COMAH Control of Major Accident Hazards

Competent authority guidance for inspectors on emergency arrangements for COMAH establishments

the Competent Authority

HSE Environment Agency SEPA

COMAH Control of Major Accident Hazards

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1 Introduction

i. Following the fire and explosion at the Buncefield oil storage depot the Buncefield Major Incident Investigation Board, MIIB, produced a 'Recommendations on the emergency preparedness for, response to and recovery from incidents' (EPRR) report[1]. This report made a series of recommendations for the COMAH Competent Authority (CA) to consider: improve its guidance for producing on- and off-site emergency plans, having regard to integration of the requirements under COMAH with those established under the Civil Contingencies Act (CCA); check that those with legal duties under COMAH are discharging them.

ii. The CA working with industry, emergency planners and other external organisations, has produced this COMAH-specific guidance to assist in the integration of COMAH and other emergency planning requirements in response to the relevant recommendations.

iii. This guidance reflects the Civil Contingencies Secretariat (CCS) guidance on alignment of emergency plans. The intention is that whilst the actual response to an incident has to be specific to the circumstances of the event, the arrangements for preparing for the response, including out-of area provision and escalation mechanisms are based on generic arrangements.

iv. The purpose of this CA guidance is to inform Inspectors of:

v. the way COMAH on and off-site emergency plans are drawn up, tested, reviewed and implemented; and

vi. the interfaces with emergency planning arrangements developed under CCA, and in particular, how information relating to major accident hazard risks, means of alerting the local and wider community and actions required in the event of an emergency are communicated to the public.

vii. The roles and responsibilities of those with duties under COMAH, with respect to emergency planning and response, ie operators and local authority emergency planning units are also described.

viii. Further information on the link between COMAH and CCA and supporting Regulations and the roles and responsibilities of Category 1 and 2 responders is contained in Annex 1 and Annex 2.

2 Principles underpinning COMAH emergency planning and response arrangements

i. The purpose of the Regulations is to ensure that the consequences of a major accident at a COMAH site are minimised through the provision of effective on-site emergency planning and response arrangements and where necessary, dovetailing with the off-site emergency plans prepared by the local authorities under COMAH or Civil Contingencies legislation.

ii. Under COMAH operators should prepare an on-site emergency plan for dealing with the on-site consequences of possible major accidents and providing assistance with off-site mitigatory measures. An off-site emergency plan addresses major accidents that have off-site consequences to persons and the environment.

iii. Regulation 9 of COMAH requires top-tier sites to have an on-site emergency plan complying with Schedule 5 of the Regulations. Operators of lower-tier sites do not have to comply with the Regulation 9 but must have arrangements in place to deal with an emergency.

iv. The recommendations in the MIIB EPRR report[1] relating to on-site emergency plans, recommendations 1 and 3-6 (assessing the potential for and managing a major incident on a site), apply to lower- and top-tier COMAH sites that are in scope. Recommendation 7 (consultation with off-site responders) applies to all COMAH sites and Recommendation 8 (communication with the public) applies to all top-tier COMAH sites.

v. Further details are contained in the CA operational delivery guide 'COMAH On-site Emergency Planning and Mitigation (DG6)[2]

2.1 COMAH Lower Tier Operators

2.1.1 Production of on-site emergency plans: [Regulation 4, 5 and Schedule 2(4)(e)]

i. Lower tier operators are required by COMAH Regulation 4 to take all measures necessary to prevent major accidents and limit their consequences to persons and the environment. Regulation 5 requires operators to prepare a major accident prevention policy (MAPP), including planning for emergencies and adoption of procedures to: identify foreseeable emergencies; prepare, test and review emergency plans; and provide training for all persons working in the establishment. The operator needs to consider reasonably foreseeable, low probability, high consequence events. The level of planning for these emergencies should be proportionate to the probability of their occurring.

ii. The procedures required by the safety management system must ensure that an adequate emergency plan is developed, adopted and implemented. The procedures should also cover the necessary arrangements for communicating the plans to those likely to be affected by an emergency, in particular information sharing with any off-site emergency responders.

iii. Further information can be found in 'A guide to the Control of Major Accident Hazards Regulations 1999 (as amended) [ISBN 9780716617561], paragraphs 108-141.

iv. The MIIB EPRR report[1] recommends that all COMAH establishments, including lower-tier operators of 'Buncefield-type' sites should: review emergency arrangements to include vapour cloud explosions and severe multi-tank fires; ensure that sufficient trained and competent staff are available to execute the plan; evaluate the siting and/or protection of emergency response facilities; identify vulnerable critical emergency resources and have contingency arrangements in place.

v. Where any lower-tier COMAH operator relies on off-site resource eg Fire and Rescue Services to respond to an on-site incident they need to consult the local provider to identify any limitations on the availability of resources which must be considered and addressed within the site's emergency arrangements.

vi. When all instances of reliance on off-site responders have been identified, the adequacy of the joint arrangements with all emergency responders should be demonstrated. The arrangements between the duty holder and the Fire and Rescue Service include, but are not limited to: raising an alert and initial information: access points, suitable hard-standings for vehicles, and rendezvous points; site information (equipment and consumables); drainage, containment capability firewater management arrangements; and evacuation arrangements.

vii. Where a lower-tier site is a partner in a mutual aid arrangement, assets for assisting with on-site emergency arrangements may be provided by another COMAH establishment. The details of any mutual aid arrangements should be addressed in the on-site emergency plan.

viii. Further information on mutual aid arrangements is contained in Annex 14.

ix. The CA has arrangements in place to check that operators have acted on the above recommendations. The CA delivery Guide[2] explains: how it will do this; what success criteria it will use to judge operator performance; and its initial enforcement expectation in case of deficiencies, within the current intervention cycle. The templates referred to below can be used to identify those parts of an on-site plan that rely on off-site responders and assess compliance.

x. Please see Appendix 6 – Emergency Planning Guidance, Table 20 – Overview of Emergency Arrangements, Table 22 – Information Needs of the Emergency Services, and Table 24 – COMAH Off Site Plan Exercising/Auditing Record of the Safety and Environmental Standards for Fuel Storage Sites (Process Safety Leadership Group) Final report[3]

2.2 Top Tier COMAH Operators

2.2.1 Production of on-site emergency plans [Regulation 9(1), 9(2) and Schedule 5 Part 1 and Part 2]

i. Top tier operators are required to prepare emergency plans for dealing with the on-site consequences of possible major accidents and providing assistance with off-site mitigatory action. These plans should be in writing and cover the full range of possible major accidents including the operator's response to reasonably foreseeable low-probability, high-consequence events. Consideration must be given to the potential on-site consequences to people, the environment and property and how to assist with off-site mitigatory action.

ii. The objectives of the on-site emergency plan include the requirement to communicate the necessary information to the public, the emergency services and other authorities concerned in the area. The necessary information is that which allows those receiving it to decide what actions they need to take for their own safety and to mitigate the consequences of the accident. Other authorities will include the local authority, the appropriate environmental agency, the health authority/Scottish Health Boards and the water companies/authorities.

iii. The plan should also describe the arrangements for restoration of the environment after an accident, including consideration of possible knock-on effects. A checklist for verifying the contents of an on-site emergency plan is contained in Annex 4 and the minimum information required is contained in Annex 15.

iv. The plan must establish the system for managing information in the event of a major accident. This should ensure that necessary information can be identified and communicated to people on site, the emergency services and the other authorities identified in the plan as having a role to play and requiring information.

v. The on-site emergency plan details the roles that those who work at the establishment will have to play in the event of a major accident. It should include the arrangements that are established for assisting with emergency response off-site. The plan must state how it interfaces with the off-site plan, so that emergency services and those responsible for communicating information to those outside the establishment know where and in what form they will receive information.

vi. To assist operators whose current arrangements rely on off-site responders to fulfil functions as part of their on-site response, the 'Safety and environmental standards for fuel storage sites' – Final report[3] produced guidance on auditing off-site emergency plans which also allows for identification of interfaces between on- and off-site responders and assessment of the adequacy of the joint arrangements.

vii. Please see Appendix 6 – Emergency Planning Guidance, Table 23 – Assessment of Vulnerable Emergency Response Equipment and Resources of the Safety and Environmental Standards for Fuel Storage Sites (Process Safety Leadership Group) Final report[3]

viii. Operators whose establishments become top-tier due to an increase in inventory must prepare their plans before they begin operation. The start of operation is the date the top-tier threshold is exceeded.

ix. Operators who become top-tier sites due to: a change in the classification of a dangerous substance; a change in the qualifying quantity in Schedule 1; a change in knowledge of dangerous substances generated must prepare their on-site emergency plans as quickly as possible but no later than 12 months from the date the Regulations apply.

x. It should be noted that the CA has administrative arrangements in place to notify LAs and other relevant parties of new top-tier COMAH establishments. Inspectors should check that the information has been forward to all relevant parties.

xi. The MIIB EPRR report[1] [recommendations 1, 4, 5 and 6] recommends that COMAH top-tier operators of 'Buncefield-type' sites should: review emergency arrangements to include vapour cloud explosions and severe multi-tank fires; ensure that sufficient trained and competent staff are available to execute the plan; evaluate the siting and/or protection of emergency response facilities; identify vulnerable critical emergency resources and have contingency arrangements in place.

xii. The MIIB EPRR report[1] [recommendations 2 and 3] also recommends that to support operators in improving the quality of their on-site plans there needs to be better alignment between the guidance for producing the plans and the guidance for assessing the adequacy of emergency arrangements described in the safety report.

xiii. Further information is contained 'A guide to the Control of Major Accident Hazards Regulations 1999 (as amended) Schedule 2 paragraph 4a and 4e, Schedule 4 Part 2 paragraph 5c and Safety Report Assessment Manual (SRAM)[4] Criteria: 14.3; 14.3.1 – 14.3.10, 14.5.

2.2.2 Consultation arrangements for on-site emergency plans [Regulation 9(3), 9(4)]

i. These Regulations require the operator of a top-tier COMAH site to consult with those who will have a role to play in the emergency response and the on-site emergency plan must include details of the arrangements.

ii. Employees and the emergency services identified as having a role to play in the emergency response must be consulted during preparation of the plan. As well as those employed directly by the operator, consultation should include all those normally working at the establishment, for example relevant long-term sub-contract personnel.

iii. Health authorities should also be consulted as they will have to deal with any injuries which arise and will be responsible for ensuring that satisfactory arrangements are in place for handling the health-care aspects of the response to a major accident.

iv. The environment agencies have specific functions in the event of a major industrial accident in connection with mitigating the impacts on the environment. For this reason the respective environmental agency is a named statutory consultee on the preparation of the on-site emergency plan, to ensure that its arrangements 'dovetail' with those of the operator.

v. For establishments for which the local authority is required to produce an off-site emergency plan the local authority must be consulted by the operator during the preparation of the on-site emergency plan. The consultation will be on the aspects of the on-site emergency plan in which off-site environmental agencies have a role and which have interfaces with the off-site emergency plan. This is to ensure that there is adequate dovetailing between the two plans which apply to the establishment.

vi. The MIIB EPRR report[1] [recommendations 2 and 3] also recommends that to support operators in improving the quality of their on-site plans there needs to be better alignment between the guidance for producing the plans and the guidance for assessing the adequacy of emergency arrangements described in the safety report.

vii. Further information can be found in 'A guide to the Control of Major Accident Hazards Regulations 1999 (as amended)' paragraph 245 – 248 and SRAM[4] Criteria 14.1.

viii. Where any top-tier COMAH operator relies on any off-site resource eg fire and rescue services to respond to an on-site incident they need to consult the local provider to identify any limitations on the availability of resources which must be considered and addressed within the site's emergency arrangements.

ix. When all instances of reliance on off-site responders have been identified, the adequacy of the joint arrangements should be demonstrated. The arrangements between the duty holder and the fire and rescue service include, but are not limited to: raising an alert and initial information: access points, suitable hard-standings for vehicles, and rendezvous points; site information (equipment and consumables); drainage, containment capability firewater management arrangements; and evacuation arrangements.

x. Where a top-tier site is a partner in a mutual aid arrangement, assets for assisting with on-site emergency arrangements may be provided by another COMAH establishment. The details of any mutual aid arrangements should be addressed in the on-site emergency plan.

xi. Further information on mutual aid arrangements can be found in Annex 14

xii. Please see Appendix 6 – Emergency Planning Guidance, Table 24 – COMAH Off Site Plan Exercising/Auditing Record of the Safety and Environmental Standards for Fuel Storage Sites (Process Safety Leadership Group) Final report[3]

xiii. The CA On-site Emergency Planning and mitigation Delivery Guide[2] explains: how it will check if operators have acted on the recommendations; what success criteria it will use to judge operator performance; and its initial enforcement expectation in case of deficiencies.

xiv. The CA operational delivery guide 'Assessment of Safety Reports' (DG1b)[5] provides further general guidance for assessment of emergency response arrangements.

xv. To assist operators whose current arrangements rely on off-site responders to fulfil functions as part of their on-site response, the 'PSLG Safety and Environmental Standards for Fuel Storage Sites' – Final report[3] provides guidance on auditing off-site emergency plans which also allows for identification of interfaces between on- and off-site responders and assessment of the adequacy of the joint arrangements.

xvi. Please see Appendix 6 - Emergency Planning Guidance, Table 20 – Overview of Emergency Arrangements, Table 22 – Information Needs of the Emergency Services, Table 23 – Assessment of Vulnerable Emergency Response Equipment and Resources, and Table 24 – COMAH Off Site Plan Exercising/Auditing Record, of the Safety and Environmental Standards for Fuel Storage Sites (Process Safety Leadership Group) Final report[3].

3. Top-tier operators and local authorities' duties relating to off-site emergency plans

i. The local authority is responsible for the preparation of, and consultation arrangements for, the off-site emergency plan: the top-tier operators' duty is to provide the information to allow the local authority to discharge its duties.

ii. The MIIB EPRR report[1] noted that effective emergency response depends upon a clear and concise emergency and contingency plan, trained and experienced responders and a well informed community.

iii. The recommendations call for improved guidance to assist local authorities to draw up effective off-site emergency plans and for measures to ensure arrangements are effective in practice.

iv. The recommendations build on the existing duties under COMAH in relation to off-site emergency response arrangements.

3.1 Preparation of off-site emergency plan [Regulation 10(1), Schedule 5 Part 1 and Part 3, Regulation 10(2)]

i. The local authority for the area where a top-tier establishment is located must prepare, in writing, an adequate emergency plan for dealing with the off-site consequences of possible major accidents. The off-site emergency plan details the roles to be carried out by emergency services, local authorities and other external organisations in the event of a major accident. This includes the arrangements established to help with the emergency response on site. The degree of planning should be proportionate to the probability and consequences of the accident occurring.

ii. Consideration must be given to the potential off-site consequences to people, the environment and property and how to assist with on-site mitigatory action.

iii. The objectives include provision for the restoration and 'clean up' of the environment following a major accident. These remedial measures should be proportionate to the level of harm caused by the accident and the risk of continuing harm to people and the environment.

iv. The plan will need to detail the arrangements and resources to ensure timely and effective restoration of the environment in the event of an accident. The particular environmental hazards associated with the operations carried out on the establishment and the specific off-site environmental conditions should have been identified by the operator in his safety report.

v. At some establishments impacts may be too many and varied for dedicated arrangements to be made in advance for every scenario. Off-site plans should therefore go as far as arranging for sampling and analysis in order to assess actual impact and bringing together key stakeholders and resources to agree priorities for community clean-up and restoration.

vi. While the plan should identify the resources and expertise likely to be needed, each accident will need to be handled individually in consultation with the appropriate environmental agency. Longer-term restoration plans need to consider what action is required to restore the environment. Part of the process should be to review the effectiveness and extent of the restoration and to revise the approach if needed.

vii. The plan should also consider possible effects on the food chain, ie through the contamination of crops or grazing land. This may require giving necessary information to, for example, the Department for Environment, Food and Rural Affairs, the Food Standards Agency, the National Assembly for Wales and the Scottish Executive Rural Affairs Department.

viii. Some local authorities will have several top-tier establishments in close proximity and will need to prepare emergency plans which take account of the potential consequences from accidents on all of them. Each must have its own off-site emergency plan, developed in collaboration with the relevant operator. This may, under some circumstances, be addressed by local authorities having a generic plan, with separate detailed annexes for each establishment as appropriate.

ix. Information on the contents of an off-site emergency response plan is contained in Annex 5. The timescales for the completion of the off-site emergency plan are found in Annex 7. Further information can be found in Annex 15 and 'A guide to the Control of Major Accident Hazards Regulations 1999 (as amended) paragraphs 249–258

x. The CA is required to check that local authorities have produced adequate off-site emergency plans. The CA Delivery Guide 'COMAH Off-site Emergency Planning' (DG7b)[6] explains: how it will do this; what success criteria it will use to judge operator performance; and its initial enforcement expectation in case of deficiencies, within the current intervention cycle.

xi. The CA operational delivery guide 'Assessment of Safety Reports' (DG1b)[5] provides further general guidance for assessment of emergency response arrangements. The templates referred to below can be used to identify those parts of an on-site plan that rely on off-site responders and assess compliance.

xii. Please see Appendix 6 – Emergency Planning Guidance, Table 20 – Overview of Emergency Arrangements, Table 22 – Information Needs of the Emergency Services, and Table 24 – COMAH Off Site Plan Exercising/Auditing Record, of the Safety and Environmental Standards for Fuel Storage Sites (Process Safety Leadership Group) Final report[3]

xiii. To improve the effectiveness of the emergency response arrangements, the MIIB EPRR report[1] made recommendations regarding: the use of trained and competent emergency planners; working with Local Resilience Forums and Sub-national Resilience Forums; extending the provision of information beyond the sites consultation distance (CD); and a review of the fitness for purpose of the command and control structures delivering the emergency response.

xiv. There is further information on the above recommendations in the following annexes:

i. Annex 8 Competencies for emergency planners;

ii. Annex 9 Working with Resilience and Emergency Division (RED) in England and arrangements in devolved administrations;

iii. Annex 10 Extendibility; and

iv. Annex 11 Command and Control and COMAH off-site Response.

xv. Please see Chapter 19 'The Fit with Other Legislation'[7] paragraphs19.19 – 19.20, 19.21 – 19.22 of 'Emergency Preparedness'

xvi. It should be noted that Regional Resilience Teams are to be replaced by Sub-national Resilience Teams in hubs across the country, acting as a conduit for communications between central government and the local level. They are responsible for activating sub-national Operations Centres where required, supporting local response and recovery efforts, and ensuring there is an accurate picture of the situation in their region.

xvii. Where the response to an emergency would benefit from regional co-ordination a Regional Co-ordinating Group (RegCG) will be convened. The need for these groups can either be decided by Regional Resilience Teams (RRTs) at the request of responders or by the Lead Government Department in consultation with either the Cabinet Office or the Department for Communities and Local Government. These groups are the regional equivalent of local Strategic Co-ordinating Groups (SCGs).

xviii. In the most serious circumstances there may be a need to convene a Regional Civil Contingencies Committee (RCCC) to support response and recovery activity across the region.

3.2 Provision of information [Regulation 10(3), 10(4), 10(5)]

i. The local authority cannot prepare an off-site emergency plan for an establishment without having received the necessary information from the operator. This information will not normally be the entire safety report. The operator should provide only that information which is relevant to preparing the off-site plan, such as details of accident consequences. The operator should also ensure that any information supplied to the local authority is updated as necessary in the light of any other changes.

ii. Some sites may be designated by the CA as 'domino sites', which are sites where the likelihood or consequences of a major accident may be increased because of the location and proximity of other COMAH establishments and the dangerous substances present there. These sites need special consideration in terms of emergency planning, and the testing of the off-site response. (See Section 9 'Information for other establishments' [Regulation 16(1)] for further information on 'domino sites').

iii. Risk assessment is the first step in the emergency planning process and depends upon having adequate information relating to the on-site emergency response arrangements and their interface with the off-site emergency arrangements.

iv. Included at Annex 12 is a template (RCS 8) which may assist emergency planners reviewing the adequacy of operators' on-site emergency response arrangements.

v. Further information can be found in the SRAM[4] Criteria 14.7.

vi. Please see Appendix 6 – Emergency Planning Guidance, Table 22 – Information Needs of the Emergency Services, of the Safety and Environmental Standards for Fuel Storage Sites (Process Safety Leadership Group) Final report[3].

vii. Risk assessments should take into account the potential impact on the wider community. This can be achieved by considering information from site safety reports as part of the community risk register assessment process within an LRF area. COMAH sites may be noted in the Risk Assessment of the Generic Risks and the risks recorded in the Community Risk Register (CRR), alongside the control measures needed.

viii. Please see Chapter 19 'The Fit with Other Legislation'[7] paragraphs 19.5 – 19.10 (Risk Assessment) of 'Emergency Preparedness'.

