

API PROCESS SAFETY EVENT (PSE) PUBLIC REPORTING:

America’s oil and natural gas industry considers safety a core value and is committed to developing the technologies, standards, best practices, and programs needed to help ensure that workplace safety is at the forefront of its activities. A process safety performance indicators program provides useful information for driving improvement and when acted upon, contributes to reducing risks of major hazards by identifying the underlying causes and taking action to prevent recurrence.

API collects process safety event (“PSE”) data based on ANSI/API Recommended Practice 754 Third Edition, *Process Safety Performance Indicators for the Refining and Petrochemical Industries*.

Year-to-year trending of performance data is a common method for assessing change. However, there are several factors that pose challenges for any year-to-year trend analysis of PSE data. The trends are for a small, finite population (refineries) and the events observed (PSEs) are statistically rare. Moreover, a PSE is a discrete event (a refinery cannot have 0.2 events in a year), further complicating any effort to statistically show a trend.

Because of these factors, yearly PSE data will tend to fluctuate and, in general, a year-to-year change is not a statistically significant indicator of real change. To address these factors, API “smooths” these fluctuations by showing a five-year rolling average, which is recognized by the industry as an indicator of sustainable performance.

The tables below show the data that API has collected for years 2019-2023.

U.S. Refining PSE Summary Data

	2019	2020	2021	2022	2023	5-Year Average
Number of Companies	28	29	28	26	29	28
Number of Refineries	99	101	96	95	96	97
Refinery Capacity Response Rate	93%	93%	94%	93%	95%	94%
Tier 1 PSEs Reported	102	85	96	92	85	92
Tier 1 PSE Rate per 200,000 Workforce Hours	0.0608	0.0612	0.0770	0.0682	0.0604	0.0651
Tier 2 PSEs Reported	264	182	219	233	211	222
Tier 2 PSE Rate per 200,000 Workforce Hours	0.1574	0.1311	0.1756	0.1728	0.1500	0.1569

