GLOBAL INDUSTRY SERVICES
SYSTEM PROGRAMS

API Process Safety Site Assessment Program

Application

REVISION 4 |

PROCESS SAFETY
SITE ASSESSMENT
PROGRAM®

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API Process Safety Site Assessment Program
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Please fill in the necessary requirements.

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This is to collect information about the facility's process safety programs and to assist in planning and conducting the assessment.

API Process Safety Site Assessment Program
Program Overview

Thank you for your interest in participating in an API PSSAP Assessment. This application form must be used when applying for an API PSSAP Assessment.

This application provides API with the basic information required for processing your inquiry. Please include as much detailed information as possible. All information will be kept private and confidential. By completing an application and submitting it to API, you agree that API may use your personal information to contact you in connection with your interest in the PSSAP program and all activities necessary to conduct and complete an assessment. If you have any questions, please contact our office by calling API at 281-978-4940. Please send email inquiries to: **broadbent@api.org** or **mengr@api.org**.

What is PSSAP?
PSSAP assessments contribute to a culture of safety and continuous improvement across the refining and petrochemical industry. During a PSSAP assessment, a team of independent, third-party process safety experts ("assessors") spend about a week at an industrial facility, working with employees and leadership (across all shifts) to fully understand the current process safety systems. Following the assessment, the PSSAP team provides observations, opportunities for improvement, and benchmarking data that can be used to enhance process safety and improve outcomes at the facility.

The PSSAP is 1 of 6 API–American Fuel & Petrochemical Manufacturers (AFPM) programs to advance process safety performance.
- Process Safety Site Assessments
- Industry Learnings & Outreach
- Process Safety Hazards Identification and Practices Sharing
- Mechanical Integrity
- Regional Network Meetings
- Human Reliability

Program benefits & opportunities
- Credible 3rd party independent assessment by experienced, qualified individuals
- Evaluates both the quality of written programs & effectiveness of field implementation.
- Industry Benchmarking allows you to gauge performance against the industry.

What do PSSAP assessors focus on?
Industry-developed protocols designed to address key process safety activities are the basis for the site assessment. A protocol was created in each area through collaborative efforts of subject matter experts, from a range of companies. For each protocol, the assessors focus on assessing written programs, field implementation, and promoting learning from the sharing of experiences and successful practices seen at industry sites to help facilities drive improvement.

What areas/protocols are assessed by PSSAP's third-party expert teams?
1. Process Safety Leadership
2. Operating Practices
3. Mechanical Integrity (focused on fixed equipment)
4. Safe Work Practices
5. Management of Change (MOC)
6. Process Hazards Analysis (PHA)
7. Facility Siting
8. Product Storage & Transfer
9. Incident Learning
10. Hydrofluoric Acid (HF) Alkylation/API RP-751

API Process Safety Site Assessment Program
Program Overview

How is PSSAP different from a typical audit?

PSSAP promotes step changes in performance, through the sharing of experiences and industry's practices, and serves as a feedback mechanism to identify industry trends and patterns. PSSAP looks beyond regulatory compliance and helps facilities benchmark their programs to help each site evaluate its internal procedures.

> ➢ Effective and Efficient Process
> ➢ Employee discussions - on all shifts – with process safety experts
> ➢ PSSAP assessors spend a considerable amount of time in the field/plant

Who are the assessors?

The assessors are independent teams of process safety experts identified by API. The assessors typically average 40 years of industry experience, with particular areas of further expertise (operations, mechanical integrity, etc.). They work with each site to evaluate both the quality of written programs and the effectiveness of field implementation

How does a typical assessment work?

While each assessment is customizable, based on the size of the site, a typical assessment takes about five days, and includes: meetings with the sites subject matter experts ("SMEs"), based on a pre-determined schedule; assessors spending considerable time in the field to determine how procedures and programs are being used and implemented. Daily de-briefs and the closing conference review the key highlights and areas recommended for further review for each area assessed.