3.3 Local Authority consultation [Regulation 10(6)]

i. The COMAH Regulations require the local authority to consult with those people and organisations that will have a role in the off-site emergency response arrangements.

ii. They must consult the emergency services in the preparation of the off-site emergency plan, so that their concerns and recommendations are taken into account in developing and resourcing the plan. The Cabinet Office publication 'Emergency response and recovery'[9] and the Scottish Executive's 'Preparing Scotland'[10] contain guidelines for local authorities, emergency services and others. These highlight the importance of a combined response, from all environmental agencies involved, ie integrated arrangements for emergency management.

iii. The environmental agencies have specific functions in the event of a major industrial accident in connection with mitigating the impacts on the environment which go beyond their regulatory role as part of the CA. For this reason the Agency is a separate named statutory consultee on the preparation of the off-site emergency plan.

iv. The relevant environmental agency is normally consulted early and regularly during the development of the off-site plan to dovetail its response with that of the local authority. The CA is consulted to assess the regulatory sufficiency of the off-site plan.

v. The local authority has to consult the appropriate health authorities as they have a responsibility to contribute to safeguarding the public health of the population within their geographical area. Thus they need to be aware of potential major accident risks, in order to dovetail their emergency plans and health service arrangements with those of the emergency services and local authority.

vi. Please see Appendix 6 – Emergency Planning Guidance, Table 22 – Information Needs of the Emergency Services, of the Safety and Environmental Standards for Fuel Storage Sites (Process Safety Leadership Group) Final report[3]

vii. It may also be necessary to consult other organisations in addition to those specifically identified by the Regulations who might become involved and whose roles would need to be included in the off-site emergency plan. These organisations may include the Department for Environment, Food and Rural Affairs, the Food Standards Agency, the National Assembly for Wales and the Scottish Executive Rural Affairs Department and water companies/authorities.

viii. Where there is reliance on mutual aid arrangements to support the off-site emergency response the details need to be included in the off-site emergency plan and there should be sufficient consultation to ensure that those involved are aware of their roles and responsibilities.

ix. Further information on mutual aid arrangements can be found in Annex 14.

x. To ensure that the off-site plan dovetails with the on-site emergency plan, the local authority will need to consult closely with the operator on both the on-site response arrangements and the interfaces between the on- and off-site plans.

xi. Please see Chapter 19 'The Fit with Other Legislation'[7] paragraphs 19.11 – 19.16 (Emergency planning and Extendibility) of 'Emergency Preparedness'

xii. The local authority must also consult the public when preparing the off-site emergency plan. This could include: consultation with elected councillors at county, borough or parish level (or equivalents); or consultation with specially established groups representing residents in the vicinity of the site.

xiii. Elected councillors will be able to use appropriate channels of communication with the public in the vicinity of the major hazard establishment to obtain their views on the developing emergency plan.

xiv. The CA will check that local authorities and operators have acted on the above recommendations. The CA Delivery Guide COMAH Off-site emergency planning[6] explains: how it will do this; what success criteria it will use to judge operator performance; and its initial enforcement expectation in case of deficiencies, within the current intervention cycle.

xv. The CA operational delivery guide 'Assessment of Safety Reports' (DG1b)[5] provides further general guidance for assessment of emergency response arrangements.

3.4 Exemption from preparing off-site plan [Regulation 10(7) and 10(8)]

i. The CA may exempt an LA from the requirement to prepare and off-site emergency plan for an establishment. Where such an exemption is in force, the LA has no function in relation to the preparation, review, testing and putting into effect an off-site plan for the establishment concerned. An exemption will normally only be considered following a formal request that includes reasons. In principle, anyone can make such a request, but in practice it is likely to be the operator of the establishment or the local authority (who should inform the other of the request). If, having considered the request and the information in the safety report, the CA agrees that an exemption is appropriate, it will write to the local authority exempting it from the duty to prepare an emergency plan and explain its reasons for granting the exemption.

4. Top-tier operators and local authorities' duties relating to review and testing of on- and off-site emergency plans [Regulation 11(1) and 11(2)]

i. COMAH places a duty on a person who has prepared an emergency plan to review, and where necessary revise the plan and test the plan at least once every three years. For the on-site emergency plan the person is the operator: for the off-site plan it is the local authority.

ii. Operators must inform the local authority of any changes made to their on-site plans which would affect the off-site plans. Similarly, local authorities must inform operators of any changes made to off-site plans which would affect on-site plans.

4.1 Review of on- and off-site emergency plans

i. Review is a process which examines the adequacy and effectiveness of the components of the emergency plan and how they function together. The review process must take into account: all material changes in the activity; an changes in the emergency services relevant to the operation of the plan; advances in technical knowledge; knowledge gain as a result of major accidents either on site or elsewhere; and lessons learned during testing of emergency plans.

ii. A review must take into account: all material changes in the activity; any changes in the emergency services relevant to the operation of the plan; advances in technical knowledge, for example new, more effective means of mitigation; knowledge gained as a result of major accidents either on site or elsewhere; and lessons learned during the testing of emergency plans.

iii. Additionally, COMAH Regulation 11(1) requires that a review of the adequacy and accuracy of the emergency planning arrangements should follow any modifications or other significant changes to the establishment. Under these circumstances, operators should not wait until the three-year review is due to review their emergency plans.

iv. The MIIB EPRR report[1] recognised that an effective emergency response depends on a clear and concise emergency plan, trained and experienced responders and a well informed community. The report made various recommendations for improving the off-site emergency preparedness and response, primarily requiring local authorities to review the effectiveness of their emergency plans and responders to review their training arrangements.

v. There is further information on the above recommendations in the following annexes:

i. Annex 8 Competencies for emergency planners

ii. Annex 10 Extendibility

iii. Annex 11 Command and Control and COMAH off-site Response

vi. Please see Chapter 19 'The Fit with Other Legislation'[7] paragraphs 19.11- 19.12 (Emergency Planning), 19.14 – 19.16 (extendibility), 19.18 – 19.22 (Command and Control) 19.27- 19.30 (Co-operation and Information Sharing) of 'Emergency Preparedness'

vii. The MIIB EPRR report[1] recommended that local authorities ensure their off-site plans gave due consideration to meeting the welfare needs of responders. However, this recommendation is already met as each organisation eg Police, Fire and Rescue Service, local authority etc., must meet the needs of responders whom they have requested to attend and also the welfare needs of their own staff.

viii. Environmental agencies who attend the scene of major accidents/incidents without being requested are responsible for the welfare arrangements for their own staff.

ix. The MIIB EPRR report[1] also recommends that local authorities, when reviewing their off-site plans, identify critical facilities, resources etc. However, this recommendation is achieved by other means as any review of off-site emergency plans for COMAH sites should already look at issues relating to critical equipment etc. and more detailed guidance is not required because arrangements are already in place.

x. Additionally, the MIIB report recommended that local authorities, as part of the review, should ensure that relevant staff are trained and competent. As responders have to be trained and competent under CCA, the requirement to train responders is met.

4.2 Testing on-site emergency plans

i. An emergency plan test is a task or tasks undertaken to give confidence in the accuracy, completeness and practicability of the plan.

ii. Testing an emergency plan may consist of a live exercise or a table-top exercise supported by the testing of other components (which may be done at separate times), including the communication arrangements. The testing of other components should demonstrate whether the plan can be put into effect successfully.

iii. The testing of some of the components should be done live, ie it should involve deployment of some personnel and resources as if they were responding to a real emergency.

iv. Where it is suitable, the nature of the scenario should vary in each three-year testing cycle, to examine the range of emergency responses required for the foreseeable accidents.

v. All relevant staff in all shifts in all the relevant organisations should be fully trained in their expected response in the event of an emergency.

vi. Dealing with the on-site consequences of major accidents will usually require the assistance of the emergency services such as the fire and rescue service and therefore it may be appropriate for them to attend some tests where they are involved with the on-site response, but not necessarily all. Other off-site agencies may wish to be involved in some of the exercises to meet their own training needs.

vii. Further information relating to exercising of plans can be found in the Cabinet office Guidance, 'Emergency Exercises'[8]

4.3 Testing of off-site emergency plans

i. COMAH requires testing of an off-site emergency plans to be undertaken at least once every three years to give confidence in the plan. This need not necessarily involve a full-scale live exercise. Testing could consist of examining the principal components of the plan.

ii. The local authority should have arrangements in place to periodically test off-site plans within three-yearly intervals to confirm that all key elements are fit for purpose and to ensure lessons learned from test and review are actioned and any necessary improvements embedded into off-site emergency plan revisions

iii. Testing should be co-ordinated and agreed locally to give the maximum benefit to local authorities, operators and emergency services.

iv. The operator, the emergency services and the local authority should agree beforehand on the scale and nature of the emergency plan testing to be carried out.

v. A suitable scenario, or suitable scenarios, have to be developed from the safety report, and the type and nature of the test exercise agreed with the operator and off-site responders involved. It will be necessary to identify which organisations are to participate in the emergency plan test and for each of these organisations to determine their own objectives, which should be consistent with the overall objectives of the exercise.

vi. When testing the off-site emergency plans for domino sites it may, in some circumstances, be appropriate to test the response to an accident caused by, or magnified by, a domino effect. This should test the off-site response of more than one COMAH establishment at the same time, with the initiating event for some of the accidents being an event on an adjacent site.

vii. The original consultees should also be consulted over any revisions to the emergency plan.

viii. The local authority must attempt to reach agreement with the operator and emergency services on the testing of the off-site emergency plan. They will need to agree the overall objectives of the testing and the best way of meeting those objectives.

ix. If the local authority cannot reach agreement with the operator and the emergency services, the Regulations still require the local authority to test the off-site emergency plan at a suitable interval, not exceeding three years.

x. Information relating to exercising of plans can be found in in the Cabinet office Guidance, 'Emergency Exercises'[8].

xi. There is further information on the above recommendations in the following annexes:

  i. Annex 10 Extendibility

  ii. Annex 11 Command and Control and COMAH off-site Response

  iii. Annex 14 Mutual aid arrangements

xii. Examples of how a local authority may organise and implement a programme for testing off-site emergency plans can be found in Annex 13

xiii. Cleveland Emergency Planning Unit document 'Testing and Exercising within Cleveland'[11]

xiv. Please see Chapter 19 'The Fit with Other Legislation'[7] paragraphs 19.11- 19.12 (Emergency Planning), 19.14 – 19.16 (extendibility), 19.18 – 19.22 (Command and Control) 19.27 -19.30 (Co-operation and Information Sharing) of 'Emergency Preparedness'

xv. The MIIB EPRR report[1] recommended the: testing of revised of off-site emergency plans within twelve months of their revision; and the training of responders and elected officials. However, within the current three year cycle, off-site emergency response arrangements should be revised to reflect the relevant recommendations and are tested within three years. The arrangements include any training necessary to complete the tests. Additionally, under CCA there are already arrangements in place for training elected officials.

xvi. The supporting guidance on review and testing of on- and off-site emergency plans for COMAH establishments is contained in 'A guide to the Control of Major Accident Hazards Regulations 1999 (as amended)' paragraphs 272 – 299.

5. Implementing emergency plans [Regulation 12]

i. This places a duty on a person who has prepared an emergency plan to take reasonable steps to put it into effect without delay when a major accident occurs or when an uncontrolled event occurs which could reasonably be expected to lead to a major accident.

ii. The duty to implement the on- and off-site emergency plans lies with the operator and the local authority, not the actual individuals who drew up the plans. The duty will be met when there are systems in place to ensure there are no unreasonable delays between the discovery of an incident and the activation of the plan. There should be a clear and logical decision-making system in place to ensure that as soon as a relevant event has occurred the appropriate plan is initiated immediately.

6. Charge for preparation, review and testing of off-site emergency plan [Regulation 13]

i. The local authority may charge the operator for its costs in preparing, reviewing, revising and testing the off-site emergency plan. It can also charge for the costs incurred by the emergency services for testing the plan, including any on site mitigatory actions.

ii. Before testing is carried out agreement should be reached between operators, local authorities and emergency services on the scale and nature of testing and a reasonably accurate estimate of the cost of the proposed testing schedule should be made.

iii. The charges made should only cover the costs of testing to make sure the plans are accurate, complete and practical.

iv. It should be noted that it is not possible for local authorities to make an additional charge to site operators for additional work to extend the plan beyond the requirements of the COMAH Regulations.

7. Provision of information to the public

i. People and establishments liable to be affected by a major accident at an establishment must be given specified information about the establishment, the major accident hazards and the safety measures that are in place.

ii. Please see Chapter 19 'The Fit with Other Legislation'[7] paragraphs 19.33 – 19.37 (Communicating with the Public) of 'Emergency Preparedness'

7.1 Provision of information [Regulation 14(1) to 14(3), Schedule 6]

i. The CA determines the area around that establishment to which this duty applies but it is the operator who has to provide the information. The area which the CA determines is known as the public information zone (PIZ). It determines the PIZ by taking account of both the likelihood and effects of possible major accidents at the establishment. It is set on the basis that people outside it are not at significant immediate risk from major accidents, although they could be if the accident escalates.

ii. The need to provide information to the public about delayed or indirect effects of major accidents, crop contamination for example, should be addressed in off-site emergency plans.

iii. Operators have to be proactive in providing this information, ie they must provide the information without waiting for the people involved to ask for it. They must consider everyone who could be in the PIZ when a major accident occurs.

iv. Anyone whose presence in the PIZ can be predicted, such as residents or workers at other premises, can be sent the information individually by post or by other means, eg by the development of educational packages in schools and colleges, and the use of videos. Those whose presence cannot be anticipated, for example shoppers or people attending leisure centres, will need to be targeted in other ways and operators should discuss these with the CA and local authority.

v. The information which must be provided is detailed in Schedule 6 of the COMAH Regulations, and reproduced in Annex 16, but this is the minimum information and operators are free to provide more if they wish. It should be written in straightforward and simple terms, avoiding the use of complicated technical expressions. The information should be readily understood by lay readers. It is important to get this message across to children as well as adults.

vi. Operators may need to translate the information into other languages. The local authority should be able to give advice about this. The way in which the information should be provided is not specified but the public should be advised to keep it readily available in case of an emergency.

vii. The information must be made available to the wider public but this duty extends beyond merely responding to requests for information. It is for operators to decide the best way of doing this. The information is required to be permanently available to the public but this is not the same as continuously available. Permanently means that the information never becomes unavailable.

viii. Please see Chapter 19 'The Fit with Other Legislation'[7] paragraphs 19.33 – 19.37 (Communicating with the Public) of 'Emergency Preparedness'

7.2 Consultation [Regulation 14(4)]

i. Operators must consult the local authority when preparing information for the public. It would normally be appropriate to consult other bodies such as neighbouring local authorities (if the establishment is near an authority boundary), utility companies, the emergency services and the health authorities/Scottish health board(s).

ii. In places where different operators have several establishments located close together, this consultation will enable the local authority to perform a co-ordinating role.

iii. Operators have the final say on the content and form of the information to be provided.

7.3 Distribution of information [Regulation 14(5)]

i. Operators should try to reach agreement with their local authority to distribute the public information within the PIZ. The agreement should be formalised, and should cover everything relevant to the distribution of the information, including the area and method of distribution.

ii. The question of the costs which will be incurred by the local authority in disseminating the information should also be addressed, particularly where the local authority wishes these to be borne by, or be recovered from, the operator.

iii. The distribution should include everyone outside the establishment and within the PIZ. This may require supplying some locations such as workplaces and multi-occupied dwellings with multiple sets of information for those in control to pass on.

iv. If agreement with the local authority cannot be reached, the operator will have to disseminate the information.

v. To improve the effectiveness of the emergency response arrangements, the MIIB EPRR report[1] made recommendations regarding extending the provision of information beyond the sites consultation distance (CD) and improving the effectiveness of communications.

vi. There is further information on the above recommendation in the following annex:

i. Annex 10 Extendibility

vii. Please see Chapter 19 'The Fit with Other Legislation'[7] of paragraphs 19.11 – 19.20 (Extendibility) 1931 – 19.37 (Communicating with the Public) of 'Emergency Preparedness'

7.4 Review, revision and re-distribution of information [Regulation 14(6) and 14(7)]

i. The information provided to the public must be reviewed every three years or immediately following a modification to the MAPP or safety report and, where necessary, updated.

ii. Updating may be necessary to reflect any changes which have taken place in the establishment, the off-site emergency arrangements, or technical knowledge.

iii. People within the PIZ must be given the required information within a reasonable period of time after the off-site emergency plan has been prepared. It must also be available to the general public within the same period. Six months would normally be appropriate.

iv. The public information must be re-distributed whenever it is revised or after five years if there has been no update. Re-distribution may also be appropriate before the five-year limit.

8. Provision of information to the Competent Authority [Regulation 15(1) to 15(2)]

i. When requested by the CA the operator should provide sufficient information to demonstrate that it has taken all measures necessary to comply with the COMAH Regulations.

ii. The CA may ask for additional documentation or evidence, for example, the health and safety policy, safety audit reports, operating instructions, training manuals, training records etc. which have been referred to in the safety report, to decide whether all measures necessary have been taken.

iii. It is not usually necessary to prepare a special document to meet the requirements of Regulation 15 but operators should be able to draw together the relevant documents to provide the necessary evidence if requested.

iv. If the CA considers the operator has not adequately demonstrated that all measures necessary have been taken, it may ask for additional information. This must be provided.

v. As the CA has duty to investigate major accidents, there is a duty on operators to provide it with any information it needs in order to investigate the accident.

vi. Where a major accident has occurred at an establishment the operator shall forthwith inform the CA of that accident.

vii. Notifications, safety reports, major accident reports etc should be sent to the local HSE office where the report will be copied and sent to the relevant Environment Agency.

9. Provision of information to other establishments [Regulation 16(1) to 16(4)]

i. In some circumstances a major accident at one COMAH establishment might be triggered by an incident at another COMAH establishment (the so-called domino effect). The initiating event need not necessarily be a major accident itself but it must be at a COMAH establishment, either top-tier or lower-tier, and involve a defined dangerous substance. The duty to identify establishments with the potential to affect neighbouring establishments in this way lies with the CA.

ii. This Regulation cannot bring a non-COMAH site into the scope of the Regulations or make a lower-tier establishment subject to the top-tier duties.

iii. The CA must notify each operator of an establishment in a group designated as part of a domino of the names and addresses of other establishments within the same group.

iv. Where two or more establishments have been designated as domino establishments, the operators must take account of the overall hazard, ie the combined consequences of a major accident at one establishment being triggered by an incident at the other. The overall hazard must be taken into account in operator's major accident prevention policy, safety reports and on-site emergency plans. In order to do this, the operators need information about the other establishments involved and this information must be exchanged.

v. Operators will need to know: the kinds of activities being carried out at the other establishment(s); the ways in which these could trigger a major accident at their own establishment; dangerous substances and their properties. The way in which the information should be exchanged is not specified, however, verbal exchange of information does not provide a permanent record, so some form of documentation is essential.

vi. Those operators whose establishments are designated as domino sites must co-operate with each other to ensure that their public information reflects the overall hazard and precautions to be taken in the event of a major accident. The information should also specify that the establishment(s) have been designated as domino sites.

vii. Operators must ensure that they give the local authority the information needed to take account of their designation as a domino site in the off-site emergency plans.

viii. The MIIB EPRR report[1] recommended that local authorities review their off-site emergency plans to ensure they contain key information provided by operators. This includes information regarding an establishment's domino status to allow the overall hazards and precautions to be addressed by the off-site emergency plan.

ix. The establishment's domino status is an important consideration when considering the extension of co-operation beyond the statutory consultation distance for the establishment and extending the public information zone (PIZ).

x. To improve the effectiveness of the emergency response arrangements, the MIIB EPRR report[1] made recommendations regarding extending the provision of information beyond the site's consultation distance (CD) and improving the effectiveness of emergency response arrangements.

xi. There is further information on the above recommendation in the following annex:

i. Annex 10 Extendibility

xii. Please see Chapter 19 'The Fit with Other Legislation'[7] of paragraphs 19.11 – 19.20 (Extendibility) 1931 – 19.37 (Communicating with the Public) of 'Emergency Preparedness'

Annex 1 COMAH and Civil Contingencies legislation

1.1 Link between COMAH and CCA and supporting Regulations

1. The Government's aim is to reduce the risk from emergencies so that people can go about their business freely and with confidence. The Civil Contingencies Secretariat (CCS) in the central government co-ordinates the UK Government's work to enhance the country's resilience to the full range of emergencies. The CCS co-ordinates the work of the various Government Departments who are responsible for contingency planning and response as part of their departmental remit.

