells are maintained to operate consistent with specified requirements.

Implementation Analysis Question	Response/Comments
Does the organization maintain current, complete documentation of asset and process design parameters and procedures?	
Has the organization established and implemented a process such that critical equipment is identified, designed, installed, tested, inspected and maintained in a way that it remains reliable and fit for service?	
Does the organization have a process for pipeline asset integrity management using recognized engineering practices, consistent applicable codes and standards?	
Has the organization established maintenance and inspection programs for equipment and systems so that they operate consistent with specified requirements?	
Does the organization have a process in place for management of safety-critical devices (e.g. PRVs, pressure instrumentation, sensors, etc.)?	
Does the organization conduct safety reviews on new and modified facilities and systems during design and prior to start-up?	
Does the organization deploy a layers of protection approach through engineering technology, instruments, equipment, facilities, and employees to prevent escalation from a single failure to a catastrophic event?	
Does the organization have a system to manage operation of equipment within safe operating windows?	
Does the organization have a system to properly manage bypassing safety systems, devices and equipment?	
Does the organization utilize the Operational Controls Element of API Recommended Practice 1173, <i>Pipeline Safety Management Systems</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 1111, <i>Design Construction, Operation, and</i>	

Maintenance of Offshore Hydrocarbon Pipelines, or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 1160, <i>Managing System Integrity for Hazardous Liquid Pipelines</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 1163, <i>In-Line Inspection Systems Qualification</i> , or an equivalent standard, if applicable?	
Does the organization utilize API 510, <i>Pressure Vessel Inspection Code: In-Service Inspection, Rating, Repair and Alteration</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 1176, <i>Recommended Practice for Assessment and Management of Cracking in Pipelines</i> , or an equivalent standard, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

- 5. **Operational Controls** – The organization develops and implements controls including procedures, practices, and/or training to maintain operational integrity.

Implementation Analysis Question	Response/Comments
Does the organization established and maintain current written operating procedures and processes in place for maintaining operational integrity?	
Do operators and other affected personnel receive written operating procedures during their initial job certification or training?	

In cases where an employee believes that following a procedure will cause an unsafe condition, does he/she have authority to stop work and seek permission to deviate?	
Does the organization have in place a training program for employees that includes initial and ongoing training to provide knowledge on safely performing their job functions?	
Do operators and other affected personnel review operating procedures as a requirement for refresher training?	
Does the organization conduct behavioral job analyses or other audits to determine if written procedures are followed?	
Does the organization utilize the Operational Controls Element of API Recommended Practice 1173, <i>Pipeline Safety Management Systems</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 1164, <i>Pipeline SCADA Security</i> , if applicable?	
Does the organization utilize API Recommended Practice 1175, <i>Pipeline Leak Detection – Program Management</i> , or an equivalent standard, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

6. **Safe Work Management** – The organization establishes, documents and executes processes, procedures, and practices to maintain control of work and minimize potential risk to people, the environment and property.

Implementation Analysis Question	Response/Comments
Does the organization maintain procedures that address safe work practices to assure the safe conduct of operating, maintenance, and emergency response activities and the control of materials that impact operational integrity?	
Does the organization implement work permit procedures and conduct audits against them?	
Does the organization implement a behavioral-based safety program or equivalent program to determine whether safe work is being implemented in the field?	
Does the organization have a process whereby high-risk work is reviewed and requires higher level sign-off before the work can begin?	
Does the organization control access to high risk areas and have a process in place for identifying those areas, and for managing times of higher risk such as startups, shutdowns and upset operations?	
Are training programs developed and implemented for safe work procedures?	
Are refresher training programs provided to ensure continual adherence to all safe work procedures?	
Do operators perform joint site visits with the work crew before work is commenced (e.g., “shown by/seen by”)?	
Does the organization have in place robust work permit and hazardous energy control procedures?	
Does the organization utilize the Operational Controls Element of API Recommended Practice 1173, <i>Pipeline Safety Management Systems</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 2200, <i>Repairing Hazardous Liquid Pipelines</i> , or an equivalent standard, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

- 7. **Management of Change** – The organization implements a process to manage changes that can affect operational integrity, including initiating actions, required analysis, and necessary approvals prior to introduction of changes. Changes can include changes in processes, equipment, and personnel.

Implementation Analysis Question	Response/Comments
Does the organization implement processes to manage changes to processes, equipment and personnel to maintain or enhance operational integrity design and conditions?	
Are there clearly established initiating actions that trigger the organization’s management of change process?	
Are there requirements authorizing both temporary and permanent changes in processes, equipment, or personnel?	
Are there clearly defined roles and responsibilities for initiating, assessing and approving changes to equipment, processes and personnel to maintain or enhance operational integrity?	
Does the organization’s management of change process address organizational and personnel changes as well as equipment and process changes?	
For equipment changes, is there field verification that the change meets the technical and design specifications and that the system is safe to start?	
Does the organization utilize the Operational Controls Element of API Recommended Practice 1173, <i>Pipeline Safety Management Systems</i> , or an equivalent standard, if applicable?	
Has the organization’s management of change processes been audited or assessed, either internally or by an external party?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

- 8. **Knowledge, Skills, and Training** – The organization implements a process to define required knowledge and skills and executes training such that individuals who make operational integrity decisions can perform their assigned roles and tasks.

Implementation Analysis Question	Response/Comments
Has the organization developed an inventory of required knowledge and skills by function related to operational integrity?	
Does the organization have a process for the identification of new skills and knowledge requirements related to operational integrity when operations and assets change?	
Does the organization provide training for affected employees to reach and maintain proficiency in safe work practices and the skills and knowledge necessary to perform their job?	
Does the organization have programs designed to assure that employees in safety critical jobs are fit for duty and are not compromised by external influences, including alcohol and drug abuse?	
Are training programs developed and used for safe work procedures?	
Does the organization provide training to managers required to make critical operational integrity decisions?	
Is periodic face-to-face or hands-on training provided for work processes that are in place in support of life critical rules?	

Does the organization utilize the Competence, Awareness, and Training Element of API Recommended Practice 1173, <i>Pipeline Safety Management Systems</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 1161, <i>Recommended Practice for Pipeline Operator Qualification (OQ)</i> , or an equivalent standard, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

9. **Contractor Management** – The organization establishes requirements and implements processes to plan, coordinate, and execute work with contractors and subcontractors in adherence with performance management system targets.

Implementation Analysis Question	Response/Comments
Where contractors are in a function critical to operational integrity, does the organization assure that they have the requisite competency?	
Does the organization have procedures to ensure contractors implement programs consistent with its own operational integrity requirements?	
Does the organization have a process for reviewing contractor safety performance prior to hiring (e.g., pre-qualification process)?	
Does the organization have a process to ensure contractors are adequately trained in the skills to safely execute their work?	
Are contractors adequately trained in the company’s permitting, safe work and other procedures such that work can be safely performed, consistent with the organization’s operational integrity expectations?	

