

## 9 DESCRIPTIVE ASPECTS OF SAFETY REPORT ASSESSMENT

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### 1. INTRODUCTION

- 1.1 This guidance is for assessors completing the Descriptive Aspects assessment and is relevant to all types of safety report.
- 1.2 All assessment of Descriptive Aspects must use the criteria and guidance set out in Appendix: 9.1 - '*Descriptive Aspects Assessment Criteria and Guidance*'.
- 1.3 Descriptive Aspects assessment must be recorded on the assessment form SRAM 14 '*Descriptive Assessment Record*'.
- 1.4 The criteria are designed to follow the specific requirements set down in Schedule 3 of the 2015 COMAH regulations and to reflect relevant purposes set out in Regulation 8 of the same regulations. These are minimum legal requirements and are clear and enforceable (Regulation 9).
- 1.5 **Assessment criteria and guidance for 'Descriptive Aspects' of a safety report have been revised for SRAM 2015.**

The key objectives in making the changes have been:

- a. To ensure the assessment criteria take account of new content requirements for COMAH 2015 safety reports;
- b. To remove duplication where it previously existed;
- c. To add clarity in terms of what the assessor should consider when they carry out assessment of Descriptive Aspects.

Duplication has been removed by rationalising and merging criteria that were previously separate but strongly related, or in some cases by removing aspects that are already subject to more in depth assessment by a different assessment discipline – for Descriptive Aspects the other discipline is usually Environment.

**This means a change to the numbering of one of the Descriptive Aspects assessment criteria.** For more detail, refer to Appendix 9.2 - *'Descriptive Aspects - Changes to Assessment Criteria and Guidance'*, which maps the change in criteria numbering and describes in broad terms the reasons for adjustments in specific criteria.

**1.6** Demonstrations should be proportionate to the hazard and risks of identified major accident hazards. This aspect can only be decided by an operator when all the elements of Schedules 2 and 3 have been determined. The determination of proportionality is an iterative process for both the operator and assessor.

### **1.7 Use of Assessment criteria**

The criteria will be applied by a competent assessor against the content of the safety report. In this context, a competent assessor will have a good understanding of the safety report assessment process, its place within the HID Regulatory Model and of any stated benchmarks.

- a. Criteria will be **"met"** when all relevant items are included in descriptions and the necessary supporting information has been provided;
- b. Criteria will be **"not met"** when all relevant items are not included in descriptions or the necessary supporting information has not been provided;
- c. Criteria will be **"not relevant"** when they are not relevant to the establishment (e.g. functional safety criteria are unlikely to be relevant to a warehouse);
- d. Criteria will be **"previously met"** when the previous assessor recorded the criterion as "met".

## **2. RELEVANT REQUIREMENTS OF THE COMAH REGULATIONS 2015**

**2.1** Regulation 8(b) states that one of the purposes of the safety report is for demonstrating that the major accident hazards and possible major accident scenarios in relation to the establishment have been identified and that the necessary measures have been taken to prevent such accidents and to limit their consequences for human health and the environment;

**2.2** Schedule 3 of the Regulations specifies the minimum data and information to be included in a safety report. Paragraph 3 of Schedule 3 requires the provision of information in respect of the environment of the establishment; this concerns the land on which the establishment is situated and the surrounding area. Paragraph 4 of Schedule 3 requires the provision of information in relation to the establishment and how it relates to the major accident hazards and preventive measures. This element deals with: the inventory of dangerous substances and the hazards they present; the layout of the establishment and its installations; and how the plant is operated.

**2.3** The assessor should be mindful that an upper tier COMAH operator has other duties under COMAH 2015 which may provide information that is relevant to a safety report, for example in the area of 'Notifications' and 'Domino Effects and Domino Groups'. The extent to which an operator has met these duties is not part of safety report assessment.

### **3. GENERAL APPROACH TO DESCRIPTIVE ASPECTS ASSESSMENT**

- 3.1** Assessment of Descriptive Aspects should usually be undertaken by the HSE Regulatory Inspector. The focus of the assessment is principally on the individual elements contained within paragraphs 3 and 4 of Schedule 3 of COMAH 2015 and how they relate to the establishment concerned.
- 3.2** The operator may decide to combine information relating to the installation description and the demonstration of safety to better make their case, or to aid the logical flow of the safety report. In such circumstances it is often helpful for the operator to provide a matrix which links the content of the safety report to the requirements of Schedules 2 and 3.
- 3.3** It should be noted that some Descriptive Aspects are subject to assessment by Environment Assessors, who do so using separate criteria and guidance.