2. The Civil Contingencies Act 2004 (CCA) and its supporting Regulations placed duties relating to civil protection on a statutory basis and provided a basic framework defining what tasks should be performed and how co-operation should be conducted for all parties involved in planning for and responding to emergencies across a range of natural and industrial incidents at local, regional and national levels.

3. The Act identifies two groups of responders: Category 1 and Category 2 who have specific duties under the legislation. The Environment Agency in England and Wales are a Category 1 responders due to their role in remediation and clean up following environment incidents, similarly the Scottish Environmental Protection Agency in Scotland. Within the UK HSE is a Category 2 responder with duties relating to information sharing and co-operation with Category 1 and Category 2 responders.

4. A particular set of risks is excluded from consideration under civil protection legislation. These are risks subject to Control of Major Accident Hazards Regulations (as amended) 1999 (COMAH), the Pipeline Safety Regulations 1996 (PSR) and the Radiation (Emergency Preparedness and Public Information) Regulations 2001 (REPPIR), which have their own legislative requirements relating to emergency arrangements, including preparation of off-site plans, which would have existed prior to the implementation of the CCA.

5. Within the CCA an 'emergency' is defined as 'an event or situation which threatens serious damage to human welfare in a place in the UK, the environment of a place in the UK or war or terrorism which threatens serious damage to the security of the UK'

6. The Control of Major Accident Hazard Regulations 1999 (COMAH) and subsequent amending legislation placed duties on top tier COMAH operators and Local Authorities to: prepare adequate on-site and off-site emergency plans; review and test emergency plans; provide information to the public; and have arrangements in place for implementing the plans. Lower tier COMAH operators are required to have arrangements in place to deal with an emergency.

7. Within COMAH, a 'major accident' means 'an occurrence (including in particular, a major emission, fire or explosion) resulting from uncontrolled developments in the course of the operation of any establishment and leading to serious danger to human health or the environment, immediate or delayed, inside or outside the establishment, and involving one or more dangerous substances';

8. Following the incident at the Buncefield Oil Storage depot in 2005, a series of investigation reports were produced which included recommendations relating to emergency response arrangements to improve the ability of all parties involved to tackle incidents at industrial premises which have an impact up to a national level for the civil protection community.

9. The recommendations aim is to ensure that the arrangements for emergency preparedness and response to meet COMAH requirements are fully integrated with those established under the CCA and are not produced in isolation, nor duplicate work done in meeting the requirements under CCA and supporting Regulations.

10. Off-site emergency arrangements are dependant on: operators' assessment of risks at the establishment; the on-site mitigatory measures and the information provided to the local authority responsible for producing the off-site emergency plan.

11. Both COMAH and CCA require: communication of information to the public; review and revision of emergency plans; and testing and exercising of plans.

12. The MIIB 'Emergency preparedness for, response to, and recovery from incidents (EPRR) report[1] recognises that the CCA framework and supporting guidance provides a valuable resource in preparing COMAH on- and off-site plans.

13. The CCS was recommended to produce guidance on integrating emergency planning for major industrial incidents into the CCA framework, the 'Fit with Other Legislation'[7] project and it was recommended that the CA revise its guidance to assist Operators in adopting these new arrangements.

14. The main focus of the Fit with Other Legislation[7] guidance document is therefore how CCA duties interface with the site specific legislation concerned with industrial emergencies. Particular focus is given to those CCA duties relating to Warning and Informing the Public, extendibility of plans, and Command and Control arrangements.

Annex 2 Roles and Responsibilities of Category 1 and Category 2 responders

Civil Contingencies Act 2004: List of responders

Schedule 1 of the Civil Contingencies Act lists the responders subject to its provisions. The Act splits local responders into two categories and imposes a different set of requirements on each category.

Category 1 responders ('core responders')

Emergencies services

- Police forces
- British Transport Police
- Fire authorities
- Ambulance services
- Maritime and Coastguard Agency

Local authorities

- All principal local authorities (ie metropolitan districts, shire counties, shire districts, shire unitaries)
- Port Health Authorities

Health bodies

- Primary Care Trusts
- Acute Trusts
- Foundation Trusts
- Local Health Boards (in Wales)
- Any Welsh NHS Trust which provides public health services
- Health Protection Agency

Government agencies

- Environment Agency
- Scottish Environment Agency

Category 2 responders ('co-operating responders')

Utilities

- Electricity distributors and transmitters

- Gas distributors
- Water and sewerage undertakers
- Telephone service providers (fixed and mobile)

Transport

- Network Rail
- Train Operating Companies (passenger and freight)
- London Underground
- Transport for London
- Airport operators
- Harbour authorities
- Highways Agency

Health bodies

- Strategic Health Authorities

Government agencies

- Health and Safety Executive

Category 1 responders are those organisations at the core of emergency response and are subject to the full set of civil protection duties: risk assessment; business continuity management; emergency planning; and maintaining public awareness and arrangements to warn inform and advise the public

Category 2 organisations (eg Health and Safety Executive) are 'co-operating bodies' who, while less likely to be involved in the heart of planning work, will be heavily involved in incidents that affect their sector. Category 2 responders have a lesser set of duties – co-operating and sharing relevant information with other Category 1 and 2 responders.

Annex 3 Emergency Response Arrangements

1 Safety and environmental standards for fuel storage sites – Final report Recommendations[3]

Recommendation 12

Operators of Buncefield-type sites should evaluate the siting and/or suitable protection of emergency response facilities such as fire fighting pumps, lagoons or manual emergency switches

2 MIIB Recommendations on emergency planning for, response to, and recovery from incidents (EPRR) report[1]

2.1 Assessing the potential for a major incident

Recommendation 1

Operators of Buncefield-type sites should review their emergency arrangements to ensure they provide for all reasonably foreseeable emergency scenarios arising out of credible major hazard incidents, including vapour cloud explosions and severe multi-tank fires that, before Buncefield, were not considered realistically credible. The Competent Authority should ensure that this is done.

2.2 Managing a major incident on site

Recommendation 3

For Buncefield-type sites, operators should review their onsite emergency plans to reflect the revised guidance on preparing on-site emergency plans as per Recommendation 2. The Competent Authority will need to check that this is done.

Recommendation 4

Operators should review and where necessary revise their on-site emergency arrangements to ensure that relevant staff are trained and competent to execute the plan and should ensure that there are enough trained staff available at all times to perform all the actions required by the on-site emergency plan.

Recommendation 5

For Buncefield-type sites, operators should evaluate the siting and/or suitable protection of emergency response facilities such as the emergency control centre, fire fighting pumps, lagoons or manual switches, updating the safety report as appropriate and taking the necessary remedial actions.

Recommendation 6

Operators should identify vulnerable critical emergency response resources and put in place contingency arrangements either on or off site, in the event of failure at any time of the year and make appropriate amendments to the on-site emergency plan. This should include identifying and establishing an alternative emergency control centre with a duplicate set of plans and technical information.

Recommendation 7

For COMAH sites, if the operator relies on an off-site Fire and Rescue Service to respond, the operator's plan should clearly demonstrate that there are adequate arrangements in place between the operator and the service provider. The Competent Authority will need to check that this is done.

Recommendation 8

COMAH site operators should review their arrangements to communicate with residents, local businesses and the wider community, in particular to ensure the frequency of communications meets local needs and to cover arrangements to provide for dealing with local community complaints. They should agree the frequency and form of communications with local authorities and responders, making provision where appropriate for joint communications with those bodies.

Recommendation 9

The Competent Authority should review the COMAH guidance to assist operators in complying with Recommendation 8 and should work with the Cabinet Office to integrate the COMAH guidance and the CCA Communicating with the public guidance, so that communications regarding COMAH sites are developed jointly by the site operator and the local emergency responders.

2.3 Preparing for and responding to a major incident

Recommendation 14

The Civil Contingencies Secretariat, working with the Competent Authority, should arrange for national guidance to local authorities to be prepared, addressing as a minimum the areas covered in Recommendation 15. Guidance should also address the competencies required for emergency planners, and be clear on the resources that may be demanded for an effective emergency planning function. The guidance should be a living document, ie periodically updated in the light of new knowledge of handling major emergencies.

Recommendation 15

Local authorities should review their off-site emergency response plans for COMAH sites in line with the revised guidance produced in response to Recommendations 13 and 14, and in the case of fuel storage sites, to take account of explosions and multi-tank fire scenarios. The aim is to ensure plans contain the key information from relevant COMAH safety reports (without compromising the safety reports' confidentiality), which should be provided by site operators following their reviews of arrangements under Recommendation 1.

Recommendation 17

Local authorities should ensure their off-site emergency plans give due consideration to meeting the welfare needs of responders, including arrangements to provide food and drink and toilet and washing facilities, on all shifts. This will also need to include guidance on rest breaks and the provision of accommodation for responders from outside of the local area.

Plans should make provision for the contribution of the volunteer community in attending major incidents in the welfare and other supporting roles

Recommendation 18

In reviewing their off-site emergency arrangements for COMAH sites, revised in accordance with our recommendations, local authorities should identify the facilities, resources and actions that are critical to successfully respond to an emergency and should provide contingencies for Buncefield-type sites. Local authorities should review and where

necessary revise emergency arrangements to ensure that relevant staff are trained and competent and that there are enough trained staff and resources to perform the actions required by the emergency plan at all times.

Recommendation 19

Local authorities should ensure their revised off-site emergency arrangements for COMAH sites are tested within 12 months of production. Exercise scenarios based on real incidents should be compiled by CCS and the Competent Authority and available for multi-agency exercise development: All Category 1 responders should ensure their staff are trained within six months of production to deliver the emergency response. Local authorities should arrange for councillors and elected members to have awareness training regarding their role in planning for, responding to and recovering from emergencies to effectively represent their communities.

Recommendation 20

Local Resilience Forums (LRFs) and devolved equivalents should assess and advise operators, local authorities and the Competent Authority on the effectiveness of communications with residents, local businesses, dutyholders and the wider community in the event of a major incident. The assessment should use an agreed standard in line with CCA2004 guidance Communicating with the public and include arrangements with local media to avoid conflicting advice being received, and to ensure key messages are transmitted.

Recommendation 23

The operators of industrial sites where there are risks of large explosions and/or large complicated fires should put in place, in consultation with fire and rescue services at national level, a national industry–fire service mutual aid arrangement. The aim should be to enable industry equipment, together with operators of it as appropriate, to be available for fighting major industrial fires. Industry should call on the relevant trade associations and working group 6 of the Buncefield Standards Task Group to assist it, with support from CCS. The COMAH Competent Authority should see that this is done.

Recommendation 24

Fire and rescue authorities and their equivalents in Wales, Scotland and Northern Ireland should review the availability of materials and equipment nationally and determine if they are sufficient to respond to and manage major incidents. Critical interface components, such as foam equipment couplings used by the FRS, should be capable of use both by the FRS and with any industry the authority may call upon. The administrations of Scotland and Wales should be involved in such a review as responsibility for the FRS is devolved. Communities and Local Government and equivalent administrations should see that this is done.

2.4 Recovering from an incident

Recommendation 32

The Environment Agency (in consultation with SEPA and the Northern Ireland Environment and Heritage Service) should complete, as quickly as possible, its review of methodologies for assessing the potential harm to the environment arising out of credible major incidents at COMAH sites, and from the emergency response scenarios attached to them. The objective is to improve information provided to aid planners and emergency responders. The work should align with the arrangements introduced for the Scientific and Technical Advice Cell (STAC).

Annex 4 Checklist for on-site emergency plans

1 The following questions may be useful in assessing the adequacy of an on-site emergency plan:

2 Does the plan cover the range of incidents that can be realistically anticipated?

3 The incidents considered should range from small events (that can be dealt with by those who work on site without any outside help) to major accidents - these need to be discussed and agreed with the emergency services and local authority.

4 Operators of top-tier establishments should be able to justify, from the information in the safety report, the scope of the emergency plan, including: the events considered, and why they were included or excluded; the typical defects and failures leading to these events; the timescales involved; the likelihood of events, so far as can reasonably be assessed; and the options for minimising events through mitigatory action.

5 Have the consequences of the various incidents considered been adequately addressed?

6 For example, each incident should be assessed in terms of the quantity of hazardous materials that could be released as a result of an accident (including smoke effluent from fires), the rate of release, the effect of explosions, the effect of thermal radiation from fires and the effect of hazardous materials that could be released.

7 Are there sufficient resources in terms of personnel and equipment on the establishment, available at all times, to carry out the emergency plan for the various incidents in conjunction with the emergency services?

8 For example, is there sufficient water for cooling, and if this water is applied by hoses, are there sufficient trained people to operate them?

9 Have the timescales been assessed adequately?

10 While developing the emergency plan, consideration should be given to the time that will elapse between the start of an emergency and the arrival of the emergency services, and the additional time that emergency services need to deploy resources. Those who work on the establishment will have to be able to deal with the developing emergency until the off-site agencies can provide appropriate support or relief.

11 Some toxic releases can develop very quickly, eg the dropping of a drum of toxic material can see the whole contents released through a sheared valve within ten minutes. If this release scenario is identified in the safety report then the subsequent remedial action should be appropriately rapid.

12 Is there a logical sequence of actions for the key personnel that are identified and given a role in the emergency plan?

13 Has suitable consultation taken place with those who work on the establishment?

14 Are arrangements in place to cover around the clock?

15 For example, is account taken of silent hours, holidays and sickness, shift handovers, and plant shutdowns?

16 Has there been an adequate and demonstrable level of consultation with the local authority emergency planning officers with responsibility for the development of the off-site emergency plan, and with the emergency services, to ensure adequate dovetailing between the two plans?

17 Has a senior emergency co-ordinating group or other similar group been established?

18 Are the arrangements in the on-site emergency plan for initiating the off-site emergency plan clear, and are they adequate?

Annex 5 Contents of off-site emergency plan

1 The off-site emergency plan should include details of: how a warning of a developing or actual major accident will be received by the off-site emergency services; and how the warning will be cascaded, as necessary, to the other off-site agencies involved, or liable to be involved, in the response to an emergency.

2 Information should be included in the plan on how the resources identified in the response arrangements will be mobilised, and how their actions will be co-ordinated; this information should complement and support the information required in the previous paragraphs. The information should include:

a) which organisations have a role to play in the off-site emergency response, their roles and responsibilities;

b) how each organisation will be alerted and will go about putting their response into action;

c) how the emergency response personnel from the establishment and the emergency services will recognise each other at the scene;

d) how the responding organisations and establishment personnel will communicate to obtain and transmit information needed for decision making, in accordance with their agreed roles and responsibilities;

e) where the emergency services, the operator of the establishment and other relevant agencies will rendezvous off site, if necessary; and

f) how they will gain access to the establishment, to any special equipment or to any other resources which may be required in the response.

3 When the off-site fire service comes on to the establishment and taking over full responsibility for dealing with the response to the emergency, the following details should be included:

a) the types of accidents that may occur to people and the environment;

b) arrangements for briefing those arriving at the establishment on the developing emergency;

c) the proposed emergency response strategy for dealing with the identified accident types on the establishment;

d) the responding personnel and their responsibilities;

e) details of the availability and applicability of special equipment including fire-fighting materials, damage control and repair items; and

f) details of the availability and applicability of other resources which may have a role to play.

4. Information for incidents which have off-site consequences, might include, for example:

a) mitigating the off-site effects of the accident;

b) sheltering or evacuating members of the public;

c) controlling traffic, eg maintaining essential emergency service routes; and

d) preventing people entering the affected area.

5 The off-site emergency plan should include information on: how the public in the vicinity of the establishment will be alerted in the event of an accident; how they will be told what they should do; and how they will be told that the danger is passed and they may return to their normal activities. The prior information should tell the public in the vicinity of the establishment about the warning mechanism, for example the meanings of different sirens and alarms. It should be noted that prior warning is not always possible.

6 The plan will also, under most circumstances, include how the media will be used to transmit information for immediate dissemination. It is also important to consider within the plan how to deal with the wider media response to an emergency. The aim should be to ensure that concerns are not raised unnecessarily and that the media, and hence the public, can understand the emergency fully. This includes the consequences and potential consequences, and the response to the emergency by the operator, the emergency services and other organisations.

Annex 6 Site Specific Recovery Plan

SITE SPECIFIC RECOVERY PLAN FOR: [insert name of COMAH Site]

Template to be completed by [insert name of COMAH Site]

1. Introduction:

Recovery is an integral part of the emergency management process. It can be defined as:

'Recovery - the process of rebuilding, restoring and rehabilitating the community following an emergency'.

(Emergency Response and Recovery Guidance, HM Government)

It is distinct from, but will usually overlap with, the response phase which can be defined as:

'Response- the actions taken to deal with the immediate effects of an emergency'.

(Emergency Response and Recovery Guidance, HM Government)

2. Recovery Structure:

The response to a COMAH Off Site incident and the subsequent recovery phase will be organised at three levels depending on the severity:

Strategic (Gold)

- Decision making body for the recovery phase
- Development of the Strategic Plan.

Tactical (Silver)

- Logistical support to the operational teams.

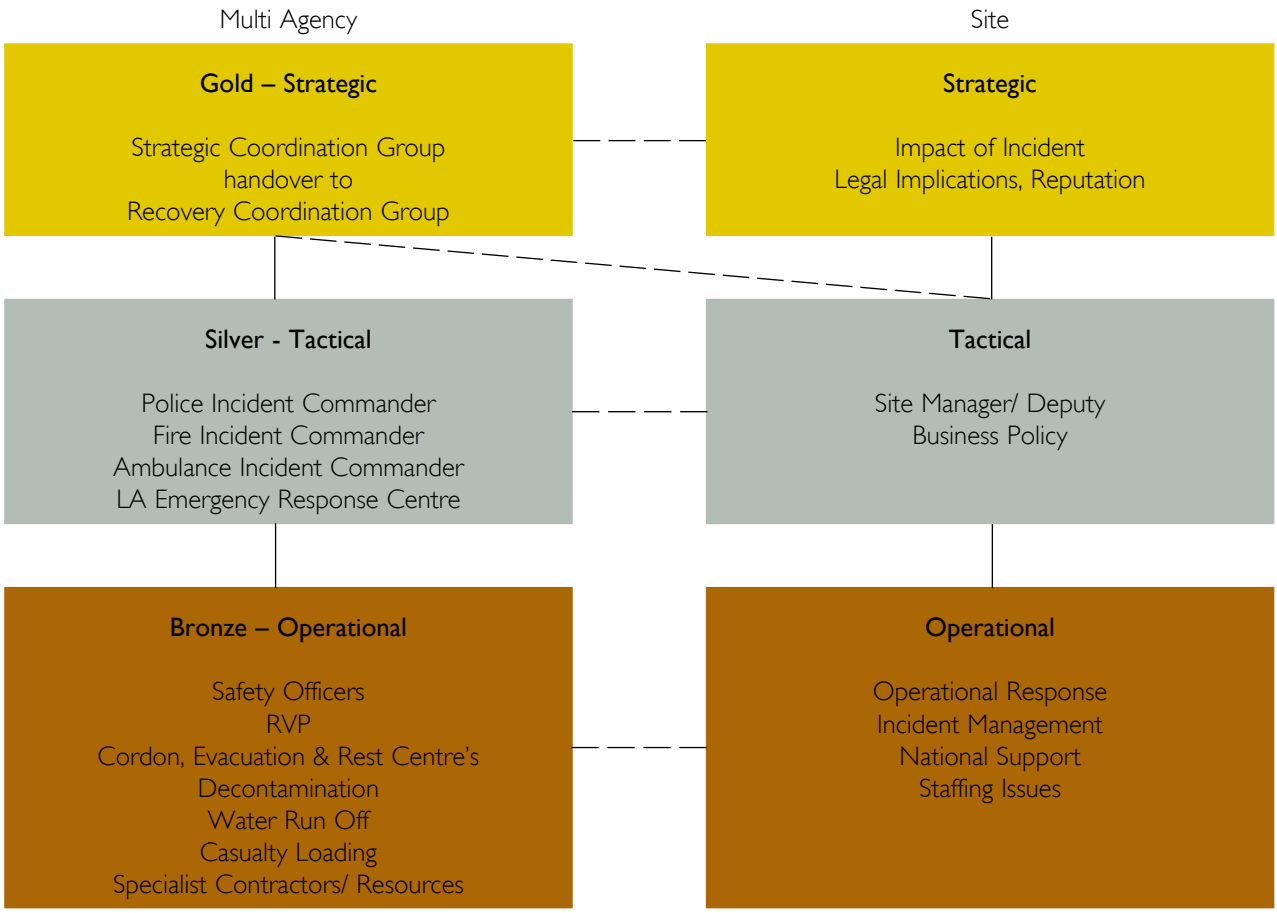
Operational (Bronze)

- Managing the physical response to the incident

NB Please see Command and Control Diagram below

3. Command and Control:

Strategic (Gold) Tactical (Silver) and Operational (Bronze)



Command & Control

Liaison

Command & Control as required

4. Strategic Recovery Groups:

Response Phase - Recovery Advisory Group

Purpose

To advise the Strategic Co-ordinating Group (SCG) on long term recovery implications of a major COMAH On site to Off Site incident.