Does the organization clearly define roles and responsibilities with its critical contractors and subcontractors to maintain operational integrity?	
Does the organization have a process in place to periodically review contractor programs and performance, and make improvements if needed?	
Does the organization utilize the Operational Controls Element of API Recommended Practice 1173, <i>Pipeline Safety Management Systems</i> , or an equivalent standard, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

10. Incident Investigation, Evaluation, and Lessons Learned – The organization investigates incident incidents to identify causes and implements actions to mitigate future incidents.

Implementation Analysis Question	Response/Comments
Does the organization implement a process so that incidents with actual or potential serious operational integrity consequences are investigated to learn and prevent a recurrence of similar incidents?	
Are incidents reported to management and tracked over time?	
Are near misses investigated?	
Does the investigation process take human factors into account?	
Does the incident investigation determine the cause(s) of the incidents?	
Does the incident investigation process include communicating the incident learnings to affected personnel and taking action to prevent recurrence?	

Has management created a culture within the organization that encourages openness and dialogue that encourages reporting of incidents and near misses such that the risk of recurrence is reduced?	
Does management have a no-retaliation policy in place for reporting incidents and near-misses?	
Are corrective actions identified and implemented to reasonably reduce the likelihood of a repeat occurrence, including findings applicable across like operations/processes within the organization?	
Does the organization utilize the Incident Investigation, Evaluation, and Lessons Learned Element of API Recommended Practice 1173, <i>Pipeline Safety Management Systems</i> , or an equivalent standard, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

11. **Emergency Preparedness and Response** – The organization prepares for and responds to emergency situations using preparedness plans and procedures that are accessible and communicated to relevant personnel, contractors, emergency responders, and community members.

Implementation Analysis Question	Response/Comments
Has the organization identified the response resources and interfaces, including local emergency responders, for each facility and operation with an emergency response plan?	
Are emergency preparedness and response plans in place and ready for immediate activation at relevant facilities and operations?	
Has the organization communicated emergency response plans and procedures with individuals and organizations with roles and responsibilities?	
Do the emergency preparedness and response procedures include internal and external notification requirements?	
Has training and/or drills been conducted with affected personnel and emergency response personnel?	
Do the emergency preparedness and response procedures include periodic review and updating of the plans?	
Does the organization utilize the Emergency Preparedness and Response Element of API Recommended Practice 1173, <i>Pipeline Safety Management Systems</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 1112, <i>Developing a Highway Emergency Response Plan for Incidents Involving Hazardous Materials</i> , if applicable?	
Does the organization utilize API Recommended Practice 1174, <i>Recommended Practice for Onshore Hazardous Liquid Pipeline Emergency Preparedness and Response</i> , or an equivalent standard, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

D. 1 – 33%: Initial stages of implementation

E. 34 – 66%: Midway through implementation

F. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

12. Integrity Management Information – The organization implements processes for the identification, distribution, and control of critical information related to operating and maintaining operational integrity.

Implementation Analysis Question	Response/Comments
Does the organization maintain a procedure for the identification, distribution, and control of information related to operational integrity?	
Does the information control procedure specify responsibilities for the approval and dissemination of operational integrity information such that policies, procedures and practices are reviewed and approved for adequacy prior to issue and use?	
Does the organization’s system for maintaining information related to operational integrity allow employees for ready access to current, relevant policies, processes, practices and specifications?	
Does the organization periodically assess whether its operational integrity information management process is effective and operating according to design?	
Does the organization utilize the Documentation and Record Keeping Element of API Recommended Practice 1173, <i>Pipeline Safety Management Systems</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 1164, <i>Pipeline SCADA Security</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 1178, <i>Integrity Data Management and Integration</i> , or an equivalent standard, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

- 13. **Stakeholder Engagement** – The organization develops and implements a process to communicate its commitment to operational integrity through engagement with employees, regulators, community members, customers, suppliers, and other stakeholders.

Implementation Analysis Question	Response/Comments
Has the organization identified key internal and external stakeholders with who it will engage regarding its operational integrity commitment?	
Has the organization communicated its commitment to continuously improving operational integrity with internal and external stakeholders?	
Does the organization implement a process to consult with identified employees on ways to drive continuous improvement in operational integrity?	
Has management promoted engagement and leadership in driving safety, environmental protection and security at all levels of the organization?	
Does the organization utilize the Stakeholder Engagement Element of API Recommended Practice 1173, <i>Pipeline Safety Management Systems</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 1162, <i>Public Awareness Programs for Pipeline Operators</i> , or an equivalent standard, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

6. Downstream Company Guide

A. Introduction

The questions included for each element are related to downstream companies' operations. The questions included in the Implementation Analysis Tool focus on key areas of implementation for each element and are not meant to be all encompassing, but rather a starting point for analysis of implementation progress. The questions included for each element can help a company determine how to complete its Self-Assessment form.

As a starting point for implementation for downstream operations, the API Process Safety Site Assessment Program (PSSAP[®]) protocols cover many of the core components of the API Energy Excellence elements. While PSSAP mainly focuses on process safety in downstream, petrochemical, and chemical operations, implementation and utilization of the 10 protocols can be used as a baseline to help companies demonstrate significant conformance to the 13 elements of API Energy Excellence.

For API member companies operating in the downstream segment, please refer to the [Process Safety Site Assessment Program \(PSSAP[®]\) protocols](#) for additional details on evaluating the implementation of key process safety elements:

- Process Safety Leadership
- Operating Practices
- Mechanical Integrity (focused on fixed equipment)
- Safe Work Practices
- Management of Change (MOC)
- Process Hazards Analysis (PHA)
- Facility Siting
- Product Storage & Transfer
- Incident Learning
- Hydrofluoric Acid (HF) Alkylation/API RP-751

B. API Energy Excellence Elements and Implementation Analysis Questions

1. **Leadership Commitment to Operational Integrity** – The organization establishes, implements, and maintains an effective performance management system that drives improvement of operational integrity. Management builds a culture of operational integrity and communicates expectations by documenting policies, goals, and commitments, as well as identifying responsibilities of personnel at all levels.

