COMAH Strategic Forum

Control of Major Accident Hazards Regulations 2015 (COMAH)

PERFORMANCE REPORT 2016/17
Foreword

The COMAH Strategic Forum is publishing this report to provide a summary of the regulatory performance of UK businesses that are subject to COMAH Regulations. The data is for the period from April 2016 to March 2017 and gives a snapshot of performance at the point that it was measured, and is an important step in developing a greater awareness of the ongoing performance of COMAH establishments as a whole.

Although we know of many examples of businesses operating safely across the COMAH sector, there is a need to avoid complacency. The COMAH Strategic Forum uses the information in this report to help us focus on areas where there is a need to develop new guidance or improve standards. We do this by working together as regulator, industry and unions, collaborating with groups such as the Chemical and Downstream Oil Industries Forum (CDOIF). In recent years we have published guidance on determining the right measures for environmental containment and improving the use of contractors on major hazard sites.

Our goal is for excellence in process safety leadership and management to become common practice across the COMAH sector and related high potential hazard industries.

If you would like to learn more about the COMAH Strategic Forum please visit: https://webcommunities.hse.gov.uk/connect.ti/COMAHSF/groupHome

Signed by Ken Rivers (Chair of the COMAH Strategic Forum) on behalf of
1. Regulating under COMAH

The COMAH Regulations 2015 aim to prevent and limit the effects of major accidents which have the potential to cause significant harm to people and the environment. The regulations apply to businesses in Great Britain which store or handle sufficient quantities of flammable, toxic or environmentally hazardous substances. The COMAH Competent Authority (CA)\(^1\) is the Regulator that provides oversight of the operational safety of these businesses by carrying out a range of activities which include inspections and investigation of reported major accidents and relevant dangerous occurrences.

To learn more about COMAH please visit [www.hse.gov.uk/comah/index.htm](http://www.hse.gov.uk/comah/index.htm)

2. About the COMAH Strategic Forum

Established in 2013, the COMAH Strategic Forum is a joint industry and regulator forum working to improve major accident hazard leadership, management and raise standards across the industry. This is achieved through the forum partners engaging collaboratively to identify and share best practice and where necessary to commission the development of new guidance.

3. Content of this Report

This report outlines the basic composition of the COMAH sector, how the regulator prioritised its resources to carry out inspections of COMAH sites, the performance ratings assigned by the regulator following relevant inspections and information which COMAH sites are required to report directly to the regulator.

4. How we collect this information

The performance data in this report relates to planned inspections undertaken by the regulator and information which COMAH sites are required to report directly to the regulator.

5. Regulatory Activity 2016/17

At the end of March 2017, there were 884 industrial installations subject to COMAH in Great Britain, covering a range of businesses from multi-site global corporations to single-site enterprises. COMAH covers businesses that range from very large complex process manufacturing sites such as oil refineries and chemicals manufacturing, to less complex operations including storage and warehousing of hazardous substances.

COMAH applies at two levels, ‘Upper Tier’ or ‘Lower Tier’ based upon the amounts of substances stored on site that could cause harm to people or the environment. Upper Tier sites store larger volumes and / or more hazardous substances and therefore have the potential to cause greater harm to people and the environment. The number of sites is not static and for 2016/17, the total number within each classification is shown in Figure: 1 below:

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\(^1\) The COMAH Competent Authority in GB is the Health and Safety Executive (HSE) or the Office of Nuclear Regulation (ONR) for nuclear establishments, working jointly with the appropriate environment agency: in England the CA is HSE or ONR and the Environment Agency; in Scotland it is HSE or ONR and the Scottish Environment Protection Agency; and in Wales it is HSE or ONR and the Natural Resources Body for Wales.
6. **Inspections at COMAH Sites**

The regulator does not inspect every COMAH site annually but bases the frequency of inspection on the potential harm to people and environment from the site and its evaluation of how well those risks are being managed. This usually means that a poorly performing site is inspected more frequently by the regulator. For 2016/17, the regulator prioritised its resources to carry out inspections at the number of COMAH sites shown in Figure: 2 below:
The regulator’s role in inspecting establishments is to take a sampling approach whereby it considers a range of potential topics and then chooses those which should give the best evidence of how well the business is managing its major accident risks on site. This means the regulator builds up a picture over time of the effectiveness of the business’ approach to managing safety on site.\(^2\)