Role

- To produce an impact assessment on the situation.
- To develop the overall recovery strategy, including communications, clean up, health, welfare, economic and business recovery.
- To feed in recovery issues whilst the SGC is running.
- Ensure that relevant stakeholders, especially the communities affected, are involved in the development and implementation of the strategy.
- To establish appropriate Sub-Groups as required by the emergency.
- To co-ordinate the recommendations and actions of the Sub-Groups and monitor progress.
- To monitor financial matters and pursue funding and other assistance.
- To agree exit strategy criteria and timescale.
- To deal with other issues that fall outside the scope of the sub-working groups.
- To provide reassurance to the public and to minimise fear and alarm.
- To address questions and issues delegated to RAG from the SCG and report back advice.
- To ensure the SCG is made aware of decisions that could compromise the medium to long term recovery.
- To determine the 'final state' options for the physical infrastructure and natural environment.
- To determine the environmental monitoring needed to support recovery decisions.

Membership:

Senior representatives will attend as necessary from:

- COMAH Site Establishment (Operator).
- County Council / Metropolitan District/ Unitary Authority.
- Environment Agency.
- Food Standards Agency.

- Primary Care Trust (to represent all NHS organisations).
- Social Care Representative.
- Health Protection Agency.
- Animal Health.
- Utility Companies.
- Transport Providers.
- Maritime and Coastguard Agency.
- Police.
- Fire and Rescue.
- Regional Development Agency.
- Ministry of Defence.
- Natural England.
- Health and Safety Executive.
- Chairs of Sub-Groups including the chair of the STAC.
- Voluntary Organisation.
- Government Decontamination Service (if contamination issues).

5. Recovery Phase – Strategic Recovery Coordinating Group:

Purpose

The strategic decision making body for the recovery phase. Able to give the broad overview and represent each agency's interests and statutory responsibilities

Role

- To decide the overall recovery strategy, including communications, clean up, health, welfare, economic and business recovery.
- To ensure that relevant stakeholders, especially the communities affected, are involved in the development and implementation of the strategy.

6. Tactical Recovery Group:

Purpose

Provide overall guidance and support to the Operational Teams.

Role

- To develop and co-ordinate the overall recovery actions.
- To provide resources as needed to the Operational Teams.
- To provide communications with Strategic and Operational Teams and the Site.
- To assess and manage the recovery impacts of the incident.
- To implement all strategic decisions made by the Strategic Recovery Co-ordinating Group.

Membership

Representatives attend as relevant from:

- COMAH Site Establishment (Operator).
- Local Authority.
- Environment Agency.
- Food Standards Agency.
- Health Protection Agency.
- Government Decontamination Service.
- Primary Care Trust.
- Health and Safety Executive.
- Animal Health.
- Utility Companies.
- Maritime and Coastguard Agency.
- Police.
- Fire & Rescue Service.

7. Operational Recovery Group:

Purpose

Managing the recovery actions and associated issues caused by the incident.

Role

- To provide the operational response.
- To deploy the operational resources.
- To manage the staffing and management issues associated with the recovery.
- To implement all tactical decisions made by the tactical command team.
- Briefing Tactical Command.

Membership

Representatives attend as relevant from:

- COMAH Site Establishment (Operator).
- Local Authority.
- Environment Agency.
- Food Standards Agency.
- Health Protection Agency.
- Government Decontamination Service.
- Primary Care Trust.
- Health and Safety Executive.
- Animal Health.
- Utility Companies.
- Maritime and Coastguard Agency.
- Police.
- Fire & Rescue Service.

[SITE SPECIFIC RECOVERY TEMPLATE]

8. On Site Recovery Locations:

Where is Operational Command – Incident Control located?

Where is Tactical Command located?

Where is Strategic Command located?

9. Tactical and Operational Considerations On-Site:

Based upon pre-identified and assessed worst case scenarios contained in the COMAH ON Site Plan and Safety Report for the site

Arrangements in place for monitoring number of persons on site?

Assessment of numbers of persons injured on site?

Assessment of injury type (eg burns)?

Estimated number of deaths?

Arrangements for informing incoming shifts (if appropriate)?

Arrangements for informing next of kin?

Arrangements for media interaction?

10. Arrangements in place for dealing with On Site recovery and decontamination:

Assessment of damage to plant and infrastructure On Site?

Assessment of length of time to achieve 'final state' recovery of site and site infrastructure?

Arrangements for maintaining on site communications?

Arrangements for maintaining on site security levels?

Assessment of damage to the on site environment and estimated off site environmental pollution (see also 12:16 below)?

What are the chemicals/products involved?

Availability of Manufacturers Safety Data Sheets?

What is the estimated extent of spread?

What is the estimated area that will need resurfacing?

What arrangements are in place for containing waste during clean up?

What procedures are in place for waste removal and disposal (see also 12.11 and 12.17 below)?

11. Arrangements in place for waste & hazardous material disposal On Site:

What options have been identified for waste disposal?

What contracts exist with specialist contractors for 24 hr emergency service?

What is their capacity?

What if any licensed sites been identified for the disposal of contaminated waste?

What arrangements are in place for transportation to licensed sites (as appropriate)?

12. Arrangements in place for environmental monitoring On Site:

What arrangements are in place for environmental monitoring of on site pollution?

Frequency of monitoring?

Reporting mechanism?

13. Arrangements in place for site closure if necessary:

Does the site have a site closure plan (if applicable)?

Date of site closure plan?

Date site closure plan was last reviewed?

14. Off Site Site Recovery Locations:

Where is Operational Command – Incident Control located?

Where is Tactical Command located?

Where is Strategic Command located

15. Tactical and Operational Considerations Off-Site:

Based upon pre-identified and assessed worst case scenarios contained in the COMAH Off Site plan and Safety Report for the site..

Assessment of possible injuries to persons off site?

Estimated number of deaths?

Estimated number of injured?

What organisational arrangements are in place for conveying public reassurance/information on any residual risk?

How will community engagement be managed?

16. Assessment of damage to buildings and infrastructure Off-Site:

What procedures are in place to assist with assessing the extent of possible damage to buildings and infrastructure Off Site?

What procedures are in place to provide advice on the level of contamination off site and recommendations for clean up and disposal?

17. Arrangements in place for dealing with Off-Site decontamination:

What are the substances involved?

Are Manufacturers Safety Data Sheets available for all COMAH substances On Site?

What is the estimated extent of spread?

What arrangements are in place for dealing with and/or assisting with Off Site contamination:

What is the estimated area that will need decontaminating?

Assessment of length of time to achieve 'final state' recovery of all contaminants?

18. Arrangements in place for environmental monitoring Off Site:

What procedures are in place to assist with environmental monitoring of off site pollution?

What procedures are in place to provide advice on pollutants and the long term effects on the environment?

19. Arrangements in place for containing waste during Off Site clean up:

What procedures are in place to assist with waste removal and disposal of substances deposited off site?

20. Command and Control:

Who in the organisation will attend Multi Agency Gold Command if requested?

Who in the organisation will attend Multi Agency Silver Command(s) if requested?

21. Strategic, Tactical and Operational Recovery:

Who in the organisation will attend the Strategic Recovery Co-ordinating Group?

Who in the organisation will attend the Tactical Recovery Group?

Who in the organisation will attend the Operational Recovery Group?

Annex 7 Timescales for preparing emergency plans

1 The local authority must prepare the off-site emergency plan within six months of:

a) being notified by the competent authority that a plan is needed; or

b) the date by which the operator must prepare the on-site plan; or

c) receiving the information needed to prepare the plan;

whichever allows the longest time.

The competent authority may extend this to a maximum of nine months.

2 The operator is required by regulation 9(4) to consult the local authority during the preparation of the on-site emergency plan. Therefore, as soon as possible before a new establishment begins operation, the operator should enter into discussions with the local authority to give the latter the opportunity to start developing the off-site emergency plan.

3 There is the possibility of an establishment operating for up to nine months with no off-site emergency plan in place. To minimise the risk to those in the vicinity of the establishment during this time, it is recommended that interim arrangements are put into place, based on any generic emergency planning arrangements the local authority may have, any existing COMAH emergency plans and the information supplied by the operator.

4 These arrangements should be developed in consultation with the emergency services and each health authority for the area in the vicinity of the establishment. They should give directions for coping with any incidents with off-site consequences, until the COMAH off-site emergency plan is in place.

5 When new COMAH establishments are proposed, the emergency planning department should be consulted on the application for consent under the provisions of the Planning (Hazardous Substances) Regulations 1992, in England and Wales, or the Town and Country Planning (Hazardous Substances) (Scotland) Regulations 1993, in Scotland.

6 The emergency planners should be able to give initial consideration to the implications for emergency planning of the operation of a new COMAH establishment at that stage.

Annex 8 Competencies for Emergency Planners

1 When choosing a suitable candidate for the position of an Emergency Planning Officer individuals should demonstrate the following competencies to allow them to effectively carry out their role:

- Demonstrate production of high quality written work,
- Demonstrate competency of writing reports, effective plans and/or developing projects,
- Demonstrate the ability to gather and analyse information and advise others consequent to that information,
- Demonstrate good organisational skills,
- Demonstrate strong and effective inter-personal skills, being able to advise and liaise with Chief Executives, Chief Officers, Elected Members and Senior Managers within a Local Authority,
- Demonstrate a proven ability to operate and communicate effectively with the emergency services and managers within the local industry, government agencies and utilities,
- Demonstrate competency and working knowledge of IT, including Microsoft word, excel and PowerPoint,
- Demonstrate proven ability to interpret relevant legislation, for example COMAH regulations and guidance, and convey them clearly to service users,
- Demonstrate proven ability to meet targets/deadlines whilst working with limited supervision and to work calmly under pressure and use own initiative,
- Demonstrate capability to adopt a flexible approach to cope with different situations and changing circumstances and work outside normal hours as a situation demands,
- Proven ability to work effectively in a small team.

2 The following competencies although not essential are desirable:

- Demonstrate proven ability to produce and deliver training and awareness raising programmes, including making presentations to a variety of audiences,
- Knowledge of the Civil Contingencies legislation and guidance,
- Awareness of sensitive information,
- Ability to access/utilise GIS,
- Use of Microsoft Word (Formatting, styles etc) and Adobe Acrobat,
- Ability to identify relevant/irrelevant information.

Annex 9 COMAH – Working with Resilience and Emergency Division (RED) in England and arrangements in devolved administrations

IMPORTANT: This Annex reflects the arrangements that are currently (February 2012) in place and will be subject to change over the short and medium term. Please use the reference sources listed to access the most up to date information: alternatively you may wish to contact CI4.

1 Local Authorities, normally through Emergency Planning Officers directly deployed within a respective local authority or within an Emergency Planning Unit dedicated to an area, for example, County Council or LRF area, will when drafting an off-site emergency plan for a COMAH establishment within their area, consult with a number of bodies / agencies who are considered to have a role to play in response to a major accident that occurs at that COMAH establishment or who could be directly or indirectly involved in the restoration and recovery phase.

2 In England the sub-national response is the responsibility of the Resilience and Emergency Division (RED) which comprises one team in four centres: North; Central; South; and London. There is no expectation that LRFs will group across this much larger patch, rather the reverse, that LRFs will form links on basis of geography or other shared interests.

3 RED supports the Government's delivery of national resilience, in line with the National Security Strategy and CAA. The Depart of Communities and Local Government (DCLG), is responsible for managing a national network of resilience advisors to support local and multi-area planning and response. The DCLG resilience role builds on, but does not replicate the relationships developed by Regional Resilience teams. The role of RED in delivering national resilience is evolving.

4 The new Division continues to provide: on call out of hours arrangements- national number / one team; the Government Liaison Role that supports the Strategic Co-ordination Group and ensures that Ministers have up to date briefings on which to base decisions at COBR; and advice on Impact Management ensuring Government Departments understand the issues affecting the local area, and communicate any difficulties responders may be experiencing

5 RED will work with LRFs to review the risks and analyse capability gaps in line with risk assessment processes; developing plans to address the gaps, taking into account the threats and hazards identified at any level.

6 At a local level, partners will continue to work through LRFs. Beyond these boundaries LRFs will be encouraged to work with others with whom they share common risks, rather than being prescribed to work within arbitrary regional boundaries.

7 RED offers a single point of contact for Civil Contingencies Secretariat (CCS) and other government departments (OGDs) to engage with resilience below national level and represents and joins up OGD resilience interests at local and multi-LRF level.

8 The EPO when drafting the COMAH off-site emergency plan will consider the role of RED and any multi-LRF arrangements and ensure their role(s) are adequately developed within the plan. Upon completion of the plan, consultees, for example, the Emergency Services, Utilities, Natural England, etc, be sent a copy of the draft plan for comment. Any comments made will be considered by the EPO writing the plan in conjunction with other comments from persons consulted and where appropriate the draft plan will be amended accordingly.

9 Once the draft plan has been seen by all those consulted, the EPO will confer with the COMAH establishment operator and ensure that the plan adequately reflects the risks on the site, mitigatory actions in place, the command and control structures and response and recovery phases of a major accident

10 The same process will occur during the 3 yearly review of the COMAH off-site plans by the relevant local authority / EPO.

11 In Scotland, the Scottish Ministers have devolved responsibilities related to managing the consequences of emergencies in Scotland. Scottish emergency response arrangements are based on the same principles as those that apply elsewhere in the United Kingdom.

12 The Scottish Emergency Co-ordination Arrangements set out the structure for an integrated response to an emergency in Scotland. The arrangements provide for Scottish Ministers to act as a focus for communications with the UK government.

13 In Scotland, the Category 1 and 2 responders may participate in Strategic Co-ordinating Groups (the equivalent of English and Welsh Local Resilience Forums (LRFs)).

14 A Strategic Co-ordinating Group may be established in each of the eight police force areas to determine the strategy for the response and the appropriate management structures to co-ordinate the local inter-agency response.

15 Scotland's eight Strategic Co-ordinating Groups are based on the police forces areas and are chaired by police chief constables and local authority chief executives. They bring the organisations involved in dealing with emergencies in Scotland together to plan for - and respond to - all kinds of emergencies. These multi-agency groups have robust plans in place to respond to all kinds of events. These plans are regularly tested in joint exercises and during real emergencies.

16 The Scottish Government has announced plans to merge the eight police forces in a single force in 2014: it is not clear how this will impact on the resilience arrangements.

17 Scottish Ministers may open the Scottish Government Resilience Room (SGoRR), which will gather and disseminate information, co-ordinate activity and provide appropriate guidance/support the Scottish response to emergencies. It will provide a national picture of the impact of the emergency which, in turn, can be used to advise and inform decisions on the strategic management of the situation for Scottish and UK government.

18 Further information:

- Emergency Response and Recovery: Chapter 10 - Arrangements in Scotland [PDF]
- Civil Contingencies Act 2004: devolution concordat with Scottish Ministers [PDF, 4 pages, 104KB] Emergency Preparedness, Chapter 10 - 'Scotland' (pp132-135)
- Scottish Executive website [external website]
- Scottish Executive Justice Department Civil Emergencies website

19 In Wales, the Pan-Wales Response Plan sets out the arrangements for the pan-Wales level integration of the Welsh response to an emergency in or affecting Wales.

20 The Wales Civil Contingencies Committee (WCCC) is constituted and functions in a similar way to its regional counterparts in England. The Welsh Assembly Government provides support for the Wales Civil Contingencies Committee.

21 The Emergency Co-ordination Centre (Wales) (ECC(W) is a facility established by the Welsh Assembly Government to gather and disseminate information in Wales on developing emergencies. It supports the Wales Civil Contingencies Committee and Welsh Ministers in providing briefing and advice on emergencies.

22 The Welsh Assembly Government Communications Division will act as a link between the local media and community relations lead, and, the United Kingdom government's News Co-ordination Centre and UK Government Department media teams where appropriate.

23 Response arrangements at the local level in Wales are the same as those in England but take into account devolved functions.

24 If emergency regulations are made covering Wales, the UK government must appoint a Wales Emergency Co-ordinator.

25 Further information:

- Emergency Response and Recovery: Chapter 11 - Arrangements in Wales [PDF]
- Civil Contingencies Act 2004: concordat between the UK Government and the Welsh Assembly Government [PDF, 4 pages, 107KB]
- Emergency Preparedness, Chapter 11 - 'Wales'
- National Assembly for Wales website [external website]

26 An overview of the arrangements for the response to emergencies requiring co-ordinated UK central government action, including the involvement of the devolved administrations is found the document:

- Central government arrangements for responding to an emergency: concept of operations (ConOps)'

Annex 10 Extendibility at COMAH sites

Purpose and scope

1 COMAH off-site emergency plans should adequately reflect the level of risk from a site, taking proper account of the likelihood, extent and severity of the major accidents presented. Each plan should ensure that the 'emergency planning distances' it adopts make reasonable provision, where necessary, for extendibility beyond its public information zone (PIZ), and that it has robust links with wider civil contingencies emergency planning arrangements and cross border links where necessary with neighbouring authorities and responders.

Legal context and extent of planning

2 The COMAH off-site plan should consider all reasonably foreseeable emergency scenarios arising from credible major hazard incidents, including low probability, high consequence events.

3 The level of planning and the mitigatory measures and arrangements a plan needs to put in place should be proportionate to the risks presented ie measures and arrangements to minimise the consequences of an accident should be put in place, so far as is reasonably practicable (SFAIRP).

4 It is important that the operator supplies the local LA with timely, correct and comprehensive information on the major hazard emergency scenarios presented by their site (as legally required by COMAH Regulation 10(3)-(5)). This will form the foundation upon which the off-site plan is developed, informing decisions on the level and nature of the planning required. It will also help inform the distance or area to be covered by (i) detailed emergency planning arrangements and (ii) extendible emergency planning arrangements for the any major hazard accident scenarios with the potential for severe consequences over an extended area.

5 Detailed Emergency Planning Distance (DEPD): the area to be covered by detailed emergency planning should equate, as a minimum, with the Public Information Zone (PIZ) required by COMAH Regulation 14. In the vast majority of cases the PIZ covers the same area as the site's land use planning Consultation Distance (CD), both of which are determined by the Competent Authority (CA). Where a PIZ does not equate with the CD (and usually a lesser distance due to actual maximum storage being less than that of the hazardous substance consent) , the PIZ should be used for determining the DEPD.

6 COMAH guidance explains that the PIZ is set taking account of both likelihood and effects (for people only, not the environment) of possible major accidents at a site, and is defined as an area in which, in the opinion of the CA, persons are liable to be affected by a major accident occurring at the site. This is the reason the CD/PIZ usually forms the basis of the DEPD. It is set on the basis that people outside it are not at significant immediate risk from major accidents, although they could be if the accident escalates. This indicates a need to identify in plans the potential for 'extended areas of risk' beyond the CD/PIZ and to consider how a reasonable response would be delivered in the event this risk is realised.

7 Extendible Emergency Planning Distance (EEPD): Detailed planning to respond to every conceivable emergency over an extended area is impracticable. A balance needs to be struck between the level of the plan's preparedness and avoiding disproportionate use of resources through over-planning for the most improbable emergencies.

8 Many, but not all, COMAH sites will have some potential for extendibility beyond the PIZ and therefore the DEPD. As a matter of good practice, where information provided from a site operator's COMAH safety report confirms that a site is capable of creating reasonably foreseeable low probability events leading to significant effects beyond the DEPD, then the off-site emergency plan should address these in a proportionate way, taking account of their extent and severity.