#### **3.4 Use of examples in the Safety Report**

There is no specific requirement for operators to include copies of operating procedures and/or associated documentation in their safety reports; the operator should determine the level of information to be provided in support of a given demonstration or requirement in Schedule 3. Some operators choose to assist their demonstrations where necessary, by summarising a given procedure and providing an example of related documentation in support of it.

### **4. BENCHMARKS**

- 4.1** Most of the guidance in the area of Descriptive Aspects is found within L111. The assessor should understand the elements of Schedule 3 paragraphs 3 and 4 of the COMAH Regulations and the guidance relating to it. The assessor should also understand the definition of dangerous substances in Regulation 2(1) and the requirements of Schedule 1.

### **5. PROPORTIONALITY**

- 5.1** The Descriptive Aspects assessment should take into account the wider Schedule 3 safety report content. In doing so, the assessor can better understand what constitutes appropriate safety report content for a given establishment and therefore, what is reasonable in terms of assessment proportionality.

### **6. PRE-CONSTRUCTION AND PRE-OPERATION SAFETY REPORTS**

- 6.1** Pre-Construction Safety Reports (PCSRs) and Pre-Operation Safety Reports (POSRs) should normally be able to provide details on all criteria in this section, though some revision may be required in POSRs to reflect design development since the PCSR.
- 6.2** Descriptions of the environment and surrounding populations should reflect expected conditions once the establishment becomes operational. Where commencement of operations is phased, reports should describe circumstances (including temporary

arrangements such as use of temporary offices and buildings, inclusion of construction contractor populations, etc.) as they apply to each phase.

- 6.3** Overview descriptions of the establishment, particularly where relevant to major accident hazards, emergency response, monitoring etc. should be described as far as information is available at the time of submission of the report. Significant gaps in required information should be justified. Principles and design philosophies which will govern the eventual choice of equipment should be stated where detailed final arrangements are not known.

## **7 POTENTIAL SERIOUS DEFICIENCY AND SIGNIFICANT OMISSION**

- 7.1** Examples of potential serious deficiencies (as described in the safety report) include but are not limited to:

(i) The safety report does not describe any preventive measures to control the major accident risks arising from the presence of a dangerous substance.

- 7.2** Significant omissions in the content of the safety report may include:

(ii) Failure to provide a dangerous substances inventory, classified in terms of CLP

(iii) Failure to describe the land use in the area surrounding the establishment

## Appendix: 9.1 - 'Descriptive Aspects Assessment Criteria and Guidance'

TECHNICAL CRITERION	GUIDANCE
<b>General</b>	
<p><b>9.1</b> The safety report should give details to allow communication with the competent authority and identify the organisations involved in preparing it.</p> <p><b>Regulation 9(1)(b)</b></p>	<p>To meet this criterion, the safety report should include the following information:</p> <ul style="list-style-type: none"> <li>• name of the operator and the address of the registered office;</li> <li>• name and address of the establishment and, where necessary, the installation covered by the report;</li> <li>• name, address, telephone number and email address for the contact within the operator's organisation for communication about the report; and where relevant</li> <li>• names of the external organisations involved in preparing the report and their area of contribution</li> </ul> <p>This is high level information, for example, "Consultant X was used for risk assessment review work". In circumstances where no other organisations have been involved, the operator should confirm this in the safety report.</p>
<b>Dangerous Substances</b>	
<p><b>9.2</b> The safety report should identify the maximum quantities of every dangerous substance present, or likely to be present, at the establishment.</p> <p><b>Schedule 3 Para (2)(c)(i)(bb)</b></p>	<p>To meet this criterion, the safety report should show the maximum quantities of the dangerous substances (as defined under Regulation 2), which are present or likely to be present at the establishment:</p> <p>Sources of the dangerous substances inventory include, as appropriate:</p> <ul style="list-style-type: none"> <li>• raw materials, product, by-product, residue, waste or intermediate;</li> <li>• substances produced during process excursions, or other unplanned but foreseeable events;</li> <li>• any other dangerous substances which may be anticipated to be present on the establishment.</li> </ul> <p>In determining the maximum quantities, the operator should also have considered the following principles:</p> <ul style="list-style-type: none"> <li>• where dangerous substances are excluded from the inventory, the reasons for their omission should be given;</li> <li>• where an establishment has a large number of different dangerous substances present, it may be appropriate to group them into representative categories (in line with Schedule 1 Part 1), for the purpose of quantification. In such cases the safety report should explain the basis for the groupings chosen;</li> <li>• the maximum inventories calculated should take into account fluctuations in business activity;</li> <li>• as appropriate, operators may relate presence either to quantities of dangerous substances which they have consent to hold under relevant planning legislation, or to the quantity which is manufactured or stored in accordance with a licence granted</li> </ul>