Implementation Analysis Question	Response/Comments
Has management established and documented operational integrity goals and objectives for the organization's performance management system?	
Does the organization have policies in place which cover operational integrity in downstream operations, as appropriate?	
Does management periodically review progress against established goals and adjust policies, goals and commitments as needed to drive improvement in operational integrity?	
Has management established a culture of operational integrity throughout the organization in which employees understand goals and responsibilities, and have access to resources for implementation?	
Has management ensured that elements of the performance management framework are in place, with clear expectations and accountability established for implementation?	
Does management encourage engagement and responsibility for operational integrity at all levels of the organization?	
Does leadership clearly articulate that all employees and contractors have the authority to stop unsafe work, and has leadership demonstrated through their actions their support for this concept?	
Does leadership clearly articulate and demonstrate that stop work authority can be exercised without fear of retaliation?	
Does the organization participate in the API Process Safety Site Assessment Program (PSSAP)?	
Has the organization utilized the PSSAP Process Safety Leadership Protocol?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

2. **System Establishment, Assessment and Continuous Improvement** – The organization establishes targets for its performance management system and implements a process to periodically evaluate its conformance to system elements and progress toward operational integrity goals. The organization uses the evaluation results to take actions to address non-conformances and continuously improve its performance management system and drive operational integrity.

Implementation Analysis Question	Response/Comments
Does the organization establish operational integrity goals to be achieved through implementation of its management system?	
Does the organization periodically assess its progress against its operational integrity goals and make adjustments as appropriate?	
Does the organization execute a process to evaluate its conformance with its management system?	
Has the organization identified system and/or performance gaps against objectives and associated corrective actions to address them?	
Does the organization utilize API Recommended Practice 754, <i>Process Safety Performance Indicators for the Refining and Petrochemical Industries</i> , if applicable? If not applicable, please explain why.	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

- 3. **Planning and Risk Management** – The organization identifies hazards, assesses risk, determines and implements mitigating measures, and communicates required actions to affected personnel.

Implementation Analysis Question	Response/Comments
Has the organization developed and implemented a robust process for identifying hazards and assessing risks in downstream operations?	
Does the organization have a process for periodic assessment and documentation of operational hazards, and implementation of actions to minimize risks, including the assessment of human factors?	
Has the organization developed and implemented a process for identifying and applying risk mitigation measures as appropriate across operations?	
Does the organization evaluate safety risks and make decisions on how to manage it through preventive controls, monitoring, and mitigation measures?	
Does the organization apply a “layers of protection” approach to mitigate operational risks?	
Has the risk management and mitigation process been applied across downstream facilities and operations?	
Does the organization have a process for communicating risk mitigation measures to affected employees?	
Does the organization have a process in place where new, unusual, infrequently performed tasks require a risk review with all involved parties, and appropriate management approval before proceeding?	

Does the organization have an effective means to clearly communicate to all employees and contractors the most critical safety systems and work processes in place to ensure life safety? (An example of an approach used by some companies is to develop a set of Life Critical Rules/Life Saving Rules).	
Does the organization utilize API Recommended Practice 580, <i>Risk-Based Inspection</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 581, <i>Risk-Based Inspection Methodology</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 751, <i>Safe Operations of Hydrofluoric Acid Alkylation Units</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 752, <i>Management of Hazards Associated with Location of Process Plant Permanent Buildings</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 753, <i>Management of Hazards Associated with Location of Process Plant Portable Buildings</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 755, <i>Fatigue Risk Management Systems for Personnel in the Refining and Petrochemical Industries</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 756, <i>Management of Hazards Associated with Location of Process Plant Tents</i> , or an equivalent standard, if applicable?	
Has the organization utilized the PSSAP Process Hazards Analysis (PHA) Protocol?	
Has the organization utilized the PSSAP Facility Siting Protocol?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

4. **Asset Design and Integrity** – The organization manages the integrity of its assets so they are fit for purpose and perform their intended functions throughout their life cycle.
 - System Integrity - New operating systems and components are designed and operated together, consistent with specified requirements, recognized engineering practices, and applicable standards. Existing systems are upgraded, serviced and maintained to operate consistent with specified requirements, recognized engineering practices, and applicable standards.
 - Mechanical Integrity - The organization implements a process or method for management of equipment and well integrity such that equipment and wells are maintained to operate consistent with specified requirements.

Implementation Analysis Question	Response/Comments
Does the organization maintain current, complete documentation of asset and process design parameters and procedures?	
Has the organization established and implemented a process such that critical equipment is identified, designed, installed, tested, inspected and maintained in a way that it remains reliable and fit for service?	
Has the organization established a process for facility design, construction and maintenance using recognized engineering practices, consistent applicable codes and standards?	
Has the organization established maintenance and inspection programs for equipment and systems so that they operate consistent with specified requirements?	
Does the organization have a process in place for management of safety-critical devices (e.g. PRVs, pressure instrumentation, sensors, etc.)?	
Does the organization conduct safety reviews on new and modified facilities and systems during design and prior to start-up?	
Does the organization deploy a layers of protection approach through engineering technology, instruments, equipment, facilities, and employees to prevent escalation from a single failure to a catastrophic event?	
Does the organization have a system to manage operation of equipment within safe operating windows?	

Does the organization have a system to properly manage bypassing of safety systems, devices and equipment?	
Does the organization utilize the API 500 series standards, or an equivalent standard, if applicable?	
Does the organization utilize the API 600 series standards, or an equivalent standard, if applicable?	
Does the organization utilize API Standard 653, <i>Tank Inspection, Repair, Alteration, and Reconstruction</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 970, <i>Corrosion Control Documents</i> , or an equivalent standard, if applicable?	
Has the organization utilized the PSSAP Mechanical Integrity Protocol?	
Has the organization utilized the PSSAP Hydrofluoric Acid (HF) Alkylation/API 751 Protocol, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

5. **Operational Controls** – The organization develops and implements controls including procedures, practices, and/or training to maintain operational integrity.

Implementation Analysis Question	Response/Comments
Does the organization established and maintain current written operating procedures and processes in place for maintaining operational integrity?	
Do operators and other affected personnel receive written operating procedures during their initial job certification or training?	
Does the organization have in place a training program for employees that includes initial and ongoing training to provide knowledge on safely performing their job functions?	
Do operators and other affected personnel review operating procedures as a requirement for refresher training?	
In cases where an employee believes that following a procedure will cause an unsafe condition, does he/she have authority to stop work and seek permission to deviate?	
Does the organization conduct behavioral job analyses or other audits to determine if written procedures are followed?	
Are operating limits clearly defined for each section of the unit?	
Do operators have a maintained operator rounds program?	
Does the organization utilize API Standard 2350, <i>Overfill Protection for Storage Tanks in Petroleum Facilities</i> , or an equivalent standard, if applicable?	
Has the organization utilized the PSSAP Operating Practices Protocol?	
Has the organization utilized the PSSAP Product Storage & Transfer Protocol?	
Has the organization utilized the PSSAP Hydrofluoric Acid (HF) Alkylation/API 751 Protocol, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

- 6. **Safe Work Management** – The organization establishes, documents and executes processes, procedures, and practices to maintain control of work and minimize potential risk to people, the environment and property.