9 Where appropriate a locally agreed 'extended area of risk' may be defined in the off-site plan, although this will not automatically extend to 'worst case scenario' distances identified in the site safety report (this will depend on likelihood). This could be done by 'extension by community' (ie taking account of the next defined areas of human settlements beyond the DEPD area) and be agreed collaboratively between local emergency planners, relevant emergency responders and the site operator. Cross-border agreements and mutual aid arrangements with neighbouring LA emergency planners and responders may also be required.

10 Generic Civil Contingencies Plans: To facilitate extendibility the COMAH off-site plan should dovetail with relevant elements of wider and more generic local emergency plans and protocols developed under the Civil Contingencies Act 2004. These will need to be sufficiently flexible to take account an EEPD area beyond the site specific DEPD identified for the COMAH off-site plan.

Considerations for extendibility planning

11 At the planning stage (and possibly also the review and revision stage), full and proper consultation and information sharing between the COMAH operator, and emergency planners and responders for the COMAH off-site and wider civil contingencies plans is essential to ensure consistent and effective extendibility arrangements are put in place across relevant plans.

12 Set out below are some of the key elements which will need to be addressed in the COMAH and contingencies plans to ensure a robust interface:

Initiating an extendible response

13 There should be clear and defined criteria and arrangements setting out when, who and how an extendible response from wider civil contingencies arrangements will be activated to support the COMAH off-site plan.

Communicating with the local public

14 One of the key interfacing elements for enabling extendibility across the COMAH on-site, off-site and wider contingencies planning are the warning and informing arrangements and protocols.

Communicating with the public can be divided into three key elements and phases:

i) proactively informing/advising/educating (before an incident)

ii) warning/alerting (during: as an incident occurs, or is imminently likely to)

iii) informing/advising (during and after a live incident)

15 The provision of suitable information to people beyond the PIZ/DEPD for each of these elements will be one of the primary and critical considerations in an escalating scenario. Populations beyond the PIZ are unlikely to have the benefit of 'prior information' (as required by COMAH Regulation 14). So the ability to generate and deliver information specifically targeted and tailored for the public in the extended area of risk and is of particular importance. Extendibility arrangements in the COMAH off-site plan should include information on significant populations within the EEPD, identifying:

- the size and distribution of the general population with the EEPD;
- the location, type and particular needs of any vulnerable groups (eg schoolchildren, hospitals, nursing homes, people with hearing or sight impairments, those who speak little or no English);
- the location and nature of factories and other industrial installations (including COMAH 'domino sites'; hazardous processes which could not be readily abandoned) which may be affected and for which specific mitigatory measures may also be necessary;

- locations with large transient populations (eg shopping centres, leisure facilities, football stadiums, etc)
- places where visitors to the area may gather (eg local tourist attractions) and people out of doors
- major nearby transport locations such as motorways, ports and airports.

16 Communication strategies for dealing with each of these should be identified and agreed.

17 Agreed communication arrangements should take steps to ensure that (i) consistent messages and information are given, regardless or their source, and (ii) the means for warning and informing over an extended area are reliable and effective in reaching their target audiences.

Communications between planners and responders

18 Guidance above notes the importance of relevant parties communicating properly at the planning stage. Of equal importance is agreeing the lines of and methods for communications across the various responders for once an incident has 'gone live'. Both the COMAH off-site plan and wider contingencies arrangements should establish which communication networks or methods will be used, as well as ensuring that everyone understands any special code words or terminology specific to particular plans (eg for identifying or initiating a particular plan).

Other interface considerations include:

- defining and agreeing control and command arrangements across COMAH and contingencies plans and their responders so they are co-ordinated, consistent and universally understood.
- agreeing on what resources and facilities may be required for an effective response; an indication where these will come from, and how they will be mobilised.
- defining arrangements for the provision or receipt of aid from neighbouring emergency services and local authorities through mutual aid agreements. Consideration should be given to the implications of cross county, regional or legislative boundaries;
- arrangements for dealing with the media;
- identifying buildings suitable for use as reception centres for evacuees. Information on the capacity and suitability of the centre should be maintained together with information on the arrangements for opening, setting-up and staffing the centre, including 24 hour contact details for all relevant personnel;
- identifying roads or routes where traffic congestion might be a problem in the event of an extended response, and tactics to ease this congestion;

19 In deciding which mitigatory measures would be most appropriate, account should be taken of the particular circumstances, including the characteristics of the potential release, the weather conditions, the local demography and geography, and the practicalities of implementation. In applying one or more relevant measures beyond the PIZ, efforts should prioritised towards those most at risk.

20 It is acknowledged that a number of people may try to evacuate before receiving official advice. This should be discouraged both proactively and at the onset of an incident (unless it is the advised course of action) as it could put people unnecessarily at risk as well as lead to severe road congestion and accidents. Where evacuation may potentially be necessary, contingency arrangements should be sufficiently flexible to enable only affected sectors to be evacuated, but allow for practical factors to be taken into account such as, the uncertainty of the weather conditions, or where whole villages or towns overlap sectors, or the availability of traffic routes.

Extendibility Testing

21 The elements which might need to be tested in an extended scenario would similar to those tested for COMAH off-site emergency plan, plus some additional elements. For example:

- communication strategies and methods over an extended/large area, a larger network of responders and organisations and their resilience (eg in the event of a power or telecommunications failure).
- co-ordinated, consistent and reliable information for the media and greater media demands;
- the need for mitigatory measures over a wider area, including addition staffing and resources; evacuation and sheltering;
- mutual aid between responders;
- boundaries of responsibility between responders both regionally and nationally, and compatibility of emergency plans across different counties, police forces, fire and rescue services etc;
- monitoring the co-ordination of a response over an extended area;
- the potential demands of widespread fatalities, injuries and acute health effects on medical transport and care facilities;
- access controls into affected areas;
- effects on the critical national infrastructure (including power and telecommunications disruptions, disorder, other installations, road and rail etc.)
- sustainability of the response.

22 An extendibility exercise involves a major demand on resources by all the organisations which would be involved in the response, firstly to verify whether the arrangements work and secondly to identify lessons and improvements for participating organisations. However, in the light of this and the improbability of such an event occurring, it is recommended that such exercises are not held too frequently.

Extendibility at lower-tier COMAH sites

23 Lower-tier sites are not required by the COMAH Regulations to have COMAH on or off-site emergency plans (Regulations 9 and 10), and their operators are not required to provide information to the public around the site within a PIZ (Regulation 14). However, they are required by COMAH to set out their on-site emergency arrangements in the site's COMAH MAPP document, and to have an effective plan in place as required by the Health and Safety at Work etc Act 1974 and Management of Health and Safety Regulations 1999.

24 Some of these sites will have significant quantities of hazardous materials, and some reasonably foreseeable major hazard emergency scenarios with consequences which could extend beyond the site boundary. This is formally acknowledged in that some of these sites are given CDs extending beyond their boundary. Some of these sites may also have large nearby populations, thus increasing the potential severity of their off-site consequences.

25 Local generic contingencies plans would be called upon to respond to major hazard events with significant off-site impact at such sites. Therefore, the good practice expectation is that the operators of these sites co-operate with relevant local contingencies planners, share any information necessary for an effective response to the potential off-site consequences and put in place arrangements to co-ordinate and co-operate with responders performing their functions under civil contingencies arrangements in their site emergency plans.

Annex 11 Command and Control and COMAH Off-Site Emergency Response

1 Most organisations have a system of command and control to co-ordinate their own response to an incident or emergency. These are usually based around a series of commands, meetings or groups that operate either at a strategic level, tactical level or operational level of decision making.

2 If a declared major incident or emergency as defined by the Civil Contingencies Act 2004[1] is triggered it is likely that a Multi Agency Command and Control Structure will be established to co-ordinate the activities of all the different responding organisations and achieve a joined up response to the declared emergency. It is likely that this structure will operate in addition to the command and control arrangements established by individual organisations. Your organisation may well have its own command and control arrangements which are site or company based, involving Incident and Main Controllers and Emergency Control Centres. You must ensure that you are aware how these operate within your own organisation and how they link with multi-agency arrangements.

3 In general, during the response phase the Police undertake the co-ordination role, which transfers to the Local Authority as response moves into recovery.

4 The multi agency structure established in response to a major emergency at your site with off-site consequences will be based on a nationally accepted model. These structures will be primarily based on the geographical boundaries of Police Force areas, with a number of variations based on locally determined arrangements (your COMAH lead person preparing the off-site plan will advise you if this is any different).

5 It is only possible to have one Strategic Co-ordinating Group when responding to a declared major emergency although many organisations might establish their own arrangements to manage their strategic response.

Strategic Co-ordination Group

6 The purpose of the Strategic Co-ordination Group (SCG) is to take overall responsibility for the multi-agency management of the declared emergency and to establish the policy and strategic framework within which the tactical response will operate. In some parts of the Country this group may be also be referred to as Multi-Agency Gold Group. The criteria for establishing a SCG will be outlined by the person preparing your organisations COMAH off-site plan based on the locally determined notification and activation arrangements.

7 The SCG will:

- determine and promulgate a clear strategic aim and objectives and review them regularly
- establish a policy framework for the overall management of the event or situation;
- prioritise the demands of the tactical level and allocate personnel and resources to meet requirements;
- direct planning and operations beyond the immediate response in order to facilitate the recovery process.

8 As part of the tasking process the SCG may commission the formation of a series of supporting groups to address particular issues, such as the Scientific Technical Advisory Cell (STAC) which can offer strategic and technical advice on the wider health and environmental consequences of a declared major incident/emergency and the Strategic Media Advisory Cell (SMAC) which will support strategic command in managing media and public information.

[1] Civil Contingencies Act 2004 Part 1 Meaning of an Emergency

9 The SCG should be based at an appropriate location away from the scene. This will usually be at Police headquarters.

10 An operator or agency may have an identified Gold Crisis Group to consider and oversee strategic issues around a large scale incident at or impacting on a site or agency. This group should link directly to the SCG through liaison or embedded communication links agreed locally.

Tactical Co-ordination Group

11 The purpose of the multi agency tactical level is to ensure that the actions taken by the operational level at site/s are co-ordinated, coherent and integrated in order to achieve maximum effectiveness and efficiency. Tactical co-ordinators will:

- determine priorities for allocating available resources;
- plan and co-ordinate how and when tasks will be undertaken and by whom;
- obtain additional resources if required;
- assess significant risks and use this to inform tasking of bronze commanders;
- ensure the health and safety of the public and personnel at the site/s.

12 Unless there is an obvious and urgent need for intervention, the multi agency tactical command should not become directly involved in the detailed operational tasks being discharged by bronze.

13 The effectiveness of the Tactical Co-ordination Group (TCG) as a joint, multi agency organisation rests on a systematic approach to multi-agency co-ordination. Irrespective of the pressure of operations, the incident co-ordinators must create time for regular, structured briefings, consultation and tasking meetings with responding agencies and key liaison officers.

14 The location of the TSG will be determined dynamically with the multi-agency Tactical Command located at the most appropriate location to exert tactical command over the incident, which could be at or near the scene, pre-designated buildings or police bespoke buildings or command rooms. Where the TSG is remote a 'scene' or 'forward' command will always be present at or near the scene and where the Operational Co-ordinating Group will function.

15 Arrangements that are necessary in the immediate vicinity of the scene include the following:

- assessing control measures with regard to reducing risk;
- deciding the functions to be controlled by each agency after taking account of:
  - the circumstances;
  - the professional expertise of the emergency services and other agencies;
  - statutory obligations and overall priorities;
  - reception and engagement of utility companies' staff (eg gas, electricity and water) on essential safety work, or to effect the restoration of essential services, where appropriate
- setting up an inner cordon to secure the immediate scene and provide a measure of protection for personnel working within the area. All those entering the inner cordon should report to a designated cordon access point. This ensures that they can be safely accounted for should there be any escalation of the incident, and affords an opportunity for briefing about the evacuation signal, hazards, control measures and other issues about which they need to be aware.

People entering the inner cordon must have an appropriate level of training, briefing and awareness and personal protective equipment, while those leaving must register their departure at a designated access / egress point.

16 If practical, an outer cordon may have to be established around the vicinity of the incident to control access to a much wider area around the site. This will allow the responding agencies to work unhindered and in privacy. Access through the outer cordon for essential non-emergency service personnel should be by way of a scene access control point. The outer cordon may then be further supplemented by a traffic cordon.

17 Other issues that should be addressed at this tactical level include:

- establishing internal traffic routes for emergency and other vehicles (including a one-way system where appropriate)
- deciding on the location of key functions or facilities, for example:
  - casualty clearing station(s) to which the injured can be taken
  - an ambulance loading point for those who need to be taken to hospital
  - a collection/assembly point for survivors before they are taken to a Survivor Reception Centre
  - possible helicopter landing site(s)
  - a rendezvous point or points for all responding personnel, which may be some distance from the scene in the event of a bomb incident or incidents involving hazardous materials
  - a marshalling area for assembling vehicles and equipment
  - a body holding area that is under cover and protected from public view
  - a media liaison point.
  - as necessary, welfare facilities for the responders - eg food & drinks, shelter, toilets, first-aid, etc.

18 The Operator's Emergency Control Centre (ECC), from where the Site Main Controller will operate, should link directly to the TCG through liaison or embedded communication links agreed locally. An operator may pre-identify suitable staff to act as a Company Representative at a TSG to provide direct information into a TSG and liaise direct between the ECC and TSG.

Operational Co-ordination Group

19 The operational level of co-ordination deals with the management of immediate 'hands-on' work which is undertaken at the site(s) of the declared emergency or other affected areas.

20 Personnel first on the scene will take immediate steps to assess the nature and extent of the problem. Operational responders will concentrate their effort and resources on the specific tasks within their areas of responsibility. They will act on delegated responsibility from their parent organisation until higher levels of management are established.

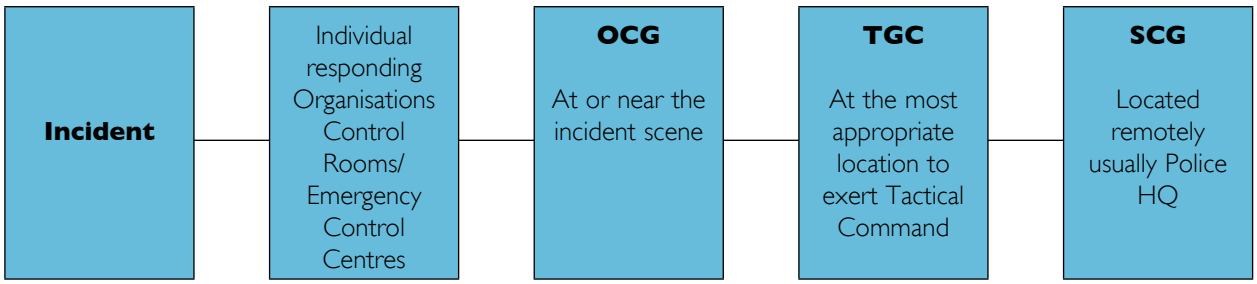
21 Where the multi agency tactical level of management is established, operational responders become responsible for implementing the multi agency TCG tactical plan within their geographical area or functional area of responsibility.

22 The OCG at the scene should directly link to the Site Incident Controller as a means of co-ordinating site and multi-agency consequence issues following an incident.

Command and Control Structures

23 The level of 'Command' required will be appropriate to the scale of incident and a SCG might only be established if the scale of the declared emergency warrants it. For a COMAH incident the level of command and control applied is likely to vary depending on the scale of a declared emergency and upon whether the declared emergency is single scene or wide area. However all the plans of responding organisations should be capable of being adapted to suit variations of response.

24 Any Category 1 or 2 Responders can make representations that the level of command applied needs amending in line with their organisational needs. This should be done through their representatives at either the Multi Agency SCG or Multi-Agency TCG.



25 This example is for illustrative purposes only and your COMAH lead officer preparing your organisations COMAH Off-site Plan will advise you on the way in which your local emergency planning community responds to declared major incidents/emergencies.

Planning Assumptions for all Command and Control Models

26 The following planning assumptions are likely to be valid regardless of the chosen command and control structure. All Category 1 and 2 responders should factor these assumptions into their own organisation's contingency planning:

- Neither the SCG nor TCG have the collective authority to issue orders. Each organisation represented retains its own responsibilities and exercises control of its own operations in the normal way. The commands therefore relies on the process of consensus[2].
- Command meetings will be periodic and occur at all 3 levels and could be conducted virtually.
- The police should initially chair the Multi Agency SCG meetings and the Multi Agency TCG meetings and retain the chair until it is appropriate to pass it to another organisation. This will usually happen when the incident enters the recovery phase, or if it becomes clear that another responding organisation is better positioned to co-ordinate the response, for example, because of a greater involvement in the response. Any changes in the chair of any multi agency groups will be discussed and agreed by those present at Multi Agency SCG and a decision record and formal handover executed.
- The Strategic and Tactical representatives should be empowered to make appropriate level decisions on behalf of their organisation.
- A sole Multi Agency Tactical Co-ordination Group operating during a wide area declared emergency is likely to have greater co-ordination and planning responsibilities than a single scene TCG. Category 1 and 2 responders must ensure that their TCG representatives are able to deal with the increased level of decision making.

[2] Emergency Preparedness Page 23 Paragraph 4,27

- All responders should plan for a sustained 24 hour presence at all levels of command throughout the incident, in particular at TCG and OCG levels. SCG representatives may need to make themselves available on a 24 hour basis.
- Business will usually be conducted through a series of briefings scheduled throughout the day after which, members will be asked to implement their agreed actions
- Multi Agency SCG and TCG will decide the frequency of subsequent meetings based upon the demands of the declared emergency
- Category 1 and 2 Responders should aim to be self-sufficient when working away from their base. They should endeavour to bring the resources they require to operate effectively and may benefit from developing a 'grab bag' of resources. For example:

  – a mobile phone and charger (mains and car);

  – a laptop with wireless internet access;

  – radios and any other appropriate communications equipment;

  – stationery;

  – basic personal welfare requirements;

  – personal protective equipment; and

  – emergency plans and maps.

27 Your organisation may well be asked to attend any one of these groups and it is important that your own site personnel are aware of their role and have access to the resources outlined above and be prepared to represent your organisations at the various levels of the locally determined response structure.

The National and Regional Perspective

28 If the emergency at your site has a significant impact on the wider community there is a possibility that central and regional government may become involved in the response. If this occurs then a higher level of command, control and co-ordination may be put in place with the regional tier of government acting as the conduit by which the SCG informs the government about the emergency. Your COMAH lead person will be able to advise you in more detail about the localised arrangements for addressing this situation.

Annex 12 Rcs 8 - Guidance: On-Site Emergency Response Inspection

Introduction

1 This guidance has been prepared to help inspectors assess and audit on-site emergency response arrangements. It is aimed primarily at top tier COMAH establishments but the principles can be applied to other establishments.

2 This guidance is not intended to address off-site emergency plans (although many of the issues are similar) and it will allow inspectors to explore the key interfaces between on- and off-site plans.

3 On-site emergency response arrangements form part of an establishment's health and safety management system (HSMS) for preventing and limiting the consequences of major accidents. They are, in effect, an establishment's system for managing emergencies and should not be treated as a 'bolt on' and something different from other company systems and arrangements. Therefore, this guidance is structured in line with HSE's guidance on 'Successful safety management systems' described in HS/G 65 and looks at emergency management in line with the POPMAR model (Policy, Organisation, Planning, Measuring, Auditing and Review) for HSMSs.

4 Many of the questions will be answered by reviewing the operator's written plan and this is the best starting point. The guidance could also be used selectively to assess written on-site emergency plans independently from site inspection. If significant shortcomings are identified then it may be worthwhile ensuring these have been resolved before proceeding further.

5 The on-site emergency plan is the framework for an establishment's emergency response. It should cover the objectives and information required by COMAH Schedule 5 Parts 1 and 2 respectively. If inspectors intend to assess on-site emergency plans, then the objectives and minimum information should be addressed and this guidance indicates points to be considered on these matters as well as other features to be included in an on-site plan.

6 Whilst COMAH creates specific requirements dealing with defined industrial major accidents involving dangerous substances there is also a wider emergency-planning field. The responsibility for this area of activity rests with the Cabinet Office Civil Contingencies Secretariat, which has published draft guidance on emergency planning and response in connection with the Civil Contingencies Act 2004. This guidance ('Emergency Preparedness' and 'Emergency Response Recovery') and related material can be found at http://www.cabinetofficegov.uk/ukresilience. That guidance adopts a different structure from the guidance presented in this document and focuses more on emergency preparedness by the 'external' (off-site) emergency services, however it contains much useful information. It recognises 6 key stages:

- anticipation;
- assessment;
- prevention;
- preparedness;
- response; and
- recovery.

