



Brief overview of Safety Performance Indicators Guidance



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OECD Guidance

OECD (2008) Guidance on Developing Safety Performance Indicators for Industry 2nd Edition, ISBN: 9789264221741 (PDF)

<http://dx.doi.org/10.1787/9789264221741-en>

- Seven step process
- Options for different industries, including examples from chemical manufacturer, specialty chemicals and warehouses

OECD (2008) Guidance on Developing Safety Performance Indicators for Public Authorities and Communities/Public 2nd Edition, ISBN: 9789264221734 (PDF) <http://dx.doi.org/10.1787/9789264221734-en>

- Also the seven-step process
- For public authority programmes – e.g., regulator, emergency responder, community groups



HSE Guidance

HSE (2006) Developing process safety indicators - A step-by-step guide for chemical and major hazard industries ISBN 978 0 7176 6180 0 <http://www.hse.gov.uk/pUbns/priced/hsg254.pdf>

HSE (2008) Key Process Safety Performance Indicators - A short guide for Directors and CEOs
<http://www.hse.gov.uk/leadership/keyindicators.pdf>

HSE (2008) RR909 - Safety performance indicators in the explosives sector: Development of a worked example
<http://www.hse.gov.uk/research/rrhtm/rr909.htm>

HID Instruction: Assessment of Key Performance Indicators During Inspection/Investigation <http://www.hse.gov.uk/comah/hid-kpi-delivery-guide.pdf>



Industry guidance (all industries)

CCPS Process Safety Metrics

<https://www.aiche.org/ccps/resources/tools/process-safety-metrics>

- Lagging (accidents/near misses) and leading indicators (e.g., mechanical integrity, mgmt of Change, training, safety culture)
- Where PSIs are not applicable

CEFIC (2016) CEFIC Guidance for Reporting on the ICCA Globally Harmonised Process Safety Metric

<http://www.cefic.org/Industry-support/Responsible-Care-tools-SMEs/3-Plant--Process-Safety/Cefic-Guidance-on-Process-Safety-Indicators/>

- Only accidents (lagging indicator). Does not cover near misses.

ISC (2015) Lead Process Safety Metrics – selecting, tracking and learning, IChemE Safety Centre,

<http://www.ichemesafetycentre.org/~media/Documents/icheme/Safety%20Centre/safety-centre-metrics.pdf>

- Leading indicators only ... to be presented this afternoon



Oil and gas industries

API (2016) Recommended Practice (RP) 754, Process Safety Performance Indicators for the Refining and Petrochemical Industries, 2nd Edition <http://www.api.org/oil-and-natural-gas/health-and-safety/process-safety/process-safety-standards/rp-754>

- Not available online. “Lagging and leading indicators” mentioned but from webinars, it looks very much like CEFIC’s process safety metrics

Energy Institute Guidance on meeting expectations of EI process safety management framework (free)

<https://www.energyinst.org/technical/PSM/psm-guidelines>

- 20 PSM Elements – Each with 10-12 potential performance measures

Energy Institute: A framework for the use of key performance indicators of major hazards in petroleum refining (for purchase)

<https://publishing.energyinst.org/topics/process-safety/leadership/a-framework-for-the-use-of-key-performance-indicators-of-major-hazards-in-petroleum-refining>

From EI : PSM Framework - Leadership

- Performance measure 1: Element compliance and implementation status (EIPSS rating)
- Performance measure 2: Implementation of management system
- Performance measure 3: Management system compliance benchmarking
- Performance measure 4: Development of performance targets, objectives and action plans
- Performance measure 5: Action plan implementation status
- Performance measure 6: Governance meetings overdue
- Performance measure 7: Governance meetings effectiveness.
- Performance measure 8: Workplace discussions overdue
- Performance measure 9: Governance meetings and workplace discussions – issues arising
- Performance measure 10: Governance meetings and workplace discussions – overdue follow-up actions.
- Performance measure 11: Policy statements overdue for review.
- Performance measure 12: Employee opinion survey.
- Performance measure 13: Incident root causes which are failures of element 1 .



Any questions?

Thank you for your kind attention!