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	<p>under the Explosives Regulations 2014;</p> <ul style="list-style-type: none"> <li>• where a number of different dangerous substances are present on an establishment at less than their qualifying quantity, the safety report should show how individual quantities have been aggregated.</li> <li>• where substances arising from foreseeable excursions have been identified, the safety report should give details of the measures taken to identify such substances.</li> </ul> <p>L111 provides extensive guidance for the operator to consider when preparing their dangerous substances inventory. The assessor should take at face value that the inventory provided in the safety report includes all dangerous substances which meet the definition in Regulation 2 of COMAH 2015 and which are present or may be anticipated to be present at the establishment.</p>
<p><b>9.3</b> For each dangerous substance identified, the safety report should describe its classification under CLP, its chemical name (including common use chemical name) and CAS number, according to IUPAC nomenclature <b>Schedule 3 Para (3)(c)(i)(aa)</b></p>	<p>In relation to the inventory provided, for each dangerous substance identified, the safety report should include:</p> <ul style="list-style-type: none"> <li>• its classification under CLP <b>[COMAH 2015 Requirement]</b></li> <li>• its chemical name (e.g. propane, butane) and where appropriate, its common chemical name (e. LPG);</li> <li>• identification of the substance (for example, chlorine) or class of substances (for example poly chloro-di-benz dioxines), according to the IUPAC system of nomenclature;</li> <li>• the CAS number for the substance or class of substances;</li> <li>• the proportion of each constituent in a mixture.</li> </ul> <p>Where necessary, the safety report should also provide any additional information useful to help identify the dangerous substance. For explosives, including stored process intermediates, the following additional information is usually provided:</p> <ul style="list-style-type: none"> <li>• which definition of an explosive in Schedule 1 part 1 to COMAH it falls within;</li> <li>• it's behaviour on accidental initiation described in terms of Hazard Type as used in licences issued by the Health and Safety Executive the Explosives Regulations 2014.</li> </ul>
<p><b>9.4</b> The safety report should describe the physical, chemical and toxicological characteristics of each dangerous substance identified, relevant to normal</p>	<p>To meet this criterion the safety report would typically include:</p> <ul style="list-style-type: none"> <li>• characteristic temperatures and pressures, e.g. flashpoints, ignition temperatures, boiling points, flammable limits, vapour pressure, explosion limits, data on reactions and rates of decomposition; and</li> <li>• It should also include appropriate data on toxicology</li> </ul>

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TECHNICAL CRITERION	GUIDANCE
<p>operating conditions and foreseeable accident conditions <b>Schedule 3 Para (4)(c)(ii) &amp;(iii)</b></p>	<p>The information presented in the safety report should be sufficient to describe the behaviour of the dangerous substances under all normal operating conditions, process upset conditions and foreseeable accident conditions.</p> <p>The list need only present those physical and chemical properties which are relevant to the various demonstrations of safety contained in the safety report.</p>
<p><b>9.5</b> The safety report should indicate the hazards, both immediate and delayed for human health and the environment; for the dangerous substances identified. <b>Schedule 3 Para (4)(c)(ii)</b></p>	<p><b>Note: content specifically related to environmental matters is assessed elsewhere under 'Environmental Assessment Criteria'.</b></p> <p>The information presented should relate to the physical, chemical and toxicological characteristics of the identified dangerous substances and specify the hazards posed. To meet this criterion the safety report should show:</p> <ul style="list-style-type: none"> <li>• short and long term effects and may include health hazards such as irritation, asphyxiation, cancer, genetic damage , lethal concentrations etc;</li> <li>• harm caused by fire or explosion;</li> <li>• effects on the built environment;</li> <li>• outlines of the routes to harm, (e.g. via airborne discharge, formation of an explosive cloud, or accidental initiation of explosives giving rise to blast);</li> </ul> <p>The information presented should consider:</p> <ul style="list-style-type: none"> <li>• recognised acceptable limits, in terms of concentration, distance from source, exposure time, or other relevant parameters;</li> <li>• the justification for harmful effects, hazardous concentrations and acceptable limits as presented;</li> <li>• where information is not known, operators are expected to evaluate the significance of that lack of knowledge and describe their approach for dealing with it.</li> </ul>
<p><b>Environment</b></p>	
<p><b>9.6</b> The safety report should describe the environment of the establishment in sufficient detail to allow the consequences of a major accident to be assessed <b>Schedule 3 Para (3)(a)</b></p>	<p><b>Note: content specifically related to environmental matters is assessed elsewhere under 'Environmental Assessment Criteria'.</b></p> <p>To meet this criterion the safety report should provide information as follows:</p> <p><b>General information</b> is expected to include:</p> <ul style="list-style-type: none"> <li>• a map to a suitable scale (usually at least 1:10,000) showing the geographical location of the establishment and its surroundings. On such maps the land use pattern (industry, agriculture, urban settlements, environmentally sensitive</li> </ul>