7 The first four stages are covered in 'Emergency Preparedness' and the final two in 'Emergency Response and Recovery'.

8 Another way of looking at the key issues involved in a good emergency response could be to check that the following features exist:

- clear aims and objectives;
- clear and well rehearsed procedures;
- an effective organisational structure;
- efficient means of information handling;
- required technical knowledge;
- necessary resources, based on testing and experience; and
- planned and rehearsed interfaces between the various responders.

Policy / Objectives

Key Issues

The overall aim of the emergency response is to ensure that appropriate response measures will be implemented when and where needed to protect/minimise the harmful effects on people and the environment from major accidents.

Inspectors should be satisfied that:

- the plan has clear aims, objectives and information meeting the requirements for on-site emergency plans detailed in COMAH Schedule 5; and
- there is evidence that it is systematic in its approach and in how it has been devised.

In achieving this, there should have been appropriate consultation with those who have a part to play in the plan and account taken of review and testing.

1 Does an 'on-site emergency' plan exist?

2 Are the purpose and objectives of the plan clear? In particular with respect to:

- containing and controlling incidents so as to minimise the effects, and to limit damage to people, the environment and property.
- implementing the response measures (procedures, roles and resources) necessary to protect people and the environment.
- communicating the necessary information to the public, emergency services and authorities concerned in the area.
- providing for the restoration and clean up of the environment following a major accident.

For some foreseeable scenarios, eg oil spills, it may be relatively simple to include quite detailed clean up arrangements. But in other cases the information may relate to indicative arrangements only, eg with information about expertise to call upon and where resources could be found to assess and implement appropriate measures under the actual circumstances.

Question 2 covers the high level objectives set out in COMAH Schedule 5 Part 1 and required by Regulation 9(1). These are top-level questions and the final answer may only be apparent once the emergency plan and response arrangements have been considered as a whole. The questions outlined in the remainder of this guidance will help to answer whether these objectives have been met.

The objectives of the emergency response should be stated as clearly as possible (and appropriate training should reinforce this). For example it should be clearly stated that the primary purpose is to protect people, followed by protecting the environment, protecting property, preserving the company's reputation etc. This might be achieved primarily by training, but the written plan should include important strategic considerations. Examples might include whether, in the event of a fire, incoming and outgoing pipelines should be isolated, whether certain vessels take priority re protection by water curtains or cooling, in the event of a release of a toxic gas cloud explaining that the approach is to get people to safe muster point upwind or to reach havens for awaiting further instructions.

3 Do the arrangements in place reflect a systematic approach to planning for emergencies based on the major accident hazard scenarios?

The on-site plan should deal with the full range of events identified in the establishment's COMAH safety report. The level of planning can be proportionate to the probability of the accident occur although consideration should also be give focusing on those events most likely to occur. It is important for the inspector to be familiar with the representative set of major accident scenarios for that establishment.

4 Is there evidence that the statutory consultees, both internally and externally, are involved in devising the plan?

It should be clear, eg from the safety report, what consultation has taken place. COMAH Reg 9(3) requires consultation for the on-site plan to include employees; EA/SEPA; emergency services; health authority and local authority

5 Is a formal review process in place that evaluates the effectiveness of the approach taken to emergency planning and to the suitability and effectiveness of the arrangements?

Setting response objectives in relation to the identified major accident scenarios (eg Time to shut down & evacuate affected plant; onsite fire team and fire brigade response times) will help both in the preparation and any subsequent review of emergency response.

Organisation - Control

Key Issues

Maintaining control in emergency situations is very complex and the allocation of responsibilities to key people with appropriate accountability and job descriptions is important.

Inspectors should be satisfied:

- that there is an effective organisational structure with suitable deputising and back up when required and
- that the roles and responsibilities are clear for those who play a part in the plan.

A plan will normally identify a Site Main Controller and Incident Controller.

Command and control structure

6 Does the plan clearly identify who should assume responsibility in an emergency?

7 Is the command and control structure clearly defined and does it identify who responds to whom in the event of an emergency?

8 Are the levels of authority assigned within the command structure such that they allow decisions to be taken at the lowest level commensurate with the urgency of the situation?

An important example of this is whether people have authority to shut down processes or await authorisation eg outside working hours.

It should be clear at what point or degree of loss of control the arrangements should come into effect.

9 Is there a logical sequence of actions for key personnel that are identified and given a role in the emergency plan?

10 Are overview charts showing the emergency command and control structure available?

Such charts provide a useful summary for staff and external bodies.

A relatively flat emergency management structure helps to allow rapid flow of essential information.

11 Does the emergency plan show how on-site command and control arrangements interface with external bodies?

12 How will emergency responders be readily identifiable; where will they rendezvous and how will they communicate?

Much time can be wasted if external services cannot find the right person at the scene. Distinctive tabards, flashing lights on vehicle and coloured helmet are commonly used. Tabards are probably the most explicit but often not effective in the dark.

Roles and Responsibilities

13 Are the roles and responsibilities clear, concise and unambiguous, with the decision-making boundaries clearly defined?

This question can be best answered after considering the more detailed questions below.

14 Does the emergency response plan identify key emergency responders (including those who will initiate/activate the on-site emergency response, take control and alert the external emergency services) and contain a statement of authority (mandates and roles of all concerned)?

15 Is there a designated person (usually called the Site Main Controller) who has overall responsibility during an emergency?

NB Except at the incident scene where the Incident Controller has responsibilities when called, the Fire Brigade senior officer will assume control at the incident scene and this is confirmed by statute when fighting fires. However the police will still retain responsibility for co-ordinating the off-site response and operators will retain responsibility for their employees including HSWA duties.

16 Has the Site Main Controller got a deputy?

The position of site main controller is much strengthened by the addition of a deputy). The inclusion of a deputy role recognises the need to distance the Site Main Controller from the detail (eg Routine communications and detailed work).

17 Are appropriate measures in place to ensure 24-hour cover, 7 days a week (including sickness and holiday cover)?

18 Are the duties of the Site Main Controller specified?

The duties should include:

- Being on site at the time of the incident or to be quickly available.
- Going to and remaining at the designated control centre for the duration of the incident - unless the location becomes untenable.
- Taking an overview of the incident and making sure certain resources are provided and steps taken to ensure the safety of others who may be affected.
- Directing any operation from the control centre and ensuring liaison with public emergency services regarding developments and possible off-site effects.
- Arranging for an incident log to be maintained.
- Having the authority to make decisions on behalf of the site and to ensure correct liaison with media.
- Arranging where necessary for off-site and environmental monitoring.

19. Are the duties of the Incident Controller specified?

The duties should include the following:

- Being on site at the time of the incident.

[Inspectors should give particular attention to unmanned sites and how the plan deals with situations where the emergency services arrive first].

- Being generally aware of the overall site situation and having detailed knowledge of the incident area.
- Staying at or near the incident and directing the efforts of the site emergency team to control the situation at the scene of the incident - distinctive clothing recognisable by all concerned is recommended.
- Overseeing all responsibilities pending arrival of the Site Main Controller.
- Ensuring Liaison with public emergency services at the scene.
- Communicating progress of the incident to the control centre.
- Accounting for personnel located near the incident scene.
- Initiating search and rescue, where necessary, usually jointly with the fire brigade.

- Initiating arrangements for casualty treatment.

20 Is there adequate technical expertise available to support the Site Main Controller and the Site Incident Controller?

Generally the Site Incident Controller should be separate from the Site Main Controller.

21 Has more than one senior management team been trained to deal with emergency situations?

22 Are the duties of the emergency response teams clear, concise and unambiguous?

These should include those of the response team, fire, security and medical services.

23 Are the team skills and experience appropriate for the identified major accident scenarios identified?

24 Are team roles clearly defined?

However, there still needs to be sufficient flexibility to adapt to specific emergencies.

25 Is there evidence of a broad understanding of peer roles?

This is important that individuals understand how their role integrates with that of others.

26 Can an appropriate distribution of workload across the team be shown?

This may be difficult to demonstrate other than by verifying through practical drills and exercises.

27 What consultation has there been with employees during the preparation of the plan?

Consultation with those that have a role in the plan is clearly important, however it is important that all employees have an opportunity to give an input, eg via the safety representative or TU representative.

Organising - Competence

Key Issues

Thorough pre-planning is vital for competence. Competence in the area of emergency response can generally only be achieved via testing, training and learning from the lessons and experience of others. These considerations define the nature of the training needed. Elements of required training for inspectors to check knowledge is given.

Inspectors should be satisfied that:

- There are arrangements in place to ensure all involved have the necessary skills and knowledge required and that
- Those involved in the plan have the required technical knowledge relating to the foreseeable major accident scenarios.

28 Are the required competence criteria (ie Knowledge & skills) defined for all personnel on site?

This should include staff, contractors, visitors, etc and is concerned with staff with emergency duties.

29 Is the defined essential knowledge based on risk?

This might include; site geography; knowledge of plant operation; familiarity with key information; physical properties and access to detailed information; fire-fighting strategy for different chemical hazards; emergency procedures; etc

30 Is there a training programme established for on-site personnel?

This should include contractors. Key external responders will also need familiarisation with relevant aspects of on-site circumstances and procedures - see 33 below.

Any assessment of competencies should not be based on a 'snap-shot' 'one-off' performance.

31 Are training programmes and exercises aimed at meeting the defined competency levels?

Minor exercises should be conducted to hone certain skills/competencies.

32 Are arrangements in place for visitors?

Both staff and visitors should be aware of these arrangements.

33 Is there evidence that training covers co-ordination with outside bodies, for example, the emergency services?

Knowledge of Key Scenarios

34 Can the emergency response team demonstrate a detailed knowledge of significant hazards & potential incidents?

Team members should be able to show they know what foreseeable scenarios they are likely to encounter and what actions are required to bring the incident under control.

35 Is the Site Main Controller able to proactively manage the incident and take a strategic view of events?

This question will involve subjective judgement. For example, the SMC should not need to refer any issues elsewhere before coming to a decision. However it should be clear whether there are any issues that the SMC feels the need to refer elsewhere for a decision eg closing down plant, pipeline feeds etc. The SMC should also be able to think 'outside the box'. In doing this SMCs will need to understand what the key objectives of the emergency plan are (see earlier). They should be clear about the bases for making decisions such as:

- Understanding priorities eg protection of people, environment, property, good name of company
- Strategy for handling foreseeable scenarios
- Importance of protecting the majority when considering the safety of individuals.

36 Are members of the emergency team sufficiently well trained and briefed to be able to respond appropriately without having to constantly refer back to the incident controller regarding predictable developments?

The 'emergency team' includes all those who have roles and responsibilities during an emergency response. For example it will include the incident team and senior management.

Elements of training that are relevant include:

- Relevant legal requirements

- Emergency planning principles
- Knowledge of the companies emergency plan procedures, including how to recognise and respond to a major emergency on site
- Appreciation of different types of major accidents
- The nature of the hazards and how to prevent harm being realised eg fire prevention.
- Technical capability. This should include the different ways (organisational & physical) of mitigating the effects of major accidents. The following categories of incident, and the associated relevant action, should be identified:
  - Gas clouds - flammable / explosive / toxic
  - Fire / explosion
  - Spillage of toxic liquids and solids
  - Spillage of flammable liquids and solids
  - Domino effects - how an incident on-site impacts on other sites and the consequent impact for the site of such domino effects
  - Natural incident eg floods if site is close to a river etc.
- Appreciation of the roles and limitation of the various emergency response organisations
- Having been involved in exercises to develop both skills and knowledge
- Required casualty care and appreciation of the concerns of the public
- Knowledge of ranks of emergency services

The level of detail will vary for different groups of staff. Specialist staff will require additional training egg:

- Command and control (site main & incident controllers & deputies)
- Fire fighting
- First aid
- Handling the media

And training for use of specialist equipment eg:

- BA
- Hoses
- PPE
- Fire extinguishers

37 Are the emergency team members familiar with the plan and do they have detailed knowledge of those aspects relating to their involvement?

Organising - Communication

Key Issues

Communication during an emergency is vital and 'lessons learned' studies have shown that communication between the operator and the emergency services is the most critical factor in determining the success or not of an emergency response. Speed of communication is a key factor here, as every incident will develop rapidly in the early stages. The effects of poor decisions made in these early stages will be compounded as the incident develops. Inter-organisational communication 'networks' need to be established and are very complex. In addition, emergency services will each establish their own complex communication networks.

Inspectors should be satisfied that:

- There are planned interfaces between the operators and emergency responders (including alert/call-out and liaison during a response) and
- There are efficient means of information handling between all parties.

These are essential elements for ensuring the necessary interface between on- and off-site emergency plans. Focusing on arrangements during the early stages of an incident is key.

Inspectors should also be satisfied that the plan and associated documentation contain the required information and are appropriate for their purpose.

38 Have information requirements been identified as far as possible prior to an incident?

These relate to the type and nature of information, which is likely to be required during an emergency either by staff or by external organisations.

39 Have communication flows been defined for staff that are involved in undertaking emergency duties?

For each staff role this is likely to involve identifying the following:

- What information persons require to perform their tasks
- What information they need to supply to others
- What communication media are necessary to supply this information
- When and how the communications will take place.

40 Is there a strategy in place to promote a shared team understanding during incident?

Although the skills of the team leader are important here, there are approaches that will help shared understanding. For example:

- Logging of information by the emergency response team as it is received is essential. The log should be regularly reviewed as the incident progresses and actions followed through

- The emergency response team (considering tactical issues) might call 'Time Outs' to enable members of the team to say what they understand is happening and for all to get an overall view of the incident. 'Time Outs' will include taking phones off the hook for a short period; however phone contact should be retained with the incident control team at least.

Liaison with Offsite Bodies

41 Has the company consulted with and provided information to relevant statutory consultees?

Under COMAH, relevant statutory consultees are local authorities, the Agencies, emergency services (police, fire & ambulance plus HM Coastguard where appropriate) and the local health authority? Consultation is required to enable development of the interfaces between the off-site and on-site plans.

Information needs for the emergency services are outlined in Appendix 2 of HS/G 191 'Emergency planning for major accidents'.

42 Does the emergency plan identify what information needs to be given to emergency services during an incident?

There should, as far as possible, be a clear interface between the on- and off-site emergency plans. The provision of **information is key to this.**

For example, establishments should ensure that they are able to supply the emergency services with information on the location of people across site and the details of any missing personnel.

All those involved in providing assistance in the event of an emergency should have identified the information they need to assist their response and the plan should be clear how to access the information quickly during the actual incident. This should also cover organisations other than statutory consultees who may require further information.

43 Are there arrangements in place for the company to provide information on hazardous chemicals to the emergency services (before an incident to facilitate preparation of external ('off-site') emergency plans and during/after an incident, to inform the external response and subsequent clean up)?

This should be planned for and provided in advance of an incident. However operators may need to be adaptable. An operator does not need to give details of every possible chemical and its products of combustion but does need to give an indication of the type of harm to health and the environment based on categories of chemicals liable to be on site to enable a planned response. Products of combustion for example should at least be treated as toxic and steps taken accordingly. Certain products or mixtures of chemicals may give off particularly noxious fumes in the event of a fire and may require additional personal protective measures and specific treatment if people are exposed. These should be identified in advance and emergency services and hospitals advised.

44 Are arrangements in place to ensure that the Site Main and Incident Controllers and team share a common picture of the emergency in terms of what has happened, what is the current situation and a forward plan of what needs to be done?

The use of aids such as white boards should be considered as a means to promote this shared understanding.

45 Are arrangements in place for giving advice and necessary information to relevant bodies and the public?

46 Does the statutory off-site emergency plans state clearly:

- what immediate actions are needed to prevent and mitigate environmental contamination during or after a major accident?
- Who has responsibility for undertaking them?

47 Has the company provided up to date information to the public?

Information should be provided in accordance with Regulation 14(1) of COMAH. The company and local authority should also consider what information is required to people beyond the area that is designated under COMAH (ie the PIZ) before and during the incident. This will help allay the anxieties and concerns of those who are not at risk but may hear the alarm siren.

Documentation presentation & layout of emergency procedures

48 Is the content of the emergency response procedures adequate?

This should include location of individuals; means of identification; main duties, equipment and information provided / needed; aide memoir of key prompts.

The emergency plan documentation should cover:

- Introduction
- Installation details
- Hazard data (including chemical properties). Only the relevant properties should be given eg boiling point, storage temperature and pressure, reaction with air/moisture, behavior of gas cloud or evaporating liquid in various air conditions.
- Chemical effects on people; needs to be specific regarding effects of increasing concentration; length of exposure; effects on vulnerable people; food safety implications.

Potential major accidents

- Emergency plan activation arrangements
- Organisation
- Control centres & communication arrangements (both physical (egg telephones) & lines of communications)
- Support services
- Medical response
- Public protection
- Information management / press / media / arrangements
- Domino effects

49 Does the plan show where communications may need to be established?

For example between:

- Emergency response team at the scene
- Emergency response team in the dedicated control centre
- All other parts of the site
- Fire / police / ambulance / service from the emergency response teams
- Media
- Water companies
- Local Authority
- Competent Authority
- DEFRA (& equivalents in Wales and Scotland) especially for off-site
- Adjacent premises

See also Organisation - Control

50 Do team members consider the procedures usable?

The procedures should be succinct (no more than two pages per role) and to the point. As a rule the key elements of the procedures should be capable of assimilation in about 1 minute.

51 Are 'aide memoirs' such as charts, maps, and flow charts used where appropriate to remind staff of key information?

Possible examples include: a scheme for warning and communication, telephone calls, lists of personnel, services, authorities etc, organisation charts, chart for emergency assistance and command.

52 Is information well structured in order to enhance communication & training?

Information Provision for External Organisations

53 Has (where appropriate) advanced information (eg site plans, inventories, shelter points and muster points etc) been provided to external organisations?

54 Has chemical information been provided to the Ambulance service and hospitals eg MSDS sheets?

It is good practice for local hospitals to be briefed in advance about practical implications when dealing with affected casualties ie pre- and during-incident exchanges between site and hospital medics.

55 Can incident specific information be easily provided during the incident itself?

For example:

- Confined space information, or details of particular processes in the area of the incident
- Details of fire fighting strategy for specific plant areas;

Which are tailored to local conditions

Organising - Co-operation

Key Issues

Emergency response arrangements should encourage co-operation. A successful response will need full co-operation between all the parties involved; the site, the emergency services and so forth.

Inspectors should be able to determine this from feedback from earlier tests, which test the interface between on, and off-site emergency plans. Observation of such a test will provide a direct indication.

56 Do emergency response arrangements encourage co-operation between all parties?

The following are external agencies that may be involved:

- The police, fire and ambulance services
- HM Coastguard
- Local authorities
- Adjacent LA and emergency services
- Environment agency
- Health and Safety Executive
- Health Authority
- Water Company and other Utilities
- Media
- Voluntary organisations
- Adjacent major hazard sites (eg domino effect & sharing resources)
- Contacts and arrangements for obtaining further advice and assistance eg technical advice
- Meteorological eg wind direction and strength and forecast changes.

Planning & Implementing

Key Issues

Methods need to be in place for developing the emergency response arrangements and the procedures contained within or referred to within those arrangements. The operator should also be able to demonstrate that adequate resources are in place to implement the plan. Inspectors should be satisfied that there are:

- Clear site-specific procedures

Particular procedures include the setting up and use of the Emergency Control Centre (ECC), muster & evacuation, decontamination, fire fighting, shut down, PPE, gas monitoring, first aid & medical support

- Planned interfaces between emergency responders
- Efficient means of information handling.

Tailored to Local Requirements

57 Is the plan tailored to reflect the site / location?

The plan should not simply be a generic company document.

58 Is information about the specific site adequate and readily available?

Information that should be included (where appropriate):

- The company products and personnel
- The locality (egg residential population, industrial installations, prevailing winds, etc)
- Site plans (including drains) and neighbourhood maps
- Processes carried out
- Hazardous materials used, stored and manufactured
- Classification of hazardous areas
- Equipment, buildings, storage
- Transport (including vehicle access routes)
- Special hazards
- External risks (off-site)
- Safety / emergency organisation
- Fire-fighting materials, extinguishing equipment & water supplies

Information on the main buildings, plant/equipment and control rooms including (where appropriate):

- Substances, properties, hazards
- Hazardous areas classification
- Equipment containing hazardous materials
- Stores
- Numbers of people
- Local organisation

Alert and Communication Facilities

59 Are the criteria for calling the internal/external emergency services unambiguous?

There should not be any doubt about what these are. Discussions on previous incidents and what happened may help to clarify issues.