Program protocols

10 Protocols – Focused on key process safety activities

- Process Safety Protocols*
    1. Process Safety Leadership
    2. Management of Change
    3. Mechanical Integrity – Fixed Equipment
    4. Safe Work Practices
    5. Operating Practices
    6. Process Hazard Analysis
    7. Facility Siting
    8. Product Storage and Transfer – *New in 2019*
    9. Incident Learning – *New in 2019*
- HF Alkylation based on API RP – 751 covers the 6 Sections of RP - 751
    1. Process Hazards Management Plan
    2. Operating Procedures and Worker Protection
    3. Materials, New Construction, Inspection, and Maintenance
    4. Transportation and Inventory Control
    5. Relief and Utility Systems
    6. Risk Mitigation Options and Techniques

*Note: The first seven protocols are what we refer to as "The Basic Protocols" or the "Original Protocols".

Program Protocol Questions

Each of the questions included in the protocols encourages going beyond the basics to improve the quality of process safety.

API Process Safety Site Assessment Program
Program Overview

Final Report

Will include:

- An executive summary
- Detailed write-up for each protocol assessed, which will include observations and good practices
- Individual scores for each question in the protocol.

Benchmarking

Benchmarking is one of the most valuable offerings of PSSAP. With the site's permission, protocol question scores are blindly placed in a database to allow you to compare your performance to the industry and identify areas for improvement. It also allows the industry to measure its progress over time.

API Process Safety Site Assessment Program
Assessment Options

Assessment Approaches

You have the option to apply for one of the following assessments:

1. A **General Assessment**
    a. Includes any combination of protocols 1 thru 9
2. **API RP – 751 HF Assessment** or 3-year Audit
3. A **General Assessment**; plus an **API RP -751 HF Assessment**
    a. A site wishing to have both types of Assessments should have them performed during two different weeks.
4. Contact the Program Manager for other assessment approach options to meet your needs. These options can include but are not limited to:
    a. Limiting the Assessment to one or more protocol(s)
    b. Conducting a follow up assessment for one or more protocol area after participating in a full general assessment.

API Process Safety Site Assessment Program
Assessment Deliverables

The API PSSAP will provide you with the following logistical support and deliverables:

1. **Pre-Assessment Site Visit**
   API will conduct a Pre-Assessment Site Visit as a general introduction to the assessment program and process.
   - API staff will meet and greet the site employee assigned to oversee the PSSAP arrangements, and
   - API will present & discuss the PSSAP with the site leadership team, including general overviews of:
     o Background and reason for the program,
     o The coverage of the Protocols and their development,
     o Scheduling for the week of the assessment – Sunday to Friday,
     o General selection criteria for assessors,
     o Explanation of assessment scoring,
     o Data, documents and report handling procedures, and
     o How benchmarking information will be provided.

2. **Logistical Support**
   API shall also provide the following logistical support:
   - Explain requirements and restrictions of assessor team make-up;
   - Provide API Assessment Protocols;
   - Inform assessors of necessary logistical arrangements (i.e., hotel, etc.);
   - Provide interview template for site to complete for scheduling assessment interviews;
   - Provide a PowerPoint for use with site employees or contractors that provides an overview of the program.

3. **Onsite Assessment of Key Process Safety Activities**
   API will provide a team of experienced assessors, who average 40 years of experience, using industry developed protocols. This assessment provides an:
   - Evaluation of both the quality of written programs & effectiveness of field implementation (see Program Options for complete list).
   - Information and experience exchange between the assessors and site personnel.
   - The assessment provides an opportunity for enhanced dialogue with assessors and the opportunity to garner information from the assessors in the field of process safety.

4. **After the Assessment**
   API shall also provide the following reports to you after the assessment according to the explained timetable:
   - Rough Draft Report (day of closing conference)
   - Draft Report (~1 to 2 weeks after closing conference)
     o No corrective action reporting is required
   - Final Report – including Benchmarking data (~4 to 6 Weeks after closing – allows for site comments on Draft Report)
     o Benchmarking data will only be included in the Final Report

API Process Safety Site Assessment Program
Assessment Deliverables (cont.)

