

API ANSI RP 754:

*Process Safety Performance Indicators
for the Refining and Petrochemical
Industries*

Implementation Conference Call

February 27, 2012

Purpose of RP 754 Quarterly Conference Calls

- To support broad adoption of API 754 throughout the Refining and Petrochemical industries
- To ensure consistency in Tier 1 and 2 metrics reporting in order to establish credibility and validity
- To share learning's regarding the effective implementation of Tier 1-4 lagging/leading metrics

Today's Agenda

- 2011 Data Collection: Feb 1 – Mar 1, 2012
- Spreadsheet instructions
- Some recent FAQs
- Upcoming AFPM (formerly NPRA) workshop
- Q&A

2011 Data Reporting – submit data by March 1, 2012

- Companies are encouraged to submit all site data (including international sites) to both API and AFPM
 - RP-754 intended for global adoption
 - Sufficient data needed to compare performance with Europe, Asia-Pacific and other regions
 - Reporting to both trade associations supports data accuracy cross-checking
 - Easy to do – single spreadsheet
 - Not required to be an API/AFPM member to submit data and receive confidential/blinded report
- Strength in numbers
 - As an industry we were able to get over the public-reporting hump for Occupational Injury/Illness and this led to significant industry-wide improvement over time
 - By submitting data to API/AFPM now, a company is able to benchmark during this initial “grace” period

Spreadsheet Instructions

- 2011 spreadsheet is very similar to last year's with the following changes:
 - All facilities and general information should be entered into the 'Facility Information' tab (reduced from 3 tabs to 2 tabs)
 - When entering Events on the 'Event Information', make sure the facility name (column B on first tab) matches exactly.
 - 'Facility Information' tab now includes an option to report that you had 'No Tier 1 Events', 'No Tier 2 Events', or 'No Tier 1 or Tier 2 Events'.
 - There is now a drop-down menu of petrochemical processes from which to choose (not just refinery processes).
 - 'Mouse-overs' are provided for additional definitions and guidance on entering the data

Spreadsheet Instructions, continued

Three areas that require clarification based on the 2010 data submittals:

1. PRD Discharges--*please see the attached slides from the September 26th Webinar (also posted at: <http://www.api.org/Environment-Health-and-Safety/Health-Safety/Process-Safety-Industry/measuring-safety-improvement/RP754-Webinars.aspx>)*

2. Contractor Hours Include:

- Embedded contractors
- Specialty contractors
- Project hours (if not major construction)

Contractor hours DO NOT include:

- delivery drivers
- large-scale projects that are typically fenced-off and not connected to the existing process (e.g., major construction)

3. PSE Consequences

- List all consequences for the Tier— e.g. list both Threshold Release Quantities and number of Days Away from Work or Fatalities.

Exception: If the event is a fire or explosion, the chemical-released quantity is not required to report. (Basis: Chemical released is consumed by the fire/explosion.) However, if the fire/explosion results in secondary release points the site shall report threshold quantities of other chemicals released.

- Do not list Tier 2 consequences in Tier 1 **except** for those related to human impact (i.e. employee, contractor, or sub-contractor recordable injuries)

Submittals

- Submit the same completed spreadsheet to both API/AFPM by March 1, 2012:
 - AFPM – Anna Scherer AScherer@afpm.org
 - API – Alexis Tressler tresslera@api.org

RP-754 FAQs

- Q. If a refinery or petrochemical site has an associated transportation terminal, should the hours and PSEs be reported with the refinery/petrochem site?
- A. RP 754 distinguishes between LOPC events that occur inside the fence line and those that occur outside the fence line, which are indicative of transportation safety performance. However, if terminal personnel report organizationally to the site and are on the same OSHA 300 log, then yes – report their PSEs and hours as part of the site’s RP 754 data. If not, then do not report this data to API/AFPM.

RP-754 FAQs

- Q. Do sites submit international data to AFPM for OII as well as PSE data?
- A. No – only PSE
- Q. If a company has a non-Refinery operation that is PSM-covered, such as a gas plant, should they report these to API and AFPM. (Note: these sites do not have an AFPM site ID number assigned.)
- A. No – While process safety performance metrics are important across all company operations, the scope of RP-754 is refineries and petrochemical sites.

RP-754 FAQs

Q. Do you have any guidance on how to calculate release amounts?

A. The most important element of determining and reporting release amounts is to be consistent. For example, in TRC Category 6 and 7.....stick with pounds or barrels consistently but either is acceptable. The point is to trend your performance improvement over time.

There is no single correct way to determine release amounts and different situations require different approaches. For example a tank that is only receiving or delivering product can use a “before and after” level indication while a rundown tank requires more sophisticated analysis. Releases from piping often use software (hole size, head pressure, etc.) to facilitate release amounts.

Typically sites rely on the unit process engineer and environmental department personnel to perform the calculations. Companies report they use the same approach for reporting both PSEs and environmental releases.

Some of the more challenging scenarios:

- amount of H₂S in a rich amine release
- heat exchanger tube leaks

RP-754 FAQs

- API posted a list of FAQs on their website a year ago (January 2011)
- Go to the link below to see an update of this FAQ list (additions highlighted in yellow)
- <http://www.api.org/environment-health-and-safety/health-safety/process-safety-industry/measuring-safety-improvement.aspx>

Upcoming Workshop

- Learn more about metrics and other key elements of industry process safety:
 - API/AFPM Advancing Process Safety Workshop
 - May 15th from 1-5pm in San Antonio, TX (Grand Hyatt)
 - This will be the day before the May 16-17 – AFPM 2012 National Occupational and Process Safety Conference & Exhibition
 - Contact Lara Swett at lswett@afpm.org for more information

API website

- API RP 754 Fact Sheet
- Series of four webinars presented in fall 2010 (available for viewing)
- Listing of FAQ's that help you properly classify a PSE
- API Guide to collecting PSE data
- Read-only access to API RP 754
- Contact Karen Haase at Haasek@api.org for more information

<http://www.api.org/environment-health-and-safety/health-safety/process-safety-industry/measuring-safety-improvement.aspx>