For some sites, an emergency will be declared in such a way that the emergency services do not await confirmation but respond with an appropriate predetermined response for a major accident.

60 Has a site-wide warning system been provided to enable everyone on site to be alerted to a major emergency?

61 Are site alarms clear and unambiguous?

Hazards requiring a specific, different response should be assigned a discrete alarm. NB The number of distinct alarms should be manageable preferably no more than three).

62 Are communications facilities and information management systems tested regularly and realistically?

More than one telephone technology is desirable along with a back-up system in case of power failure.

63 Can radio systems use alternative frequencies?

The communication system should not solely rely on radios as they have high failure rates and are not reliable in high noise areas.

64 Are the communication facilities adequate once people are mustered?

For example PA system with plant radios as backup.

65 Is a list of phone numbers of services, staff, external bodies, etc readily available?

66 Can it be demonstrated that the initial response team is able to cope for as long as it has to during out of hours or at times when others have to be called in?

Demonstration will be required by showing the required training has been provided supported by testing. This should cover all shift teams for example and for each type of hazard that is relevant.

67 Are effective arrangements in place for contacting and calling in staff during low manning periods (eg night shifts, weekends, etc)?

These should be tested to ensure an appropriate speed and rate of response (for example testing how quickly staff respond to pagers during out of hours periods).

68 Are there clear arrangements for alerting the public?

At major hazard sites equipped with public warning sirens, agreement should be reached between the company and the external emergency services on the circumstances in which the alarm can be sounded and who can order its sounding. This procedure should also be written into the off-site emergency plan.

69 Can the company demonstrate that means of public warning (sirens etc) are effective and reliable?

Evidence is required of how this is tested and feedback recorded and acted on. Back-up power supplies should be provided where necessary.

Emergency Control Centre

70 Is there an Emergency Control Centre, with sufficient resources to manage the emergency?

This will normally be the location occupied by the site main controller and others eg senior officers of the external emergency services in attendance for tactical and operational command & control.

Three main categories are required.

- Equipment for external off-site communications
- Equipment for internal (on-site) communications
- Site plans & maps to show clearly the current incident situation

71 Can non-permanent facilities be set up very quickly?

This will require clear instructions to be given, all equipment (telephones, fax machines, PCs, etc) to be stored in an orderly way and on-site people trained to deploy efficiently.

72 Does the emergency control centre have a means of collating a record of who is on site and their location?

This information will be required by the emergency services upon arrival on site.

73 Can an alternative emergency control centre with the required resources be made available if the main one is liable to be incapacitated during an emergency?

A means of moving from one to another needs to be established and practiced.

Muster and Evacuation

74 Can the company show that there is a sufficient number of muster points to allow those not involved in emergency duties to gather?

This should include provision for contractors and visitors as well as for all company staff.

75 Has the location of muster points been carefully assessed?

There should be sufficient muster points to ensure safety, depending on wind direction. Hazards such as blast (over pressure & flying debris) smoke, hazardous fumes etc should be considered as part of this assessment. Muster points will generally be at safe locations outside, but a number of companies identify havens located in buildings for people to resort to in the event of a toxic release.

Guidance on havens can be found in the CIA's Guidance 'Safety in the design and location of Occupied Buildings at hazardous installations'.

76 Are procedures in place to ensure that the number and identity of people at each muster point is noted, reported to the emergency control centre and acted upon?

There must be practical arrangements in place to account for personnel and to identify any that might be missing. Good practice is for central control to ring refuge rooms. Multiple telephones trying to contact one point such as central control are likely to block lines. There should be appropriate communication points at each muster point.

77 Does the muster point roll call include the assessment of potential casualties, and their location, as well the factual roll-call information?

Casualties should be identified as a priority. The casualty identification system should operate more quickly than the roll-call system, especially on larger sites.

78 Are appropriate arrangements in place to deal with emergencies of long duration?

This is a consideration for all major accident scenarios but is key for dealing with those people who have travelled to a 'haven'. It may be preferable to move people from muster points to alternative safe locations in such circumstances. There should be an appropriate contingency plan in place to evacuate people from havens, where necessary.

79 Does the site have several evacuation routes?

This will make it possible to evacuate upwind of an incident. Criteria for deciding when and how evacuation is appropriate should be established.

Decontamination procedures

80 Are decontamination facilities available and are staff trained in its use?

Chemical or radioactive contamination must be cleaned away before PPE is removed. Also casualties need to be decontaminated before loading into ambulances.

81 Can the decontamination facilities be put into effect without delay?

82 Is there a policy to cope with casualties who are too ill or injured to be fully decontaminated?

This relates to how such casualties are handled. Protective arrangements for first aid/medical staff, early warning to ambulance service/hospitals are issues to be covered.

On-site Fire Fighting

83 Is the overall fire fighting strategy clearly defined?

The fire-fighting strategies should address the range of on-site hazards, appropriate actions to take, and means of preventing escalation. This should include any 'let burn' decisions, which should be discussed with the fire service.

84 Does the emergency plan include details of on-site fire-fighting expertise?

Site personnel should have expertise in chemical fire-fighting and gas-cloud handling. Managers should be properly trained if they are to direct fire teams because this requires a high level of fire-fighting competence.

85 Does the emergency plan include details of fire fighting facilities including materials, equipment and water supplies?

86 Does the range the capability of fire fighting equipment match the on-site demand or can it be supplied in a timely way by external fire service?

87 Is the location of fixed and mobile fire-extinguishing systems clearly indicated in procedures/maps/plans?

88 Is the location of fixed and mobile fire-extinguishing systems clearly marked?

These should be in line with the Safety Signs and Signals Regulations

89 Is a testing and maintenance regime in place for the materials and fire fighting equipment to ensure that it is fit for purpose?

Documentary evidence is required that the regime is in place and actions taken on findings. The frequency of equipment testing and maintenance should be regularly reviewed.

Safe Isolation and Shutdown

90 Is there a defined process in place for managing the isolation and shutdown of plant, processes and equipment during the emergency?

91 Are there arrangements to check and test the integrity of isolations?

This should include provision of sufficient staff to keep essential services such as water available during the emergency itself.

Personal Protective Equipment (PPE)

92 Is there sufficient PPE available to protect all personnel who may be at risk including staff, contractors and visitors?

It may be useful if on-site breathing apparatus is compatible with that used by the Fire Brigade. Often site personnel with local knowledge need to assist the Fire Brigade. Logistics are eased if similar systems of the same duration are used. For example it is good practice for operator's staff to work from the same BA control board as the Fire Brigade. This is a matter for discussion with the Fire Brigade at the planning stage and then supported by the required training.

93 Has the location of PPE storage points been carefully considered?

For example, does it take into account the location of site hazards, evacuation routes etc?

94 Are the PPE storage points clearly marked?

These should be in line with the Safety Signs and Signals Regulations.

95 Is there a testing and maintenance regime in place to ensure that the PPE is fit for purpose?

Documentary evidence is required that the regime is in place and actions taken on findings. The frequency of equipment testing and maintenance should be regularly reviewed.

Gas monitoring

96 Are gas monitoring facilities and procedures in place?

There is usually a need to determine gas concentrations at key positions such as the site boundary. Adequate resources and reliable equipment must be available to do this, but off-site monitoring may not be reasonably practicable. Mobile monitoring may be used where this is not likely to put people at risk in setting it up.

Medical

This should cover medical treatment, triage and casualty handling procedure - linking with the ambulance service for casualty labelling and tracking.

97 Are first aid/medical facilities provided suitable (in so far as is reasonably practicable) to deal with immediate effects of the emergency eg gas inhalation; burns?

98 Are personal records (eg next of kin, relatives, etc) readily available?

99 Is there a planned approach for accounting for casualties and evacuating them?

Resourcing

100 Can the operator demonstrate that it has provided sufficient resources to enable appropriate development and testing of the emergency plan relative to the foreseeable major accident scenarios identified in the COMAH Safety Report?

101 Can the operator demonstrate that it has provided sufficient resources, so far as is reasonably practicable, to contain the major accidents identified in the safety report until the emergency services arrive? [See also COMAH Safety Report].

'Resources' refer to both manning levels and equipment.

Inspectors should have considered this demonstration as part of the COMAH safety report assessment. The operator should be able to support the demonstration by giving information about the results of testing the emergency plan.

The adequacy of manning levels should be assessed by considering:

- The worst foreseeable major accident scenario, identified as foreseeable in the COMAH safety report;
- Including periods where the manning levels are lowest such as 'out-of-hours' or 'call-in' situations.

When deciding on the manning levels required to deal with emergencies, it is preferable to initially 'man-up' beyond perceived requirement, and then 'man-down' later.

102 Are arrangements in place for individuals to take responsibility on behalf of others in order to cope with the full range of possible circumstances?

This includes coping out-of-hours and with the absence of personnel.

103 What resources are available on site and what additional resources could be quickly obtained?

The following are examples that would normally be expected to be available where relevant for the identified major accident scenarios:

- Fire and toxic gas alarms
- Fire-fighting equipment, eg assured water supply, hose reels, etc
- First aid facilities
- Sandbags or other absorbent materials
- Windsock or flag (illuminated at night)
- Radiophone or telephone backup

The following additional resources may be on-site or there should be arrangements to make them available, where necessary. Details of where the resources are to be obtained from should be readily available during an emergency. Performance measures for obtaining these should also be available ie clear timescales. These should be consistent with the major accident scenarios and the risk assessments argued in the COMAH safety report.

- Heavy lifting gear
- Bulldozers and other transport facilities for movement of equipment
- Specialised fire-fighting equipment
- Extra communications equipment eg loudhailers, two-way radio
- Water spray or curtains
- Standby water supplies eg pump out of Local River
- Specialised protective clothing
- Atmospheric monitoring equipment
- Gas dispersion expertise
- Emergency engineering work, egg provision of emergency lighting, temporary modifications, oxy-acetylene cutting equipment, ladders or scaffold etc

- Medical facilities, including specific antidotes where necessary
- Extra breathing apparatus
- Specific neutralising agents, antidotes or absorbent materials
- Access to firms or individuals with specialised chemical knowledge, laboratory facilities, computing expertise, etc
- Containment equipment for materials that get into waterways, eg strategically placed boom
- Early warning devices, eg smoke detectors.

Additional resources can often be obtained from nearby sites. Where these are to be relied upon, then there should be formal agreements in place.

Measuring Performance

Key Issues

The emergency response arrangements need to be thoroughly tested. Testing is essential to make sure that the arrangements are suitable, accurate and capable as working as intended. Inspectors should be satisfied that there are:

Well-rehearsed procedures.

Rehearsed interfaces within on-site teams and between those teams and various responders.

And that these are tested by those who have the skills and knowledge to do so.

104 Is there a testing programme in place to regularly test and improve the effectiveness of emergency arrangements?

The testing programme should include drills and exercises to test a range of scenarios.

105 Who conducts and evaluates these tests?

For the test to be worthwhile, the person running the test should have the skills and knowledge in the emergency response matters being tested, the necessary technical knowledge and be able to understand and evaluate what is happening during the test.

106 Do the scenarios selected, test across a wide range of the worst foreseeable and lesser, more realistic events?

107 Do the scenarios respond to actions taken by the emergency team, rather than leading them through the exercises?

This question is aimed at developing the scenario in response to the actions of the emergency team. This would require some skill by the 'tester' and would need some planning in setting up the test to develop the scenario, depending on the actions of the team. Computer based tests, which are often aimed at command and control skills can be programmed to respond to actions being taken place by the team.

108 Is the testing scenario ever moved beyond the procedural envelope, so that the flexibility of the arrangements can be tested?

For example, are there scenarios, which have been discounted by the safety report because they were not considered foreseeable, but could be used to test how well the arrangements work beyond their original scope.

109 For each exercise, are there clearly defined exercise objectives?

The objectives of the exercise need to be met. However, if the scenarios change sufficiently, as discussed above, then the exercise may never get to the part that is to be tested.

110 Are appropriate types of exercise selected?

The purpose of an exercise with its objectives should be clear. Some examples of tests and their value are outlined below.

- Drills - testing a specific and relatively simple aspect of the emergency plan in isolation. Examples are fire drills; roll call and searching; cascade telephone calls; spillage control and recovery;
- Seminar exercises - training of staff and developing emergency plans. The facilitate discussion about different organisations responses in particular circumstances during an emergency.
- Walk through exercises - training staff or developing emergency plans. The emergency response is 'walked through', including visiting appropriate facilities such as Emergency Control Centres;
- Tabletop exercises - allowing information exchange and dissemination between organisations at the emergency control centre, together with decision making to be tested. They are carried out in relation to a model, plans or photograph to depict the establishment. They could involve using information technology or virtual reality systems;
- Control post exercises - testing the communication arrangements during an emergency, with participating organisations located where they would be during an emergency;
- Live exercises - fully testing some or all aspects of the emergency plan for the on-site and off-site response. These exercises will be costly.

111 Do the emergency exercises used simulate so as possible a real emergency and do they keep to a realistic time-line?

112 Is an adequate range of staff involved in the exercises?

This should include practising taking on other roles, for example, covering for the absence of colleagues.

113 Does the testing programme incorporate some exercises that involve collaborating with off-site services?

114 Is there careful observation of the response of key players during an exercise?

This can be used to study the effectiveness of training of the decision makers and their suitability for involvement in emergency response.

Audit & Review

Key Issues

Audit and review is essential to the effective development of the emergency response arrangements. It is only by reviewing the emergency response arrangements (eg by means of post exercise de-brief) can the emergency response be amended and adapted to address the shortcomings identified by the emergency response exercises. Review of the emergency response arrangements should also take place after changes on site.

115 Is information from the testing programme used as the basis for evaluating and improving the emergency plan?

For example, the command and control structure and interfaces should be reviewed on a regular basis.

It would be valuable to know what information is recorded and collated from testing to inform any such review.

Evaluation of adequate resources is a key element of a review and should inform any changes proposed to the procedures.

116 Is the frequency and nature of the testing programme itself periodically reviewed?

117 Is there a process in place for evaluating team performance?

This should address issues such as whether the team brought the emergency under control, saved life, whether the team performed well together, where were the weaknesses.

118 Can it be shown that the plan reflects lessons learned from previous incidents/exercises?

Management of Change

119 Is there a formal review process in place that is initiated following any significant changes to plant/ process/ location/ personnel or after a defined period?

The review process should consider the impact of change to plant/ process/ location and personnel COMAH at Regulation 8 requires a review and also revision of the safety report where there are changes that have significant repercussions with respect to the prevention of major accidents or the limitation of consequences of major accidents to persons and the environment. A management of change system should include confirmation as to whether a Regulation 8 review is required and a record of the conclusions. As a result the safety report and the on-site emergency plan may require amendment. Where possible, the operator should attempt to maintain the continuity of key personnel in emergency roles. Where this is not possible, an emergency response review process should be triggered.

Annex 13 Cheshire Local Resilience Forum

COMAH / REPPIR Exercise Calendar 2009 / 2012

Site to be Exercised	Ex Due (Month / Year)	Date of last Exercise	Level	Area
Company A	30 March 2011	14 February 2008	Modified Standard	Western
Company B	14 April 2011	17 April 2008	Major Live	Western
Company C	27 May 2011	Not previously tested	Standard	Western
Company D	June 2011	Not previously tested	Modified Standard	Western
Company E	8 July 2011	2 October 2008	Mini Live	Western
Company F	January 2012	5 March 2009	Mini Live	Western
Company G	December 2012	25 February 2010	Modified Standard	Western
Company H	February 2013	11 February 2010	Major Live	Northern
Company I	April 2013	29 June 2010	Modified Standard	Western
Company J	May 2013	30 July 2010	Modified Standard	Western
Company K	June 2013	13 July 2010	Major Live	Western
Company L	June 2013	22 July 2010	Standard	Eastern
Company M	December 2013	27 January 2010	Major Live	Northern
Company N	December 2013	December 2010	Standard	Eastern
Company O	June 2010		Modified Standard	Northern
Company P	October 2010		Modified Standard	Northern
Company Q	To be programmed 2012	New site		Western
Company R	To be programmed 2012	New site		Western
Company S	To be programmed 2012	New site		Western
Company T	To be programmed 2012	New site		

Major Live

Full Fire Service attendance at site, all control locations fully operational at usual locations

Mini Live

Limited Fire Service attendance at site, control centres simulated at artificial location, table-top, Silver, Dosec

Standard

Familiarisation visit, presentations and table-top facilitated by Local Authority

Modified Standard

Table-top element facilitated jointly by Local Authority and Company

Annex 14 Mutual Aid and National Inventory

1 National Inventory and mutual aid schemes are intended to enable the release of fire-fighting resources and personnel to respond to catastrophic events (large explosions, or large complicated fires beyond the scope of local capabilities) which fall outside those which can be reasonably expected by the Control of Major Accident Hazards (COMAH) sites and their arrangements with local authority fire and rescue services. These fire-fighting resources may be drawn from industry, the fire and rescue service, or other commercial organisations or consultants.

2 The final report of the Major Incident Investigation Board on the Buncefield Incident of 11 December 2005 provides two recommendations (23 and 24) covering the development of mutual aid schemes. The following guidance provides a framework by which industry and other stakeholders can meet these recommendations.

Recommendation 23

Operators of industrial sites with risks of large explosions and/or large complicated fires should put in place, in consultation with fire and rescue services at national level, national industry-fire service mutual aid arrangement. Aim: enable industry equipment, together with operators of it as appropriate, to be available for fighting major industrial fires. Industry should call on the relevant trade associations and working group 6 of the Buncefield Standards Task Group to assist it, with support from CCS. The COMAH Competent Authority should ensure this is done.

3 The purpose of this guideline is to outline prudent steps that a COMAH site may wish to take in preparedness for unforeseen major events, both in terms of people and equipment. Any mutual aid scheme should be an entirely voluntary arrangement, in which companies may individually decide to participate or not. Any offer or arrangement of assistance provided as part of such a scheme should be entirely voluntary and not a binding obligation or expectation upon participants in any voluntary scheme. The following paragraphs should be read in this context.

4 Recognising that many mutual aid schemes are already in place, and effectively managed, this guidance proposes an architecture of local mutual aid schemes (voluntary or otherwise) that are nationally coordinated. This takes into account the geographic proximity of many COMAH sites, and identifying that existing well established mutual aid schemes should be preserved and enhanced where appropriate, providing access to resources from other regions where necessary.

5 To ensure consistency in the development of mutual aid schemes, the ORCCID (Operational Response to COMAH Catastrophic Incidents and Disasters) initiative developed jointly by JOIFF (Joint Oil Industry Fire Forum, the Organisation for Emergency Services Management) and CFOA (Chief Fire Offices Association) has been adopted within this guidance to enable the identification of the key constituent elements of a mutual aid scheme. These are:

- legal and insurance
- training and competence
- audit and assessment
- operations – tactical
- media and communications
- post incident demobilisation and recovery
- sustainability

COMAH Legal Context

6 Before providing the guidance to assist in the development of a mutual aid scheme, it is first important to understand the COMAH legal context, under which such a scheme may be implemented.

COMAH duty on operators to provide mitigatory measures

7 The COMAH Regulations are underpinned by the general duty placed on all COMAH operators to take 'all measures necessary' to prevent major accidents and limit their consequences to people and the environment. These include emergency mitigatory measures and this term equates to 'as low as is reasonably practicable' (ALARP) (which has the same interpretation as the Health and Safety at Work Act's 'so far as is reasonably practicable' – SFAIRP) in the UK. The duty holder must consider all reasonably foreseeable emergency scenarios arising from credible major hazard incidents, including low-probability, high consequence events.

8 The level of planning and the mitigatory measures then taken for emergency scenarios should be proportional to the risks presented (ie the likelihood of the accident occurring, and the scale and nature of the consequences presented). COMAH operators (in co-ordination with their local authority emergency planning unit) must put emergency measures in place, to reduce the risks to as low as is reasonably practicable. Where mitigatory measures are technically possible, but the costs of introducing them are grossly disproportionate to the level of risk, operators do not necessarily have to implement them.