5. **Written Report**
   The report will contain the following information:
   - Detailed Analysis by each protocol of:
     - Key Good Practices
     - Key Observations
     - Completed Protocol Spreadsheet
       - Includes assessors' observations for each question
       - Site Score and Industry Score for each question
     - List of positions interviewed
     - Performance against Key questions
     - Site & Industry Score for protocol
     - Site Score for protocol by the Management Systems and Implementation portions of each protocol
     - Site Scores by weighting of questions
     - Chart showing sites performance for protocol questions with the highest weighting
   - Scope Summary
   - Team Listing
   - Definition of Terms
   - Scoring Information (explains how scoring is done)

6. **Benchmarking Data**
   API shall also provide benchmarking data with the final report and then periodic updates as additional assessments are conducted at other locations. The benchmarking data includes, but is not limited to:
   - Industry Score for each protocol question.
   - "Spider" charts by protocol and "sub-protocol"
     - These spider charts will show your site's performance overlaid on top of the industry performance and will cover:
       - Performance by protocol
       - Performance by sub-protocol
       - Key question performance by protocol
       - Key question performance by sub-protocol
   - "Box & Whisker" or "Quartile" charts
     - These charts will show both your site and Industry scores and will cover:
       - Performance by protocol
       - Performance by sub-protocol
       - Key question performance by protocol
       - Key question performance by sub-protocol

API Process Safety Site Assessment Program
Submission of the Application

Directions for Submission of the Application

Submit all applicable pages of the following items for each of the assessment approaches identified on page 6 for which you are applying:

1. Part 1 – Application
2. Part 2 – Assessment Questionnaire

Submit completed Applications to:

Electronically to:

Andrew Broadbent – Program Manager
broadbenta@api.org

or

Ryan Meng – Program Associate
mengr@api.org

Application Review

API will contact the individual listed as the Primary Contact on page 10 of the application to review the application. An agreement will then be sent back to the individual identified by the Primary Contact.

1. Part 1 – Application
2. Part 2 – Assessment Questionnaire

API Process Safety Site Assessment Program
Part 1 – Application

Please fill out the following information:

1. <u>Legal Company Name:</u>

2. <u>Facility Name:</u>
   (Name of location where assessment is to take place)

3. Actual physical location of facility to participate in the assessment. In general, documents will be sent to Primary Contact (see item 4). Physical location of facility is needed for planning of assessment.
   <u>Street Address:</u>
   (P.O. Box numbers are not acceptable)

   <u>City:</u>   <u>State/Province:</u>

   <u>Zip/Postal Code:</u>   <u>Country:</u>

   <u>Website:</u>

4. Primary Contact for this Assessment and other API Legal Documents (NOTE: Individual must be an employee / officer of the organization):
   <u>Name:</u>

   <u>Title/Position:</u>

   <u>Street Address:</u>
   (P.O. Box if applicable)

   <u>City:</u>   <u>State/Province:</u>

   <u>Zip/Postal Code:</u>   <u>Country:</u>

   <u>Telephone Number:</u>   <u>Email Address:</u>

5. On site Facility Contact Person(s) (Contact person at the facility to be assessed, if different from the primary contact identified in item 4):
   <u>Name:</u>

   <u>Title/Position:</u>

   <u>Telephone Number:</u>   <u>Email Address:</u>

   <u>Name:</u>

   <u>Title/Position:</u>

   <u>Telephone Number:</u>   <u>Email Address:</u>

API Process Safety Site Assessment Program
Part 1 – Application (Cont.)