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	<p>locations etc) and the location of the most significant features (e.g. hospitals, schools, other industrial sites, airports, harbours, motorway and railway networks, harbours etc) should be clearly indicated. In addition, on the maps, access routes to the establishment should be clearly indicated, as well as the escape routes from the establishment and other traffic routes significant for rescue and emergency operations.</p> <ul style="list-style-type: none"> <li>• separate maps may be required to identify the surrounding population and the surrounding natural environment. It may be necessary to have different scale maps when the operator mentions long distance effects.</li> </ul> <p>Information on <b>the surrounding population</b>, is expected to include:</p> <ul style="list-style-type: none"> <li>• approximate numbers of residents;</li> <li>• estimated numbers of people who may use the area (for example: present at workplaces, present as tourists, or to attend football matches or motorway services); and</li> <li>• groups of people who may be particularly vulnerable either on account of their sensitivity to the hazards in question (e.g. schools and hospitals) or because of the population density.</li> <li>• Consideration should also be given to allow assessment of the indirect impact of a major accident on the public. For example, as a result of contamination of drinking water.</li> </ul> <p>Information on <b>the surrounding environment</b> that may influence the impact of a major accident. Examples may include:</p> <ul style="list-style-type: none"> <li>• the topography if it could have an effect on the dispersion of toxic or flammable gases or combustion products, (this should include buildings, underground workings or other structures where appropriate, e.g. a pedestrian subway);</li> <li>• historical local weather records, including: wind speed; wind direction; atmospheric stability and rainfall. The relevance of this information to the behaviour of releases of dangerous substances should be described;</li> <li>• a description of features of the surroundings that may hinder emergency response or mitigation measures.</li> </ul> <p>Information on <b>the built environment</b> is expected to include:</p> <ul style="list-style-type: none"> <li>• any sections of the infrastructure, such as major transport routes or utilities (e.g. electricity, gas, telephone, water sewers and treatment plant); that may be vulnerable to the effects of a major accident.</li> </ul>
<p><b>9.7</b> The safety report should describe the environment of the establishment in sufficient detail to allow the contribution of</p>	<p>The contribution of external factors to a major accident could be as an initiating or exacerbating event. To meet this criterion the safety report should, as necessary, include information on:</p> <ul style="list-style-type: none"> <li>• the physical environment surrounding the establishment which may have an effect on certain initiating events. For example,</li> </ul>

