

Key Process Safety Performance Indicators

A short guide for Directors and CEOs

Do you have the right information to enable you to make business decisions that improve the control of major hazard risks?

You will recognise that good leadership is based on making business decisions in the full knowledge of the factors that will lead to a successful outcome and deliver the intended benefits. In the past, information on safety performance has relied on factors such as lost time incident rates. Whilst this is a good indicator of how well personal injury accidents are being managed, it is a poor indicator of how well major hazard risks are being controlled. Companies with exemplary personal injury incident rates have in the past suffered catastrophic failure in the containment of major hazards, with devastating consequences for the plant, employees, the environment and company reputation.

Pioneering work on developing process safety performance indicators by the Health and Safety Executive and the UK Chemical Industries Association has changed the way that information on major hazard risks can be collected and utilised. *Developing Process Safety Indicators – A Step-by-Step Guide*¹ sets out a simple methodology that you can use to equip yourself with key information on the performance of the most important protection systems you have in place. This guidance has de-mystified this seemingly complex issue. Setting focused leading and lagging indicators will give you early warning when the systems you have paid for, implemented and rely upon for the integrity of business, start to go wrong. This will then give you time to take corrective action to avert problems. Good indicators will also help you track the impact of business decisions on process safety risks.

Here are some questions to check if you are getting the right information:

- 1 Do you rely mainly on personal accident and injury rates to monitor safety performance within your organisation or do you have specific Key Performance Indicators (KPIs) for major hazard risks?
- 2 Were you involved in setting the KPIs for your organisation and do the measures you have reflect your understanding of the main process safety risks within your organisation?
- 3 Do you have a manageable number of KPIs or do you 'over measure' because you find it difficult to identify the main areas of vulnerability within your organisation?
- 4 Do you understand what the change in the status of each measure actually means for the control of risk?
- 5 Are you certain that the information KPIs provide leads directly to a change in the way you manage risk?
- 6 Do you always expect the status of the KPI to be acceptable or good, or does the culture of your organisation encourage upward reporting of bad news?
- 7 Do you regularly review the range of KPIs you have to ensure that they reflect the main vulnerable areas in your management of risk?
- 8 Do you benchmark your major hazard performance against other organisations in the same or similar sectors?

For more information contact ian.travers@hse.gsi.gov.uk or visit:

<http://webcommunities.hse.gov.uk/ui/inovem.ti/group/chemicalindustries.pspm/grouphome>

¹ *Developing Process Safety Indicators – A Step-by-Step Guide* HSG254. HSE Books. ISBN 0 7176 6180 6