Please fill out the following information:

6. Indicate the size of the facility by total barrel per day output (TBD) based on historical data from the previous reporting year: Large   Medium   Small

   API Definition of Size:
Large –	Greater than 300,000
Medium –	Between 150,000 and 300,000
Small –	Less than 150,000

   If small, please indicate total barrel per day output: _____   TBD

7. Indicate the desired assessment approach (see descriptions on page 6):

   ☐   General Assessment

   ☐   API RP – 751 HF Assessment (qualifies as the RP – 751 3 – year audit)

      o   Date of last 3 – year audit:_____

   ☐   A General Assessment ; plus an API RP – 751 HF Assessment

      o   Date of last 3 – year audit:_____

   ☐   You would like to talk with Program Manager to discuss options

8. Please give us an indication of the time frame you would like this assessment to take place. This can be done by year and/or quarter:
   An exact week will be selected once an agreement is executed.

   1. General Assessment (includes any combination of the 9 Protocols)

      Year/Quarter:_____

   2. API RP-751 HF Assessment or 3 - year audit

      Year/Quarter:_____

   3. A General Assessment plus an API RP-751 Assessment

      Year/Quarter:_____

API Process Safety Site Assessment Program
Part 2 – Assessment Questionnaire

Please respond to the following questions

1. Does the site have a Safety and Environmental Management System?   Yes   or   No

   a. If yes, what is the basis of the management system (e.g. company developed, ISO 14001/OHSAS 1801, ACC Responsible Care®)?_____

2. What are the major toxic materials present at this site (e.g. chlorine, HF acid, sulfuric acid)?_____
   _____

3. Does the site have an HF Alkylation unit?   Yes   or   No

   a. If yes, has the site conducted a detailed review against API RP 751 guidelines?   Yes   or   No

   b. If yes, what is the date of the most recent review:_____

4. Describe the location of the site and its proximity to nearby community concerns (e.g. house, schools, hospitals:_____
   _____

5. When was the site built?_____

6. How many employees are at this location?_____

7. How many regular contractors are at this location?_____

8. Does the facility have a marine facility (e.g. tankers, barges)?   Yes   or   No

9. Are TWIC Cards required at the site?   Yes   or   No

10. Are there any current administrative/judicial orders, pending or threatened litigation, unresolved allegations, citations, or notices of violation?   Yes   or   No

   a. If yes, please describe:_____
   _____
   _____

11. How many of the following jobs have been performed at the site in the past 12 / 24 months:

Type of Job	Number
Live-Flare Work	
Inert Entry	
Critical Crane Lift (i.e., over equipment)	
Hot Taps	

API Process Safety Site Assessment Program
Part 2 – Assessment Questionnaire (Cont.)

Please respond to the following questions

12. Do special arrangements need to be made to visit or inspect any of the facilities associated with this site?_____

13. Suggested Name, address, and phone number of hotel for members of the assessment team to use (i.e. Corporate Rate)?_____

14. Does the Facility have a facial hair policy?   Yes   or   No
    a. If yes, would this policy apply to members of the assessment team?   Yes   or   No

15. Besides basic safety orientation training; is any other special training / requirements required of assessors in order to access the facility (e.g. H2S, HF, respiratory protection, etc.)?   Yes or No

    a. If yes, describe (including duration):_____

    _____

    _____

16. Are there any special considerations for bringing laptop computers on site (e.g., do the computers need to be "registered")?_____

    _____

17. Does the site have internet access available for the assessors (e.g., local network or guest   Wi-Fi)?_____

    _____

18. Which of the following personal protective equipment will the facility require of the members of the assessment team, and which will the facility provide?

Equipment	Required	Facility Will Provide
Safety Glasses (with side shields)	Y / N	Y / N
Splash Goggles	Y / N	Y / N
Hard Hats	Y / N	Y / N
Hearing Protection	Y / N	Y / N
Gloves	Y / N	Y / N
Flame Retardant clothing (e.g. Nomex)*	Y / N	Y / N
H2S Monitors	Y / N	Y / N
Safety Shoes	Y / N	Team Member will Provide
Special Instructions		

* Assessors typically have their own but occasionally need to borrow

GLOBAL INDUSTRY SERVICES
SYSTEM PROGRAMS

API PROCESS SAFETY SITE ASSESSMENT PROGRAM

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