Implementation Analysis Question	Response/Comments
Does the organization maintain procedures that address safe work practices to assure the safe conduct of operating, maintenance, and emergency response activities and the control of materials that impact operational integrity?	
Does the organization implement work permit procedures and conduct audits against them?	
Does the organization implement a behavioral-based safety program or equivalent program to determine whether safe work is being implemented in the field?	
Does the organization have a process whereby high-risk work is reviewed and requires higher level sign-off before the work can begin?	
Does the organization control access to high risk areas and have a process in place for identifying those areas, and for managing times of higher risk such as startups, shutdowns and upset operations?	
Are training programs developed and implemented for safe work procedures?	
Are refresher training programs provided to ensure continual adherence to all safe work procedures?	
Do operators perform joint site visits with the work crew before work is commenced (e.g., “shown by/seen by”)?	
Does the organization have in place robust work permit and hazardous energy control procedures?	
Does the organization utilize API Recommended Practice 2001, <i>Fire Protection in Refineries</i> , or an equivalent standard, if applicable?	

Does the organization utilize API Recommended Practice 2003, <i>Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 2009, <i>Safe Welding, Cutting, and Hot Work Practices in the Petroleum and Petrochemical Industries</i> , or an equivalent standard, or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 2015, <i>Requirements for Safe Entry and Cleaning of Petroleum Storage Tanks</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 2027, <i>Ignition Hazards and Safe Work Practices for Abrasive Blasting of Atmospheric Storage Tanks in Hydrocarbon Service</i> , or an equivalent standard, if applicable?	
Has the organization utilized the PSSAP Safe Work Practices Protocol?	
Has the organization utilized the PSSAP Product Storage & Transfer Protocol?	
Has the organization utilized the PSSAP Hydrofluoric Acid (HF) Alkylation/API 751 Protocol, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV – Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

- 7. **Management of Change** – The organization implements a process to manage changes that can affect operational integrity, including initiating actions, required analysis, and necessary approvals prior to introduction of changes. Changes can include changes in processes, equipment, and personnel.

Implementation Analysis Question	Response/Comments
Does the organization implement processes to manage changes to processes, equipment and personnel to maintain or enhance operational integrity design and conditions?	
Are there clearly established initiating actions that trigger the organization’s management of change process?	
Are there requirements authorizing both temporary and permanent changes in processes, equipment, or personnel?	
Are there clearly defined roles and responsibilities for initiating, assessing and approving changes to equipment, processes and personnel to maintain or enhance operational integrity?	
Does the organization’s management of change process address organizational and personnel changes as well as equipment and process changes?	
For equipment changes, is there field verification that the change meets the technical and design specifications and that the system is safe to start?	
Has the organization utilized the PSSAP Management of Change Protocol?	
Has the organization’s management of change processes been audited or assessed, either internally or by an external party?	

Based on your responses above, please now consider where you fall according to these categories:

- EV** – Evaluating existing company systems against the element
- Partial Implementation (Three Options)** –
 - A. 1 – 33%: Initial stages of implementation
 - B. 34 – 66%: Midway through implementation
 - C. 67 – 99%: Implementation almost complete
- FI** – Full implementation of the element
- NA** – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

8. **Knowledge, Skills, and Training** – The organization implements a process to define required knowledge and skills and executes training such that individuals who make operational integrity decisions can perform their assigned roles and tasks.

Implementation Analysis Question	Response/Comments
Has the organization developed an inventory of required knowledge and skills by function related to operational integrity?	
Does the organization have a process for the identification of new skills and knowledge requirements related to operational integrity when operations and assets change?	
Does the organization provide training for affected employees to reach and maintain proficiency in safe work practices and the skills and knowledge necessary to perform their job?	
Does the organization have programs designed to assure that employees in safety critical jobs are fit for duty and are not compromised by external influences, including alcohol and drug abuse?	
Are training programs developed and used for safe work procedures?	
Does the organization provide training to managers required to make critical operational integrity decisions?	
Is periodic face-to-face or hands-on training provided for work processes that are in place in support of life critical rules?	
Does the organization utilize API Publication 770, <i>A Manager’s Guide to Reducing Human Errors – Improving Human Performance in the Process Industries</i> , or an equivalent standard, if applicable?	
Does the organization utilize API TR 1253, <i>API Selection and Training Guidelines for In Situ Burning Personnel</i> , or an equivalent standard, if applicable?	
Has the organization utilized the PSSAP Operating Practices Protocol?	

Based on your responses above, please now consider where you fall according to these categories:

- EV** – Evaluating existing company systems against the element
- Partial Implementation (Three Options)** –
 - A. 1 – 33%: Initial stages of implementation
 - B. 34 – 66%: Midway through implementation
 - C. 67 – 99%: Implementation almost complete
- FI** – Full implementation of the element
- NA** – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

- 9. **Contractor Management** – The organization establishes requirements and implements processes to plan, coordinate, and execute work with contractors and subcontractors in adherence with performance management system targets.

Implementation Analysis Question	Response/Comments
Where contractors are in a function critical to operational integrity, does the organization assure that they have the requisite competency?	
Does the organization have procedures to ensure contractors implement programs consistent with its own operational integrity requirements?	
Does the organization have a process for reviewing contractor safety performance prior to hiring (e.g., pre-qualification process)?	
Does the organization have a process to ensure contractors are adequately trained in the skills to safely execute their work?	
Are contractors adequately trained in the company’s permitting, safe work and other procedures such that work can be safely performed, consistent with the organization’s operational integrity expectations?	
Does the organization clearly define roles and responsibilities with its critical contractors and subcontractors to maintain operational integrity?	
Does the organization have a process in place to periodically review contractor programs and performance, and make improvements if needed?	
Does the organization utilize API Recommended Practice 1646, <i>Safe Work Practices for Contractors Working at Retail Petroleum/Convenience Facilities</i> , or an equivalent standard, if applicable?	
Does the organization utilize API Recommended Practice 2220, <i>Contractor Safety Performance Process</i> , or an equivalent standard, if applicable?	

Does the organization utilize API Recommended Practice 2221, <i>Contractor and Owner Safety Program Implementation</i> , or an equivalent standard, if applicable?	
Has the organization utilized the PSSAP Operating Practices Protocol?	

Based on your responses above, please now consider where you fall according to these categories:

EV – Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

10. Incident Investigation, Evaluation, and Lessons Learned – The organization investigates integrity incidents to identify causes and implements actions to mitigate future incidents.

Implementation Analysis Question	Response/Comments
Does the organization implement a process so that incidents with actual or potential serious operational integrity consequences are investigated to learn and prevent a recurrence of similar incidents?	
Are incidents reported to management and tracked over time?	
Are near misses investigated?	
Does the investigation process take human factors into account?	
Does the incident investigation determine the cause(s) of the incidents?	
Does the incident investigation process include communicating the incident learnings to affected personnel and taking action to prevent recurrence?	
Has management created a culture within the organization that encourages openness and dialogue that encourages reporting of incidents and near misses such that the risk of recurrence is reduced?	