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<p>external factors to major accidents at the establishment to be assessed.</p> <p><b>Schedule 3 Para (3)(a)</b></p>	<p>underlying geology should be described to show the consideration of seismic events and subsidence as accident initiators;</p> <ul style="list-style-type: none"> <li>• the history of the land on which the establishment is located, together with its surroundings, may be significant to the consideration of major accident initiating events. For example, history of mining, other mineral extraction activities or land reclamation, may lead to subsidence; previous land use, may be important in respect of contaminated land or water;</li> <li>• historical evidence of other external events that might act as accident initiators such as: seismic events; flooding; and extreme weather conditions including: temperature; rain; snow; wind; and lightning;</li> <li>• other neighbouring establishments and pipelines in the area capable of initiating or influencing a major accident;</li> <li>• current land use under the establishment, including current mining or mineral extraction activities;</li> <li>• air traffic movements over and around the establishment, including civilian and military, fixed wing and helicopters;</li> <li>• relevant transport activities including shipping, major transport routes and dangerous substance movements; and</li> <li>• other human activities that might lead to major accidents such as arson, vandalism, theft, and criminal damage;</li> <li>• high voltage overhead electric power distribution lines;</li> <li>• radio transmission masts in the area that produce fields which could interfere with safety control systems or communication systems, or initiate electro explosive devices.</li> </ul>
<p><b>Establishment</b></p>	
<p><b>9.8</b> The safety report should identify installations and other activities of the establishment which could present a major accident hazard.</p> <p><b>Schedule 3 Para (3)(b)</b></p>	<p>To meet this criterion the safety report should identify and show on a suitable map:</p> <ul style="list-style-type: none"> <li>• main storage facilities</li> <li>• process installations;</li> <li>• location of relevant dangerous substances, their quantities and an indication of their chemical and physical state;</li> <li>• relevant equipment (including vessels and pipes);</li> <li>• utilities and services;</li> <li>• means of access and egress within the establishment and from the establishment – indicating normal and emergency routes;</li> <li>• occupied buildings such as control rooms, offices, workshops and canteens that could be vulnerable in a major accident.</li> </ul>
<p><b>9.9</b> The safety report should</p>	<p>To meet this criterion the safety report should describe the relevant processes and in doing so pay particular attention to the</p>

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<p>describe the process(es) being carried out within the installations and areas of the establishment which could give rise to a major accident.</p> <p><b>Schedule 3 Para (4)(b)</b></p>	<p>operating methods which apply to those processes.</p> <ul style="list-style-type: none"> <li>• the purpose of the installation</li> <li>• the conditions under which the dangerous substance is normally held</li> <li>• how the dangerous substance(s) change physically and chemically as a result of:               <ul style="list-style-type: none"> <li>○ their use within the designed purpose of the plant; and</li> <li>○ foreseeable deviations from the designed purpose of the plant;</li> </ul> </li> <li>• the discharge, retention, re-use and recycling or disposal of residues and waste liquids and solids, or the discharge and treatment of waste gases</li> <li>• How the operator has taken account of available information on best practice operation in respect of activities involving dangerous substances at their establishment <b>[COMAH 2015 REQUIREMENT]</b></li> </ul>
<p><b>9.10</b> The safety report should describe the areas on the establishment where a major accident could occur.</p> <p><b>Schedule 3 Para (3)(d )</b></p>	<p>The Safety Report should clearly identify plant and activities where a major accident could happen. Typically it should include:</p> <ul style="list-style-type: none"> <li>• plant diagrams which unambiguously identify key control systems;</li> <li>• reaction vessels, storage vessels;</li> <li>• pipework systems;</li> <li>• valves and significant connections;</li> <li>• a site plan that unambiguously identifies the location of activities where a major accident could happen (e.g. storage in packages and processing of explosives)</li> </ul>

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<p><b>9.11</b> The safety report should provide focused information about each installation, in sufficient detail to support the demonstration that major accident hazards will be prevented or the effects mitigated</p> <p><b>Schedule 3 Para (4)(a)</b></p>	<p>The safety report should show a strong link between the sources of major accident risk, the conditions under which the related major accident could occur and the measures in place to prevent or mitigate the effects of the major accident. To meet this criterion the safety report should provide information to cover the following:</p> <p>The description should set out the purpose, location and function of equipment within the installation that has a bearing on major accident prevention and control. In particular, information about items of plant such as:</p> <ul style="list-style-type: none"> <li>• vessels (e.g. location, type, size, pressure, purpose, contents)</li> <li>• pipework systems (e.g. routes, types, size, pressure, purpose)</li> <li>• services (e.g. steam, air, electricity, fuel, hot water)</li> <li>• drainage (e.g. routes, purpose [e.g. foul water, fire fighting run-off water])</li> <li>• stacks, flares and gas cleaners (e.g. location, purpose)</li> <li>• safety (or environment) critical valves, instruments, control loops and detection systems</li> <li>• fire fighting and supply arrangements</li> <li>• monitoring equipment, e.g. for toxic products in air, sewers, discharges to water; for fires or explosive atmospheres</li> <li>• incorporators, rolling mills, manual and power presses, sieves, granulators, mixers</li> </ul> <p>Safety reports should also include information about:</p> <ul style="list-style-type: none"> <li>• the normal operating parameters of plant;</li> <li>• the designed maximum working capacities, temperatures, and pressures and maximum explosive inventories;</li> <li>• relevant qualitative and quantitative information on energy and mass transport in the process (i.e. material and energy balances) in:             <ul style="list-style-type: none"> <li>i. normal running</li> <li>ii. start up or shut down periods</li> <li>iii. abnormal operations</li> </ul> </li> </ul>

