



Why Metrics Matter

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"If you can not measure it, you can not improve it"

Lord Kelvin







2017 Responsible Care Chairman's Award





O WORLD'S MOST

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2015 Award for Excellence in Process Safety







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Zero-Incident Mindset is a wholistic approach that strives for a culture where all incidents are preventable.

The Zero Incident Mindset embraces all of our values:

- Safety & wellness
- Inclusion & diversity
- Ethics & integrity
- Sustainability



Drives company approach to metrics.



• OSHA required:

- Recordable injuries/illnesses
- Days away
- Beyond:

Prevention through work systems aimed at minimizing risk of personal injury or illness.

- Serious Injuries and Fatalities (SIFs)
- Potential SIFs (P-SIFs)



- SIF: Work-related incident that results in a life-altering injury, illness, or death.
 - Life-altering is defined as permanent or long-term impairment or loss of use of an internal organ, body function, or body part
- P-SIF: Work-related incident that could have likely resulted in a life altering injury, illness or death or an incident which involved a lapse in a Life Critical Process.
 - Includes Near Misses



- All work-related SIF / P-SIF incidents must be formally investigated.
- An incident one pager shall be created for all work-related SIF investigations.
- Incident one pagers are optional, at site management's discretion, for P-SIF investigations.

One pagers reviewed at the executive level.

- One pagers available on intranet.
- ACC developed SIF/P-SIF metric that Eastman will be sharing this year.



Process Safety

- Prevention and mitigation of fires, explosion, and accidental releases.
- A Process Safety Incident occurs anytime there is an unplanned or uncontrolled release of material from primary containment.

"Keeping it in the Pipes"



Process Safety Metrics

- API Recommended Practice 754 is industry standard
 - *Tier 1* Loss of Primary Containment Event of Greater Consequence
 - Tier 2 Loss of Primary Containment Event of Lesser Consequence
 - *Tier 3* Challenges to Safety Systems
 - Tier 4 Operating Discipline and Management System Performance Indicators

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Process Safety Indicator Pyramid Broad Access [Nationwide] Public Tier 1 Reporting LOPC Events of Greater Consequence Tier 2 LOPC Events of Lesser Consequence Leading Indicators Tier 3 **Challenges to Safety Systems** Tier 4 **Operating Discipline & Management System** Performance Indicators

1220 L Street, NW + Washington, DC 20005-4070 + www.api org

- Tiers 1 & 2 are RP-754 standardized definitions
- Tiers 3 & 4 are company defined performance indicators

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Process Safety Metrics

- By reviewing lower-tier process safety events, we can proactively mitigate risk of higher-tier events.
- Tier 1 and 2 information reported to:
 - American Chemistry Council
 - American Fuel and Petrochemical Manufacturers
- Process safety incident rate reported in Eastman Sustainability Report, along with other safety metrics.

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Additional Information Sharing

- Television screens throughout plants display information related to safety incidents.
- IShare Reporting and Tracking Database Available to all employees.
 - Reporting of incidents
 - Incident investigation
 - Root causes
 - Corrective measures

Company intranet displays OSHA-R, SIFs/P-SIFS, process safety events, and other metrics.

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Questions?

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