Does management have a no-retaliation policy in place for reporting incidents and near-misses?	
Are corrective actions identified and implemented to reasonably reduce the likelihood of a repeat occurrence, including findings applicable across like operations/processes within the organization?	
Does the organization utilize API Recommended Practice 585, <i>Pressure Equipment Integrity Incident Investigation</i> , if applicable?	
Has the organization utilized the PSSAP Incident Learning Protocol?	

Based on your responses above, please now consider where you fall according to these categories:

EV – Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

11. **Emergency Preparedness and Response** – The organization prepares for and responds to emergency situations using preparedness plans and procedures that are accessible and communicated to relevant personnel, contractors, emergency responders, and community members.

Implementation Analysis Question	Response/Comments
Has the organization identified the response resources and interfaces, including local emergency responders, for each facility and operation with an emergency response plan?	
Are emergency preparedness and response plans in place and ready for immediate activation at relevant facilities and operations?	
Has the organization communicated emergency response plans and procedures with individuals and organizations with roles and responsibilities?	
Do the emergency preparedness and response procedures include internal and external notification requirements?	
Has training and/or drills been conducted with affected personnel and emergency response personnel?	
Do the emergency preparedness and response procedures include periodic review and updating of the plans?	
Does the organization utilize API Recommended Practice 2001, <i>Fire Protection in Refineries</i> , or an equivalent standard, if applicable?	
Does the organization utilize API TR 1253, <i>API Selection and Training Guidelines for In Situ Burning Personnel</i> , or an equivalent standard, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV – Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

12. **Integrity Management Information** – The organization implements processes for the identification, distribution, and control of critical information related to operating and maintaining operational integrity.

Implementation Analysis Question	Response/Comments
Does the organization maintain a procedure for the identification, distribution, and control of information related to operational integrity?	
Does the information control procedure specify responsibilities for the approval and dissemination of operational integrity information such that policies, procedures and practices are reviewed and approved for adequacy prior to issue and use?	
Does the organization’s system for maintaining information related to operational integrity allow employees for ready access to current, relevant policies, processes, practices and specifications?	
Does the organization periodically assess whether its operational integrity information management process is effective and operating according to design?	
Does the organization utilize API Recommended Practice 1164, <i>SCADA Security</i> , or an equivalent standard, if applicable?	
Has the organization utilized the PSSAP Process Hazards Analysis (PHA) Protocol?	

Based on your responses above, please now consider where you fall according to these categories:

- EV** – Evaluating existing company systems against the element
- Partial Implementation (Three Options)** –
 - A. 1 – 33%: Initial stages of implementation
 - B. 34 – 66%: Midway through implementation
 - C. 67 – 99%: Implementation almost complete
- FI** – Full implementation of the element
- NA** – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

13. **Stakeholder Engagement** – The organization develops and implements a process to communicate its commitment to operational integrity through engagement with employees, regulators, community members, customers, suppliers, and other stakeholders.

Implementation Analysis Question	Response/Comments
Has the organization identified key internal and external stakeholders with who it will engage regarding its operational integrity commitment?	
Has the organization communicated its commitment to continuously improving operational integrity with internal and external stakeholders?	
Does the organization implement a process to consult with identified employees on ways to drive continuous improvement in operational integrity?	
Has management promoted engagement and leadership in driving safety, environmental protection and security at all levels of the organization?	
Does the organization utilize API Bulleting 100-3, <i>Community Engagement Guidelines</i> , or an equivalent guidance, if applicable?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

7. Service, Supply, and Manufacturing Company Guide

A. Introduction

The questions included for each element related to service, supply and manufacturing companies' operations. The questions included in the Implementation Analysis Tool focus on key areas of implementation for each element and are not meant to all encompassing, but rather a starting point for analysis of implementation progress. The questions included for each element can help a company determine how to complete its Self-Assessment form.

B. API Energy Excellence Elements and Implementation Analysis Questions

1. **Leadership Commitment to Operational Integrity** – The organization establishes, implements, and maintains an effective performance management system that drives improvement of operational integrity. Management builds a culture of operational integrity and communicates expectations by documenting policies, goals, and commitments, as well as identifying responsibilities of personnel at all levels.

Implementation Analysis Question	Response/Comments
Has management established and documented operational integrity goals and objectives for the organization's performance management system?	
Does the organization have policies in place which cover operational integrity in service, supply, and manufacturing operations, as appropriate?	
Does management periodically review progress against established goals and adjust policies, goals and commitments as needed to drive improvement in operational integrity?	
Has management established a culture of operational integrity throughout the organization in which employees understand goals and responsibilities, and have access to resources for implementation?	
Has management ensured that elements of the performance management framework are in place, with clear expectations and accountability established for implementation?	
Does management encourage engagement and responsibility for operational integrity at all levels of the organization?	
Does leadership clearly articulate that all employees and contractors have the authority to stop unsafe work, and has leadership demonstrated through their actions their support for this concept?	

Does leadership clearly articulate and demonstrate that stop work authority can be exercised without fear of retaliation?	
Does the organization use API Spec Q1 in the manufacture of product or API Spec Q2 in the provision of services?	
Does the organization utilize API Spec Q1/Q2 QMS Requirement: Management Responsibility?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

2. **System Establishment, Assessment and Continuous Improvement** – The organization establishes targets for its performance management system and implements a process to periodically evaluate its conformance to system elements and progress toward operational integrity goals. The organization uses the evaluation results to take actions to address non-conformances and continuously improve its performance management system and drive operational integrity.

Implementation Analysis Question	Response/Comments
Does the organization establish operational integrity goals to be achieved through implementation of its management system?	
Does the organization periodically assess its progress against its operational integrity goals and make adjustments as appropriate?	
Does the organization execute a process to evaluate its conformance with its management system?	

Has the organization identified system and/or performance gaps against objectives and associated corrective actions to address them?	
Does the organization have a quality management system in place?	
Does the organization utilize API Spec Q1/Q2 QMS Requirement: Quality Management System?	
Does the organization utilize API Spec Q1/Q2 QMS Monitoring, Measurement, Analysis & Improvement provisions?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

3. **Planning and Risk Management** – The organization identifies hazards, assesses risk, determines and implements mitigating measures, and communicates required actions to affected personnel.

Implementation Analysis Question	Response/Comments
Has the organization developed and implemented a robust process for identifying hazards and assessing risks in service, supply, and manufacturing operations?	
Do the organization have a process for periodic assessment and documentation of operational hazards, and implementation of actions to minimize risks, including the assessment of human factors?	
Has the organization developed and implemented a process for identifying and applying risk mitigation measures as appropriate across operations?	