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<p><b>9.12</b> On the basis of available information, the safety report should identify neighbouring establishments, as well as non-COMAH sites, and areas and developments that could be the source of, or increase the risk or consequences of a major accident and of domino effects.</p> <p><b>Schedule 3 Para (3)(c)</b></p>	<p>The COMAH notification necessary under Regulation 6(1) and in particular Regulation 6(1)(g) specifies the same information as is required by Schedule 3(3)(c)</p> <p>To meet this criterion the operator may add relevant information from their notification under COMAH 2015 or they may refer the reader to the appropriate part of that notification document: The information to be provided is not required to be detailed.</p> <ul style="list-style-type: none"> <li>• For neighbouring establishments and non-COMAH sites of operation, the safety report should give the name, address and type of business.</li> <li>• For areas and developments that could be the source of, or increase the risk or consequences of a major accident and of domino effects, the safety report should describe for example the nearby housing and other buildings where there might be large numbers of people or people who might be particularly vulnerable to a major accident;</li> </ul> <p>This part of the regulations is looking for a general description of the land use in the vicinity of the operator’s establishment. Further Guidance is available in L111</p>

## **Appendix: 9.2 - 'Descriptive Aspects - Changes to Assessment Criteria and Guidance'**

The assessment criteria and guidance for Descriptive Aspects of a safety report have been revised for SRAM 2015. The key objectives in making the changes are:

- To ensure the assessment criteria take account of new content requirements for COMAH 2015 safety reports;
- To remove duplication where it previously existed;
- To add clarity in terms of what the assessor should be looking for when they carry out assessment of Descriptive Aspects.

Duplication has been removed by merging criteria that were previously separate but strongly related, or in some cases by removing aspects that are already subject to assessment by a different assessment discipline – for Descriptive Aspects the other discipline is usually Environment.

### **The rationalisation has resulted in a change to the numbering of one of the Descriptive Aspects assessment criteria**

The following pages provide a map of the change in numbering and describe in broad terms the reasons for changes in specific criteria and guidance.

### Criteria for Descriptive Aspects

Number	Old SRAM	Number	SRAM 2015
<b>GENERAL</b>			
9.1	The safety report should give details to allow communication with the competent authority.	9.1	The safety report should give details to allow communication with the competent authority and identify the organisations involved in preparing it. Regulation 9(1)b <b>Criteria and guidance merged with previous 9.13</b>
<b>DANGEROUS SUBSTANCES</b>			
9.2	The safety report should identify the maximum quantities of every dangerous substance present, or potentially present, on the establishment. Schedule 4 Part 2, Para 3 (c) (i)	9.2	The safety report should identify the maximum quantities of every dangerous substance present, or likely to be present, at the establishment. Schedule 3 Part 2 (c)(i)(bb) <b>Slight change in phrasing of criterion to reflect COMAH 2015 language. Guidance rationalised as L111 advises on how to determine inventory of dangerous substances.</b>
9.3	For each dangerous substance identified, the safety report should describe its chemical name (including common use chemical name) and CAS number, according to IUPAC nomenclature. Schedule 4 Part 2 para 3 (c) (iii)	9.3	For each dangerous substance identified, the safety report should describe its classification under CLP, its chemical name (including common use chemical name) and CAS number, according to IUPAC nomenclature Schedule 3 Part 3 (c) (i)(aa) <b>Slight change in phrasing of criterion to reflect COMAH 2015 language. Guidance rationalised as L111 provides extensive guidance to Schedule 1 in relation to dangerous substances.</b>
9.4	The safety report should describe the physical and chemical behaviour of each dangerous substance identified, relevant to normal operating conditions and foreseeable accident conditions	9.4	The safety report should describe the physical, chemical and toxicological characteristics of each dangerous substance identified, relevant to normal operating conditions and foreseeable accident conditions