**7. Strategic Priority Inspections**

Some inspection topics which are relevant across the COMAH sector are designated as strategic priorities and supported by an ‘Inspection Delivery Guide’, which outlines the scope of the topic and a set of objective criteria against which inspectors evaluate a site’s performance. One or more strategic priority inspection\(^3\) topics may be applicable to a COMAH site and inspectors can undertake these inspections alongside other planned inspection work. In 2016/17, the following strategic priority inspections were part of the regulators’ planned work:

1. Ageing Plant (AP)
2. Secondary and Tertiary Containment
3. Competence
4. Emergency Preparedness On-site / Off-site
5. Electrical, Control and Instrumentation (EC&I)
6. Human Factors (HF)
7. Key Performance Indicators

Figure: 3 below shows ratings assigned for strategic priorities from April 2016 - March 2017:

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\(^2\) To learn more about this approach please refer to [www.hse.gov.uk/hid/hid-regulatory-model.pdf](http://www.hse.gov.uk/hid/hid-regulatory-model.pdf)

\(^3\) For more information on CA Strategic Inspection Priorities visit: [www.hse.gov.uk/comah/ca-guides.htm](http://www.hse.gov.uk/comah/ca-guides.htm)
Figure: 3 – ‘COMAH Strategic Priority Inspection Ratings – April 2016 – March 2017’:

The data in the table represents only those sites which had a rating assigned for a strategic priority inspection in the period April 2016-March 2017. No trends can be drawn from this data and it does not represent the performance of all sites in the COMAH sector for that period.

Strategic Priority Inspections rated as broadly compliant or better have either reached the legal standard or can do so by making straightforward improvements. Relatively few businesses will receive a rating of fully compliant for a strategic priority as there is a requirement for continuous improvement under COMAH and the regulator is much more likely to revisit businesses which are performing at a lower standard. Where a site’s performance is rated as poor or very poor it will receive increased attention from regulators and potentially enforcement action depending on the levels of non-compliance.

8. Enforcement Activity by the Regulator

When the regulator finds sufficient evidence that the measures taken to manage and control major accident hazards are not of an appropriate standard it will require the COMAH site to resolve the situation. Depending upon the specific circumstances, a range of enforcement measures are applied which include regulatory actions, enforcement notices and prosecution. Figure: 4 below shows the numbers of enforcement notices served on COMAH sites over a five-year period from 2012-2016.
9. **Regulatory Actions placed on COMAH sites**

Where the regulator identifies matters for improvement that do not warrant an enforcement notice, they may issue the site with a regulatory action which requires them to address the matters within a defined period of time. These issues can be complex, may involve capital expenditure, and so may take time to resolve. For this reason, not all regulatory actions issued within a work year will be closed out within that same work year.

- **Regulatory actions raised in 2016/17 = 1236**

Figure: 5 below identifies the percentage of regulatory actions raised against the root cause problem for 2016/17:
One of the roles of the COMAH Strategic Forum is to review performance against strategic priorities and where relevant, commission further work to promote improvements, for example:

- To support delivery of a strategic topic, the Chemical and Downstream Oil Industries Forum (CDOIF) developed and published the "Guideline - Environmental Risk Tolerability for COMAH Establishments" to assist sites and regulators in carrying out risk assessments to help determine proportionate environmental containment measures.

- CDOIF was also commissioned to develop guidance on the use of external contractors in the management of Ageing Plant. This was as a direct result of analysing the performance scores against this strategic topic from 2014/15.

10. Dangerous Occurrences at COMAH Sites

A dangerous occurrence is an incident with a high potential to cause death or serious injury, but which happens relatively infrequently. All businesses are required to report such incidents to the enforcing authorities and this also helps improve understanding about the circumstances and their causes which both regulators and business can use to help prevent accidents in the future. To learn more about this please refer to www.hse.gov.uk/riddor/dangerous-occurrences.htm.

For COMAH sites in 2016/17 the number and type of COMAH related dangerous occurrences reported by businesses is shown in Figure: 6 below:
Figure: 6 - Dangerous Occurrences at COMAH Sites 2016/17

- Electrical incident causing fire and explosion: 1
- Pressure system failure: 2
- Explosion or fire: 4
- Damage to or failure of a pipe: 7
- Escape of a hazardous substance: 8
- Escape of flammable substances: 26

Number of Dangerous Occurrences