Does the organization evaluate safety risks and make decisions on how to manage it through preventive controls, monitoring, and mitigation measures?	
Does the organization apply a “layers of protection” approach to mitigate operational risks?	
Has the risk management and mitigation process been applied across facilities and operations?	
Does the organization have a process for communicating risk mitigation measures to affected employees?	
Does the organization have a process in place where new, unusual, infrequently performed tasks require a risk review with all involved parties, and appropriate management approval before proceeding?	
Does the organization have an effective means to clearly communicate to all employees and contractors the most critical safety systems and work processes in place to ensure life safety? (An example of an approach used by some companies is to develop a set of Life Critical Rules/Life Saving Rules).	
Does the organization utilize API Spec Q1/Q2 Product/Service Realization: Planning provision?	
Does the organization utilize API Spec Q1/Q2 Product/Service Realization: Risk Assessment and Management provision?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

4. **Asset Design and Integrity** – The organization manages the integrity of its assets so they are fit for purpose and perform their intended functions throughout their life cycle.
- System Integrity - New operating systems and components are designed and operated together, consistent with specified requirements, recognized engineering practices, and applicable standards. Existing systems are upgraded, serviced and maintained to operate consistent with specified requirements, recognized engineering practices, and applicable standards.
 - Mechanical Integrity - The organization implements a process or method for management of equipment and well integrity such that equipment and wells are maintained to operate consistent with specified requirements.

Implementation Analysis Question	Response/Comments
Does the organization maintain current, complete documentation of asset and process design parameters and procedures?	
Does the organization maintain a process for the establishment of the frequency of preventive maintenance for equipment used in product realization or provision of service?	
Does the organization have a documented procedure to plan and control the design and development of the product/service or service-related products using recognized engineering practices, consistent applicable codes and standards?	
Does the organization have a verification process to ensure final products/services, components or activities conform to specified requirements before release to customer?	
Does the organization use product/service quality plans that specify the required processes and documentation of the quality management system including required inspections, tests, and records?	
Does the organization utilize API Spec Q1/Q2 Product/Service Realization: Design and Development provision?	
Does the organization utilize API Spec Q1/Q2 Product/Service Realization: Production and Servicing Provision (Q1) or Execution of Service (Q2) provision?	
Does the organization utilize API Spec Q1/Q2 Product/Service Realization: Control of Testing, Measuring, and Monitoring Equipment provision?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

- 5. **Operational Controls** – The organization develops and implements controls including procedures, practices, and/or training to maintain operational integrity.

Implementation Analysis Question	Response/Comments
Does the organization established and maintain current written operating procedures and processes in place for maintaining operational integrity?	
Does the organization have processes in place that control the quality management system processes that are not included in your performance management system?	
Does the organization have in place a training program for employees that includes initial and ongoing training to provide knowledge on safely performing their job functions?	
Do affected personnel review operating procedures as a requirement for refresher training?	
Does the organization conduct behavioral job analyses or other audits to determine if written procedures are followed?	
Does the organization utilize API Spec Q1/Q2 QMS Requirement: Operational Capability provision?	
Does the organization utilize API Spec Q1/Q2 Product/Service Realization: Purchasing provision?	
Does the organization utilize API Spec Q1/Q2 Product/Service Realization: Production and Servicing Provision (Q1) or Execution of Service (Q2) provision?	

Does the organization utilize API Spec Q1/Q2 Product/Service Realization: Control of Testing, Measuring, and Monitoring Equipment provision?	
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Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

- 6. **Safe Work Management** – The organization establishes, documents and executes processes, procedures, and practices to maintain control of work and minimize potential risk to people, the environment and property.

Implementation Analysis Question	Response/Comments
Does the organization maintain procedures that address safe work practices to assure the safe conduct of operating, maintenance, and emergency response activities and the control of materials that impact operational integrity?	
Does the organization control access to or require use of specific personal protective equipment when working in high risk areas?	
Does the organization implement a behavioral-based safety program or equivalent program to determine whether safe work is being implemented?	
Are training programs developed and implemented for safe work procedures?	
Are refresher training programs provided to ensure continual adherence to all safe work procedures?	
Does the organization utilize API Spec Q1/Q2 QMS Requirement: Operational Capability provision?	

Does the organization utilize API Spec Q1/Q2 Product/Service Realization: Production and Servicing Provision (Q1) or Execution of Service (Q2) provision?	
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Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

- 7. **Management of Change** – The organization implements a process to manage changes that can affect operational integrity, including initiating actions, required analysis, and necessary approvals prior to introduction of changes. Changes can include changes in processes, equipment, and personnel.

Implementation Analysis Question	Response/Comments
Does the organization implement processes to manage changes to processes, equipment and personnel to maintain or enhance operational integrity design and conditions?	
Are there clearly established initiating actions that trigger the organization’s management of change process?	
Are there requirements authorizing both temporary and permanent changes in processes, equipment, or personnel?	
Are there clearly defined roles and responsibilities for initiating, assessing and approving changes to equipment, processes and personnel to maintain or enhance operational integrity?	
Does the organization’s management of change process address organizational and personnel changes as well as equipment and process changes?	

Does the organization utilize API Spec Q1/Q2 Product/Service Realization: Management of Change Provision?	
Has the organization’s management of change processes been audited or assessed, either internally or by an external party?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

8. **Knowledge, Skills, and Training** – The organization implements a process to define required knowledge and skills and executes training such that individuals who make operational integrity decisions can perform their assigned roles and tasks.

Implementation Analysis Question	Response/Comments
Has the organization developed an inventory of required knowledge and skills by function related to operational integrity?	
Does the organization have a process for the identification of new skills and knowledge requirements related to operational integrity when operations and assets change?	
Does the organization provide training for affected employees to reach and maintain proficiency in safe work practices and the skills and knowledge necessary to perform their job?	
Does the organization have programs designed to assure that employees in safety critical jobs are fit for duty and are not compromised by external influences, including alcohol and drug abuse?	

Are training programs developed and used for safe work procedures?	
Does the organization provide training to managers required to make critical operational integrity decisions?	
Does the organization have a process for the identification new skills and knowledge requirements related to operational integrity when operations and/or assets change?	
Is periodic face-to-face or hands-on training provided for work processes that are in place in support of life critical rules?	
Does the organization utilize API Spec Q1/Q2 QMS Requirement: Operational Capability provision?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

- 9. **Contractor Management** – The organization establishes requirements and implements processes to plan, coordinate, and execute work with contractors and subcontractors in adherence with performance management system targets

Implementation Analysis Question	Response/Comments
Where contractors are in a function critical to operational integrity, does the organization assure that they have the requisite competency?	
Does the organization have procedures to ensure contractors implement programs consistent with its own operational integrity requirements?	
Does the organization have a process for reviewing contractor safety performance prior to hiring (e.g., pre-qualification process)?	