### Criteria for Descriptive Aspects

Number	Old SRAM	Number	SRAM 2015
	Schedule 4 part 2 para 3 (c) (ii)		Schedule 3 para 4(c)(ii) &(iii) Slight change in phrasing of criterion to reflect COMAH 2015 language. Guidance rationalised to remove duplication with environment assessment.
9.5	The safety report should describe the immediate and delayed harm to man and the environment for each dangerous substance identified Schedule 4 part 2 para 3 (c) (ii)	9.5	The safety report should indicate the hazards, both immediate and delayed for human health and the environment; for the dangerous substances identified. Schedule 3 para 4(c)(ii) Slight change in phrasing of criterion to reflect COMAH 2015 language. Guidance essentially unchanged.
<b>ENVIRONMENT</b>			
9.6	The safety report should describe the environment of the establishment in sufficient detail to allow the consequences of a major accident to be assessed Schedule 4 part 2 para 2 (a)	9.6	The safety report should describe the environment of the establishment in sufficient detail to allow the consequences of a major accident to be assessed Schedule 3 part 3(a) Guidance changed to remove elements examined under Environmental assessment.
9.7	The safety report should describe the environment of the establishment in sufficient detail to allow the contribution of external factors to major accidents at the establishment to be assessed Schedule 4 part 2 para 2	9.7	The safety report should describe the environment of the establishment in sufficient detail to allow the contribution of external factors to major accidents at the establishment to be assessed. Schedule 3 para 3(a) Guidance changed to remove elements examined under Environmental assessment.
<b>ESTABLISHMENT</b>			
9.8	The safety report should identify installations and other	9.8	The safety report should identify installations and other

### Criteria for Descriptive Aspects

Number	Old SRAM	Number	SRAM 2015
	activities of the establishment that are relevant to major accident hazards Schedule 4 part 2 para 4(b)		activities of the establishment which could present a major accident hazard. Schedule 3 part 3 (b) <i>Small change in criterion text to reflect the wording in the schedule but this doesn't change the expectations for the criterion. Guidance unchanged.</i>
9.9	The safety report should describe the process(es) being carried out within every installation which could give rise to a major accident Schedule 4 part 2 para 3 (b)	9.9	The safety report should describe the process(es) being carried out within the installations and areas of the establishment which could give rise to a major accident. Schedule 3 part 4(b) <i>Small change in criterion text to reflect the wording in the schedule but this doesn't change the expectations for the criterion. Guidance unchanged.</i>
9.10	The safety report should describe the area on each installation where a major accident scenario could happen Schedule 4 part 2 para 2(c)	9.10	The safety report should describe the areas on the establishment where a major accident could occur Schedule 3 para (3)(d) <i>Small change in criterion text to reflect the wording in the schedule but this doesn't change the expectations for the criterion. Guidance unchanged.</i>
9.11	The safety report should provide focused information about each installation, in sufficient detail to support the demonstration that major accident hazards will be prevented or the effects mitigated Schedule 4 part 2 para 3 (a)	9.11	The safety report should provide focused information about each installation, in sufficient detail to support the demonstration that major accident hazards will be prevented or the effects mitigated Schedule 3 Para (4)(a) <i>Criterion text unchanged. Guidance essentially the same as before except introductory remarks clarify what the criterion is looking for in terms of safety report content.</i>

### Criteria for Descriptive Aspects

Number	Old SRAM	Number	SRAM 2015
9.12	For sites that are part of a domino group, designated by the competent authority, the safety report should confirm whether there has been information exchange between the operator and other operators in the domino group Regulation 16(3)	<b>9.12</b>	On the basis of available information, the safety report should identify neighbouring establishments, as well as non-COMAH sites, and areas and developments that could be the source of, or increase the risk or consequences of a major accident and of domino effects. Schedule 3(3)(c) The overarching aim of this part of the regulations is that there should be a general description of the land use in the vicinity of the operator's establishment. <span style="color: red;">Criterion significantly revised to reflect wording in Schedule 3 of COMAH 2015 and that sharing of domino information is a matter to be inspected outwith the safety report assessment process.</span>
9.13	The safety report should include the names of any relevant organisations involved in drawing up the report Schedule 4 part 2 para 6	<b>9.1</b>	<span style="color: red;">Merged with 9.1</span>