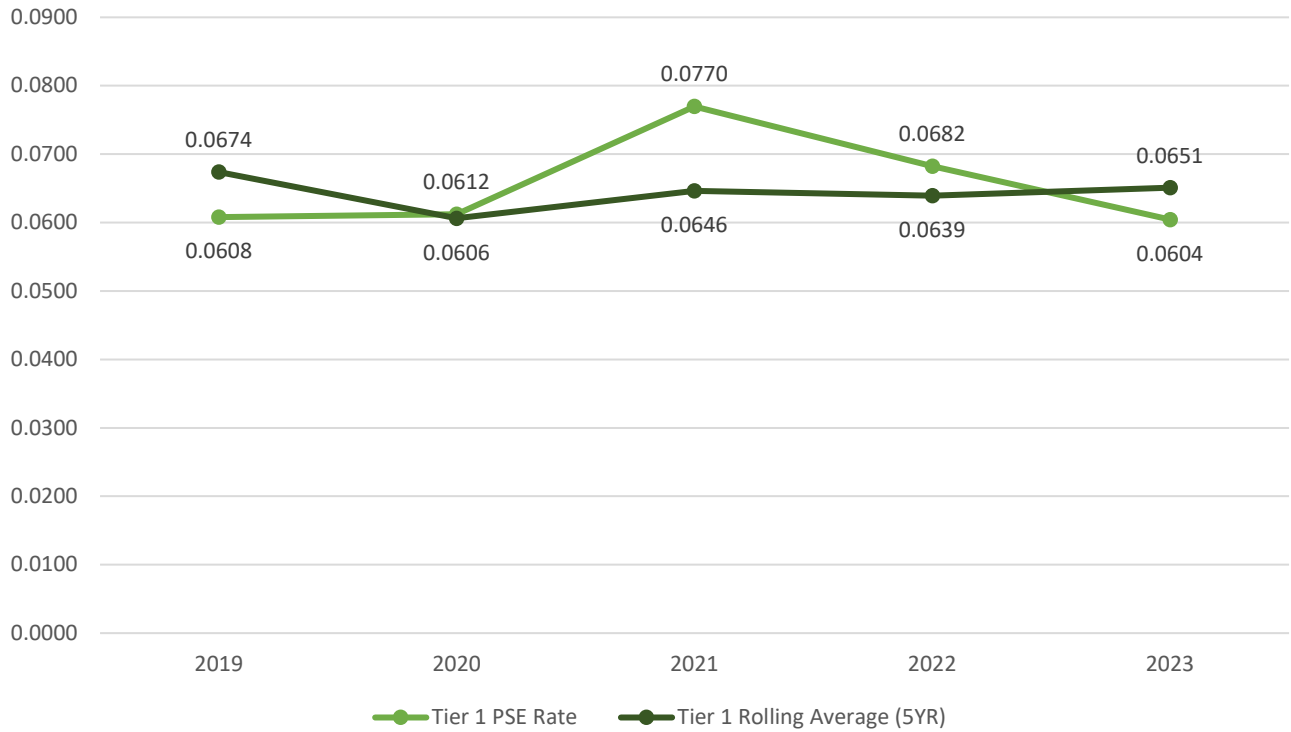


Figure 1. U.S. Refining Tier 1 PSE Rates (2019-2023)

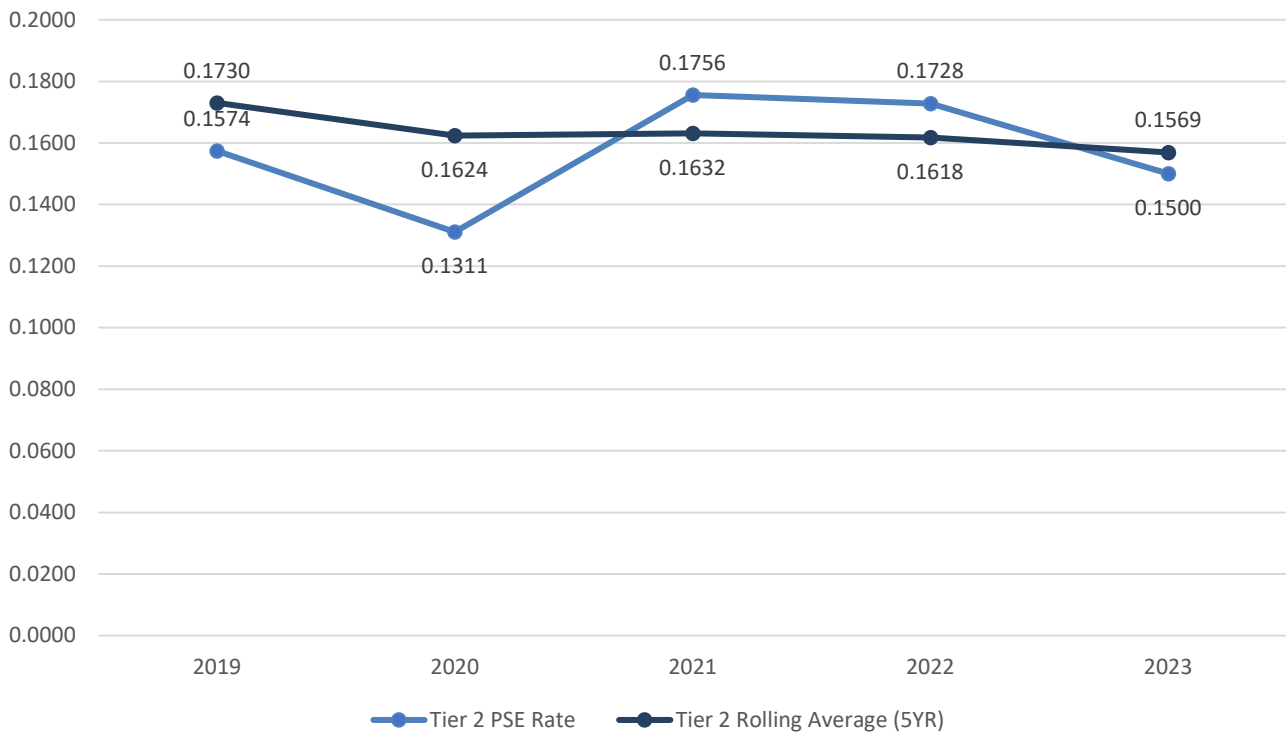


Figure 2. U.S. Refining Tier 2 PSE Rates (2019-2023)