Does the organization have a process to ensure contractors are adequately trained in the skills to safely execute their work?	
Are contractors adequately trained in the company's permitting, safe work and other procedures such that work can be safely performed, consistent with the organization's operational integrity expectations?	
Does the organization clearly define roles and responsibilities with its critical contractors and subcontractors to maintain operational integrity?	
Does the organization have a process in place to periodically review contractor programs and performance, and make improvements if needed?	
Does the organization utilize API Spec Q1/Q2 QMS Requirement: Operational Capability provision?	
Does the organization utilize API Spec Q1/Q2 Product/Service Realization: Purchasing provision?	
Does the organization utilize API Spec Q1/Q2 Product/Service Realization: Production and Servicing Provision (Q1) or Execution of Service (Q2) provision?	

Based on your responses above, please now consider where you fall according to these categories:

- EV** - Evaluating existing company systems against the element
- Partial Implementation (Three Options)** –
 - A. 1 – 33%: Initial stages of implementation
 - B. 34 – 66%: Midway through implementation
 - C. 67 – 99%: Implementation almost complete
- FI** – Full implementation of the element
- NA** – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

10. Incident Investigation, Evaluation, and Lessons Learned – The organization investigates integrity incidents to identify causes and implements actions to mitigate future incidents.

Implementation Analysis Question	Response/Comments
Does the organization maintain procedures to correct non-conformities and to take corrective actions, both internally and with suppliers?	
Does the organization implement a process so that incidents with actual or potential serious operational integrity consequences are investigated to learn and prevent a recurrence of similar incidents?	
Do procedures address nonconformances associated with both the product/service provided as well as nonconformances within the management system itself?	
Are incidents reported to management and tracked over time?	
Are near misses investigated?	
Does the investigation process take human factors into account?	
Does the incident investigation determine the cause(s) of the incidents?	
Does the incident investigation process include communicating the incident learnings to affected personnel and taking action to prevent recurrence?	
Has management created a culture within the organization that encourages openness and dialogue that encourages reporting of incidents and near misses such that the risk of recurrence is reduced?	
Does management have a no-retaliation policy in place for reporting incidents and near-misses?	
Are corrective actions identified and implemented to reasonably reduce the likelihood of a repeat occurrence, including findings applicable across like operations/processes within the organization?	
Does the organization utilize API Spec Q1/Q2 Product/Service Realization: Control of Nonconforming Product provision?	
Does the organization utilize API Spec Q1/Q2 QMS Monitoring, Measurement Analysis, & Improvement provision?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

11. Emergency Preparedness and Response – The organization prepares for and responds to emergency situations using preparedness plans and procedures that are accessible and communicated to relevant personnel, contractors, emergency responders, and community members.

Implementation Analysis Question	Response/Comments
Has the organization identified the response resources and interfaces, including local emergency responders, for each facility and operation with an emergency response plan?	
Are emergency preparedness and response plans in place and ready for immediate activation at relevant facilities and operations?	
Has the organization communicated emergency response plans and procedures with individuals and organizations with roles and responsibilities?	
Do the emergency preparedness and response procedures include internal and external notification requirements?	
Has training and/or drills been conducted with affected personnel and emergency response personnel?	
Do the emergency preparedness and response procedures include periodic review and updating of the plans?	
Does the organization utilize API Spec Q1/Q2 Product/Service Realization: Contingency Planning provision?	
Does the organization utilize API Spec Q1/Q2 Product/Service Realization: Control of Nonconforming Product provision?	

Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

12. **Integrity Management Information** – The organization implements processes for the identification, distribution, and control of critical information related to operating and maintaining operational integrity.

Implementation Analysis Question	Response/Comments
Does the organization maintain a procedure for the identification, distribution, and control of information related to operational integrity?	
Does the information control procedure specify responsibilities for the approval and dissemination of operational integrity information such that policies, procedures and practices are reviewed and approved for adequacy prior to issue and use?	
Does the organization’s system for maintaining information related to operational integrity allow employees for ready access to current, relevant policies, processes, practices and specifications?	
Does the organization periodically assess whether its operational integrity information management process is effective and operating according to design?	
Does the organization utilize API Spec Q1/Q2 QMS Requirement: Documentation Requirements provision?	
Does the organization utilize API Spec Q1/Q2 QMS Requirement: Control of Records provision?	
Does the organization utilize API Spec Q1/Q2 Product/Service Realization: Contract Review provision?	

Does the organization utilize API Spec Q1/Q2 QMS Monitoring, Measurement, Analysis & Improvement provision?	
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Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

13. Stakeholder Engagement – The organization develops and implements a process to communicate its commitment to operational integrity through engagement with employees, regulators, community members, customers, suppliers, and other stakeholders.

Implementation Analysis Question	Response/Comments
Has the organization identified key internal and external stakeholders with who it will engage regarding its operational integrity commitment?	
Has the organization communicated its commitment to continuously improving operational integrity with internal and external stakeholders?	
Does the organization implement a process to consult with identified employees on ways to drive continuous improvement in operational integrity?	
Has management promoted engagement and leadership in driving safety, environmental protection and security at all levels of the organization?	
Does the organization utilize API Spec Q1/Q2 QMS Requirement: Quality Management System?	
Does the organization utilize API Spec Q1/Q2 Product/Service Realization: Design and Development provision?	
Does the organization utilize API Spec Q1/Q2 Product/Service Realization: Purchasing provision?	
Does the organization utilize API Spec Q1/Q2 Product/Service Realization: Product Release provision?	

Does the organization utilize API Spec Q1/Q2 Product/Service Realization: Control of Nonconforming Product provision?	
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Based on your responses above, please now consider where you fall according to these categories:

EV - Evaluating existing company systems against the element

Partial Implementation (Three Options) –

- A. 1 – 33%: Initial stages of implementation
- B. 34 – 66%: Midway through implementation
- C. 67 – 99%: Implementation almost complete

FI – Full implementation of the element

NA – Element does not apply to API operations.

Please note your response above considering you will need to complete the Self-Assessment form to report implementation progress.

Notes/Comments _____

8. Additional Resources

API Energy Excellence Resources – www.api.org/energyexcellence

- [Primary Segment Mapping Document](#) of API Segment-Based Performance Management Systems Approaches to the API Energy Excellence Elements
- API Member Toolkit
- [API Standards](#)

API Energy Excellence Reading Room

API provides API Member Companies and the public with access to the key industry standards used to support participation in API Energy Excellence and referenced in this Tool. Through the [API Energy Excellence Reading Room](#), representatives can review standards related to systematically managing safety, health, security, and environmental impacts across all segments of the natural gas and oil industry. The standards included cover key areas of operations, including process safety, refinery and chemical plant operations and equipment, offshore drilling, onshore safety, pipeline safety, and public awareness programs. These standards are available for review only, and hard copies and printable versions will continue to be available for purchase at the [API Publications Store](#).

Upstream

- [Center for Offshore Safety](#) – Based on API RP 75, *Recommended Practice for a Safety and Environmental Management System for Offshore Operations and Assets*, the Center for Offshore Safety (COS) promotes continuous safety improvement for offshore drilling, completions and operations through effective leadership, communication, teamwork, disciplined management systems and independent third-party auditing and certification.
- [The Environmental Partnership](#) – Inclusive of upstream and midstream operations, The Environmental Partnership (TEP)'s mission is to continuously improve the industry's environmental performance by taking action, learning about best practices and technologies, and fostering collaboration in order to responsibly develop our nation's essential natural gas and oil resources.
- [Onshore Safety Alliance](#) – The Onshore Safety Alliance (OSA) is a voluntary industry coalition committed to safety and the well-being of the industry's workforce in U.S. onshore oil and gas exploration and production.

Midstream

- [Pipeline Safety Management System \(SMS\) Maturity Model and Tools](#) – Primary resources in evaluating conformance with the Performance Management Framework. Specifically, the Pipeline SMS Maturity Model provides pipeline operators a means to benchmark progress and evaluate the effectiveness of their implementation of safety management systems through Recommended Practice (RP) 1173, *Pipeline Safety Management System*.
- [API Pipeline Safety Management System Assessment Program](#) – third-party assessment program to proactively support industry adoption of API RP 1173 and implementation of pipeline safety management systems (SMS). Assessments utilize pipeline SMS experts and are designed to evaluate both the quality of the written programs and the effectiveness of field implementation of process safety practices.

Downstream

- [API-AFPM Advancing Process Safety Initiative](#) – AFPM and API offer numerous programs and work groups to further advance process safety improvements by providing industry with more opportunities to communicate and share experiences and knowledge – vital components of our collective goal to improve process safety performance.
- [API Process Safety Site Assessment Program \(PSSAP®\)](#) – Third party-assessment program which utilizes industry developed protocols to assess a site’s process safety systems by independent, credible, third party teams of industry-qualified process safety expert assessors. Assessments are designed to evaluate both the quality of the written programs and the effectiveness of field implementation of process safety practices.

Service, Supply, and Manufacturing

- [API Monogram Program](#)
- [API Quality Registrar Program \(APIQR\)](#)

International Association of Oil & Gas Producers (IOGP) Resources

- [IOGP 510](#), Operating Management System Framework for controlling risk and delivering high performance in the oil and gas industry
- [IOGP Life Saving Rules](#)
- [IOGP Process Safety](#)

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APPENDIX

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 	✓ Leadership and Management Commitment Element	✓ Process Safety Leadership Protocol	✓ QMS Requirement: Management Responsibility
System Establishment, Assessment and Continuous Improvement	✓ 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 	✓ 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 	✓ 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 ➤ 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 	✓ 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	✓ 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 Processes, Tools 	✓ Operational Controls Element	<ul style="list-style-type: none"> ✓ Operating Practices Protocol ✓ Product Storage & Transfer Protocol 	<ul style="list-style-type: none"> ✓ QMS Requirement: Operational Capability ✓ Product/Service Realization: Purchasing

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
		<ul style="list-style-type: none"> 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"> ✓ Hydrofluoric Acid (HF) Alkylation/API RP 751 	<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: Appy 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: Appy 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

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
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

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
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

Glossary of Frequently Used Terms

Administrative Change: A change to processes, practices, policies, procedures, standards, or controlled documents.

Asset: The equipment (individual items or integrated systems) or software use in oil and gas operations.

Authority: Assigned power to control work by an organization, including power to delegate.

Contractor: An individual, partnership, firm or corporation retained by the Owner or Operator to perform work or to provide supplies or equipment. The term Contractor shall also include subcontractors.

Document: As used in this publication, written statement of requirements or record of actions taken and completion of requirements.

Effective(ness): Extent to which planned activities are completed and planned results achieved [From BS EN ISO 9000:2005, 3.2.14]

Hazard: Types of chemical, thermal, toxic, kinetic, or potential energy with the ability to cause harm to people, the environment, or facilities.

Knowledge: A person's understanding of the requirements needed to perform a role or fulfill an activity.

Leadership: Establishing clear vision translated into policies and objectives; sharing them with others so they will follow willingly; providing information, knowledge, and methods to realize the objectives; and coordinating and balancing competing interests of all stakeholders; also used collectively to refer to those persons, at any level in the organization, who provide these functions.

Life Critical Rules/Life Saving Rules: Rules pertaining to common, but critical activities and safety hazards; intended to be simple, concise reminders to enhance safety performance and benefit individuals and communities. Examples include: [IOGP Life Saving Rules](#), [Phillips66 Life Saving Rules](#), [Halliburton Life Rules](#), [Shell Life Saving Rules](#).

Management [noun]: Person or group of people, as defined by the owner or operator, who directs and controls all or part of a facility, location, department, or other function; has fiscal responsibility for the organization; and is accountable for compliance with legal and other applicable requirements.

Operational Integrity Management: The API Energy Excellence/Performance Management Framework defines Operational Integrity Management as systematically managing safety, health, security, and environmental impacts to achieve continuous improvement of oil and gas production, transportation and refining operations

Organizational Change: A change in personnel or organizational structure affecting safety or environmental risks or operational integrity interfaces.

[Performance] Management System: A framework of elements that an organization uses to direct and control work to achieve its objectives in an intentional and continual manner.

Procedure: Documented method that is followed to perform an activity under controlled conditions to achieve conformity to specified requirements.

Process: A series of interrelated or interacting activities or steps with anticipated outputs applied in oil and gas operations.

Risk: Situation or circumstance that has both a likelihood of occurring and a potentially negative consequence; the product of likelihood of failure and consequence.

Risk Analysis: Methodology for predicting the likelihood and consequence of a threat or threats.

Risk Assessment: An act of identifying hazards, evaluating the risks posed by the hazards, including the potential consequences and likelihood of such consequences, and identifying risk controls.

Risk Management: Systematic application of management policies, processes, procedures, finite financial and human resources, and practices to the tasks of identifying, analyzing, assessing, applying prevention practices, and mitigating risk in order to protect employees and contractor personnel, the general public, the environment, and operations.

Safety: As used in this publication, 'safety' may relate to personal safety, process safety, health, environment and security.

Safe Work Management: Documented requirements used in the planning, preparation, risk assessment, authorization, execution, monitoring, and completion of work that help minimize the potential harm to people, the environment, and property.

Safe Work Practice: Documented requirements used in the planning, preparation, risk assessment, authorization, execution, monitoring, and completion of offshore work that help minimize the potential harm to people, the environment, and property.

System: An integrated set of elements, including people, hardware, software, information, procedures, facilities, services, and support facets, that are combined in an organizational or support environment to accomplish a defined objective.

Acronyms and Abbreviations

- KPI – Key Performance Indicator
- MOC – Management of Change
- PDCA – Plan-Do-Check-Act
- SMS – Safety Management System