Emergency planning

9 Duty Holders should carry out all the steps set out in the emergency planning PSLG guidance for EPRR report[1] recommendations 1-7 and recognise the potential linkage between recommendations 7 and 23 of the Buncefield Major Incident Investigation Board Recommendations on the emergency preparedness for, response to and recovery from incidents (MIIB EPRR Report[1]). Where a duty holder has identified credible major accident hazards that may require resources beyond those available on site, becoming a member of a mutual aid agreement is one of several options they should consider. The agreement does not remove the operator's duty to take 'all measures necessary', but is intended to supplement these, on the basis the duty holder has already put in place all reasonably practicable on-site preventative, protective and mitigatory measures. Recommendation 7 (Buncefield Major Incident Investigation Board Recommendations on the emergency preparedness for, response to and recovery from incidents (MIIB EPRR Report[1])) requires duty holders who rely on an off-site FRS response to supplement their on-site arrangements to clearly demonstrate they have put suitable and sufficient arrangements in place between themselves and the service provider.

Deployment of the Fire-fighting Mutual Aid Agreement

10 Assistance from national inventory may be called upon by the fire and rescue service to help respond to an emergency which is escalating, or likely to escalate beyond the capabilities of local fire-fighting resources. The mutual aid resources are intended to be used in addition to site and local fire-fighting provisions, not to compensate for an inappropriate absence or shortfall in these provisions. In the case of a formally constituted scheme governed by a mutual aid agreement, each member will be expected to contribute to it fully and proportionately with what fire-fighting resources they have at their disposal.

11 Any partnership should consider a mechanism by which smaller operators who are members of the partnership can contribute financially, or through provision of equipment or expertise to the mutual aid scheme

Enforcement by the Competent Authority

12 The COMAH Competent Authority (CA) will continue to employ a regulatory strategy intended to ensure that duty holders meet their duty to take all measures necessary, based on the principles of reducing risk to as low as is reasonably practicable through a range of interventions, including safety report assessment (top-tier sites), review of MAPPs (lower-tier sites), and review of on-site emergency plans and arrangements.

Legal and Insurance (Mutual Aid Arrangements)

13 A mutual aid scheme typically has two types of members: stakeholders who have an interest in the success of the scheme, eg the competent authority; and partners who actively participate in the provision of materials eg plant, assets, staff.

14 Partners in a mutual aid scheme should include as a minimum Industry (each operator site that wishes to participate in the scheme), the fire and rescue service, and local government emergency planning officers.

15 To avoid the complexities of developing a legally binding contract for the mutual aid scheme, partners may wish to consider the use of a statement of intention (Memorandum of Understanding). This may include, but not be limited to:

- the broad principles and terms of engagement of the scheme
- definition of the roles and responsibilities of each partner
- process to ensure the efficient deployment of equipment

A template statement of intention is provided in appendix 1

16 For companies that wish to engage in mutual aid arrangements, a pre-defined indemnity for the provision of voluntary assistance may be an invaluable aid to rapid mobilisation in the event of an incident. Details could be agreed by each mutual aid partner, and referenced in the statement of intention.

17 Any partner of the mutual aid scheme should demonstrate that they have appropriate measures in place, such as a pre-defined indemnity, to enable them to cover the costs of either injury, damage to equipment or assets used.

18 Reference should be made to Post incident de-mobilisation and recovery for details of pre and post delivery checklists that may assist when estimating the costs of damaged equipment or assets used when responding to an incident.

19 An individual duty holders on-site emergency plan should consider the potential cost for the impact to the environment caused by fire water, fire-fighting foam or other substances used when tackling the incident. Reference should be made to the final PSLG Report, Appendix 6, Emergency Planning Guidance, for details of on-site emergency plans.

Training and Competence

20 Ensuring fire fighting personnel from both industry and the fire and rescue service have the appropriate training and competency is essential to the establishment of a mutual aid scheme. This should be commensurate to the risks of the site and incident to which they may be required to respond. Reference should be made to the final PSLG Report, Appendix 5, guidance for the management of operations and human factors, paragraphs 47-92 for further guidance relating to roles, responsibilities and competence.

21 As part of the mutual aid arrangements, the fire and rescue service should ensure that they maintain a core competency for tackling industrial fires at COMAH sites within the area covered by the partnership.

22 Mutual aid partners should ensure that only suitably trained and equipped personnel, operating a safe system of work, are permitted to respond to a request for mutual aid. This includes ensuring that personnel are trained and competent in the use of any equipment they are expected to use when tackling a fire.

23 In order to test the efficiency of the mutual aid scheme (and effective communication with the national inventory), periodic exercises (this includes both table top exercises and real scenarios – these may also be linked into existing site exercises) should be carried out which challenge the mutual aid scheme under different potential accident scenarios at

different types of facility. An exercise schedule should be developed, agreed and supported jointly by the members of the mutual aid partnership. The schedule should clearly identify the sites at which exercises should be carried out, the frequency at which they should be repeated, and the equipment, resource, training and competency requirements.

24 The schedule should address each foreseeable scenario (for example a pool fire), and each type of facility (for example a refinery, or terminal) that is represented by the mutual aid partnership. Exercises should be spread fairly across member sites; ensuring responsibility for hosting is shared. Where appropriate, credit should be taken for similar sites, and similar exercise components, so as to avoid duplicating scenarios.

25 Consideration should be given to the use of pre and post exercise briefings or 'tool-box' talks to review the efficiency and effectiveness of the exercise and to highlight any areas of the mutual aid scheme that may warrant improvement (see also Sustainability).

Audit and Assessment

26 Reference should be made to the final PSLG Report, Appendix 6, Emergency Planning Guidance, for details of on-site emergency plans. The on-site emergency plan should consider the response to and mitigation of a multiple tank fire following an explosion. Where an individual duty holder does not have adequate means on site to tackle such an event, recommendation 7 requires duty holders who rely on an off-site FRS response to supplement their on-site arrangements to clearly demonstrate they have put suitable and sufficient arrangements in place between themselves and the service provider which includes competency and equipment to do so. The duty holder may also consider participation in a mutual aid scheme to ensure that their legal obligations under COMAH have been met.

27 When participating in a mutual aid scheme, the duty holder should compile an inventory of equipment that can be made available, and will register this as part of the national inventory (refer to recommendation 24 of the Buncefield Major Incident Investigation Board Recommendations on the emergency preparedness for, response to and recovery from incidents (MIIB EPRR Report[1])). This should include such items as high pressure pumps and foam monitors together with any specialist resources necessary to operate this equipment. Any ancillary requirements, for example the required couplings, hoses and their ratings for the correct operation of the equipment should be clearly identified. Consideration should also be given to assets such as foam stocks that could be made available. As a minimum, the inventory sheet should include:

- Operator site and address where the equipment is located
- A 24 hour emergency telephone number to call to request the asset
- Name and e-mail address of the asset owner or co-ordinator
- For equipment, the manufacturer, model, coupling requirements, capacity and whether competent personnel are supplied with specialist equipment
- For foam stocks, the type, volume and container in which the foam is stored
- Transport options, stating whether the site can deliver the asset, or whether collection is required

An example duty holder inventory sheet can be found in appendix 2.

28 Mutual aid partners should assess the adequacy of the mutual aid scheme, both on inception, and periodically. This assessment should challenge the mutual aid scheme as follows:

- Do the assets available to the mutual aid scheme fulfil the requirements necessary for tackling catastrophic events at partner sites?

- Are there sufficient water and foam stocks available at the partner site to tackle a catastrophic event? (foam stocks may also be available through the mutual aid inventory, alternative water supplies should be identified)
- Has the compatibility of equipment been considered for the mutual aid equipment supplied - are suitable adapters, couplings and hoses readily available either from the FRS or from an industry partner?
- For any specialist equipment identified, are suitably trained and competent personnel available to operate it?
- Can the ongoing competency of industrial response teams (which may involve multiple partners of the mutual aid scheme) be demonstrated? (refer to Training and Competence)
- For unforeseen events, where the assets available to the mutual aid scheme may not be sufficient, have resources been identified nationally from other mutual aid schemes? (refer to Operations – Tactical, and to the guidance provided for recommendation 24)

29 When deciding on the on-site inventory of equipment and consumables, and identifying releasable equipment and consumables, operators should be mindful of the increased risks which will arise at their own sites following release of equipment and consumables. Operators should take steps to rectify the deficiencies as soon as possible.

30 Duty holders should ensure that any equipment or other assets made available to the mutual aid scheme are fit for purpose, and are maintained in accordance with the manufacturer's requirements.

31 Duty holders should periodically review and where necessary update their inventory sheets, ensuring that any amendments are forwarded to the FRS and to the national inventory.

32 The FRS which participates in the mutual aid scheme should collate and maintain inventories from each industry partner, ensuring that resources, their location, and mobilisation details are available centrally in the event that they are required to tackle an incident.

33 Note that the assessment of individual duty holders emergency arrangements under COMAH remains the responsibility of the competent authority, and should not be considered when reviewing the sufficiency of the mutual aid scheme, refer to paragraph 12.

Operations - Tactical

34 Tackling an incident effectively and efficiently requires comprehensive planning, ensuring that all parties involved understand their roles and responsibilities, equipment and personnel can be deployed effectively and safely, and for unforeseen events, a process by which additional assets can be requested is in place.

35 As part of the structure of the mutual aid scheme, the FRS should develop and maintain a tactical fire plan (on-site fire fighting plan) in conjunction with the operator site covered by the scheme. The plan should be developed in co-operation with the duty holder, and where applicable other partners in the mutual aid partnership.

36 The tactical fire plan is one specific aspect of an overall emergency response plan which specifically covers fire fighting tactics and equipment etc. It comprises of two elements; firstly the actions that should be put in place before an event occurs and secondly, actions that should be carried out once an event has occurred. An example framework for a tactical fire plan is included within appendix 3.

37 The following key aspects should be considered:

- Agree the chain of command for the FRS when tackling an incident (For example the bronze, silver and gold command structure), and,

- Determine and agree with the duty holder the organisational, communication and co-operation aspects of tackling an incident at the site. This should include identifying who has overall responsibility for tackling the incident, and interfaces with both on and off site specialist fire fighting teams.

- Determine the site specific fire fighting tactics for planning the delivery of each emergency scenario presented by a site so that the appropriate response can be delivered effectively

- Recognise that a duty holders on site fire fighting team (where present) will often have the necessary expertise in tackling specific site incidents, and should be involved when considering how emergency scenarios may evolve

- Recognise that sites supplying personnel and equipment to tackle an incident at another members site will be required to complete a risk assessment (this would be completed in conjunction with the requesting site and/or FRS as appropriate).

38 When determining the logistical arrangements for tackling an incident, the tactical fire plan should:

- maintain an emergency contact list for:

  – mutual aid partners, in order to request equipment, assets and personnel, this should be included on the duty holders inventory list (refer to paragraph 27); and

  – national resources, in order to request equipment, assets and personnel from other mutual aid schemes and/or FRS, this mechanism is described in the guidance for recommendation 24.

- Make reference to the mutual aid partners inventory list (refer to paragraph 27) to ascertain the transport arrangements that are in place when requesting mutual aid resources, including how equipment is to be loaded, transported and unloaded.

- Consider the welfare and subsistence arrangements for those involved in responding to the incident, including the responsibility of the local authority. Refer to the guidance provided against recommendations 17 and 18 of this Buncefield Major Incident Investigation Board Recommendations on the emergency preparedness for, response to and recovery from incidents (MIIB EPRR Report[1]).

- Consider the impacts to the environment, and how they can be mitigated.

Media and Communications

39 Communicating with the media and the public is addressed by recommendations 8, 9 and 20 of this Buncefield Major Incident Investigation Board Recommendations on the emergency preparedness for, response to and recovery from incidents (MIIB EPRR Report[1]).

40 For duty holders, the responsibility for communicating with the media and with the public should be addressed as part of the COMAH safety report, and described within the on and off site emergency plans where appropriate. Refer to the final PSLG Report, Appendix 6, Emergency Planning Guidance, for further details.

Post incident de-mobilisation and recovery

41 Following an incident, the mutual aid partnership should agree the mechanism by which emergency response teams can be de-mobilised, equipment returned, and assets that have been used accounted for.

42 The authority to de-mobilise should remain with the incident commander as identified in the tactical fire plan, refer to paragraph 36.

43 The site which requested the mutual aid assistance should take responsibility for returning equipment and other assets to their source. This should be in accordance with any specialist transportation arrangements set out in the duty holders inventory sheet, and arranging a mutually agreed delivery date with the donor site, ensuring that personnel are available to receive and inspect the returned equipment and assets.

44 Whilst an incident is being tackled, equipment may become damaged, and assets may be used (for example foam stocks) that have been supplied by another mutual aid partner. The responsibility for repair or replacement should remain with the requesting site. To assist in ascertaining the extent of damage or asset use, pre and post delivery checklists may be employed to aid in securing payment, either through an insurance claim, or though other measures identified in the insurance model of the statement of intention. The purpose of the pre and post delivery checklists being to ascertain the state of equipment and volume of assets prior to delivery, and record the same on return.

45 Appendix 4 provides a template pre and post delivery checklist.

46 The pre delivery checklist should be completed by the owner of the equipment or asset, and may be completed ahead of any request made by a mutual aid partner. The requesting site should confirm that the details are correct when the equipment or asset is delivered.

47 The post delivery checklist should be completed by the owner of the equipment or asset on return. The post delivery inspection should be witnessed and confirmed by a nominated representative from the requesting site.

48 Where equipment or assets need to be repaired or replaced ahead of the agreed settlement, the donor site should ensure that they collate all relevant paperwork and make this available to the requesting site to support any claim that they may need to make. Where possible, this should include quotations from more than one supplier.

49 Following de-mobilisation, the stakeholders of the mutual aid scheme should consider carrying out a post incident review to identify any lessons learned, this should include the following:

- Effectiveness of the communication between the FRS and members of the mutual aid scheme, including the interface with national inventories where applicable
- A review of the tactical fire plan
- Accuracy of the inventory checklists, equipment compatibility issues and the use of the pre and post checklists
- Identification of any further training or competency needs
- Identification of any additional equipment or assets that may strengthen the mutual aid partnership arrangements
- Consider whether lessons learned are applicable to other mutual aid schemes nationally

The results of the post incident review should be discussed as appropriate at the following stakeholder meeting, refer to Sustainability.

Sustainability

50 To ensure the continued success, development and critique of the mutual aid scheme, stakeholders should actively manage and monitor its effectiveness, and ensure that all stakeholders work together to achieve the common goal of a supportable and dependable partnership. Mutual aid partners should establish periodic meetings to:

- Review the membership of the mutual aid scheme

- Review the training and competency needs, and agree the exercise plan as described in Training and Competence
- Review the effectiveness of mutual aid arrangements
- Review the outcomes of any tool box talks held following training exercises
- Review the outcomes of any post incident reviews (regionally and nationally)

A template agenda for a partner meeting is included in appendix 5

51 One partner should be nominated by the mutual aid partnership to chair and provide the co-ordination necessary to facilitate the meetings.

Recommendation 24

Fire and Rescue Authorities and their equivalents in Wales, Scotland and Northern Ireland should review availability of materials and equipment nationally and determine if they are sufficient to respond to and manage major incidents. Critical interface components, such as foam equipment couplings used by the FRS, should be capable of use both by the FRS and with any industry the authority may call upon. The administrations of Scotland and Wales should be involved in such a review as responsibility for the FRS is devolved. Communities and Local Government and equivalent administrations should see that this is done.

52 Guidance to follow.

Appendix 1 Template Statement of Intention

<Name of the Mutual Aid Partnership Agreement>

STATEMENT OF INTENTION

Partners

<Duty Holder #1>
<Duty Holder #2>
<Duty Holder #n>
<Region fire and rescue service>
<Region county council>
<Other organisations>

1 Statement of Intention

The partners wish to co-operate and to act in a mutually supporting manner in the event of a major incident. It is the intention that this support will extend to the identification of equipment and fire fighting media, which could be made available to the emergency services to help in dealing with an emergency at another partner's site.

Whilst wishing to co-operate to assist one another in the event of an incident, primary responsibility remains with individual sites and it is recognised that partners will only release equipment if it does not compromise their own safe operation.

2 Review

These working arrangements and the content of this statement will be reviewed every three years.

3 Mutual Aid

The partners agree to co-operate with one another to do the following:

a) Compile, maintain and update periodically an inventory of equipment which is believed to be compatible equipment available for release to the another partner in the event of an incident at one of their premises

b) The Fire & Rescue Service (FRS) will be the owner of, and maintain, the inventory

c) All partners will provide the FRS and the national inventory with any updates to the inventory when necessary.

d) In the event of an incident occurring it will be the FRS who make the request for the release of an asset or assets on this inventory.

e) In the event of an incident occurring, the partner in receipt of the request for help will use all reasonable endeavours to release and make available the equipment requested

f) Contact will be facilitated via the mutual aid partnership contacts list, which is held by the FRS.

g) Provide trained and competent personnel that will be supplied with any specialist equipment

4 Equipment Compatibility

Each partner considers that purchases of future fire fighting equipment that may be made available to the mutual aid scheme is, as far as practicable, technically compatible with the fire fighting equipment of the other partners.

Personnel of each partner who are employed or trained as fire fighters should be trained in the use of their own fire fighting equipment shown on the inventory.

Periodic exercises and training days will be arranged by the partners, involving the fire fighting personnel of each partner in an effort to maintain competence and as far as practicable to verify the compatibility and inter changeability of the fire fighting equipment on the inventory, and to help develop operational relationships and plans.

5 Indemnity

<Enter details if applicable of any measures that may be in place to cover costs associated with participating in the mutual aid scheme. Refer to the 'Legal & Insurance', paragraphs 12 to 19 of the CAP EPLG EPRR final report[1] for details>

This Statement of Intention reflects the good will that exists between the partners of the mutual aid scheme.

<Duty Holder #1>	Signed:	Date:
<Duty Holder #2>	Signed:	Date:
<Duty Holder #n>	Signed:	Date:
<Fire and Rescue Service>	Signed:	Date:
<County Council>	Signed:	Date:
<Others>	Signed:	Date:

Appendix 2 Duty Holder Inventory Sheet

Contact Details					
Address	24Hr Emergency Telephone	Asset Owner/ Coordinator	E-Mail Address	Telephone - Landline	Telephone - Mobile
Site 1, Road Town County Postcode	+44 12345 1234567	An Employee	an.employee@site1	+44 55 1234567	+44 77 1234567

Major Monitors (> 4,500 litres)								
	Equipment				Transport Options			
Manufacturer	Capacity (UK LPM)	Operating Pressure Range	Type	Couplings	Availability	Collect	Deliver	Personnel
Williams Ambassador	22,800	25-100 lbs/s	Non-Aspirated	6' Stortz – 2 lug	Immediate	Yes	Yes	Yes

High Volume Pumps								
	Equipment				Transport Options			
Manufacturer	Capacity (UK LPM)	Operating Pressure	Type	Couplings	Availability	Collect	Deliver	Personnel
Williams Dependapower	15,200	175 psi	Trailer	6' Stortz – 2 lug	2 hours	Yes	No	Yes

Foam (No foam containing PFOS should be included in the register)								
	Product					Transport Options		
Type	Induction Rate	Manufacturer	Trade Name	Volume (Litres)	Container	Availability	Collect	Deliver
AFFF	3%	Tyco	Platinum	15,000	Totes	1 hour	Yes	Yes

Notes

1 Where equipment requires specialist operators, these should be supplied with the equipment.

2 Major monitors should include the foam inductor matched with the monitor, complete with any specialist couplings and hoses required.

Appendix 3 Tactical Fire Plan Structure and Content

1 Route Maps

Planned routes for operational fire appliances and specialist equipment should be identified, taking account of height restrictions which may affect larger vehicles. Details should include the address of the site (including postcode), telephone number and OS map reference.

2 Site Information

Brief description of processes carried out on site, number of tanks/spheres and contents, size of workforce.

3 Site Map

Easy to read schematic of the site.

4 Hazards

List of hazards likely to be encountered on site.

5 RVPs

Rendezvous Points - these should be agreed between the FRS and site operators local authorities. RVPs may be sited away from the site and appliances called upon to attend as necessary.

6 Marshalling Points

A large area close to, or on the site, should be identified whereby appliances can be held ready for deployment. Such areas should be agreed between the operators and the emergency services.

7 Incident Scenarios

Incident Scenarios should be identified and documented as part of the on-site plan, and reference provided as appropriate from within the tactical fire plan.

8 Foam and Water Supplies

On site water supplies should be identified with off-site supplies identified in the event that on site supplies are exhausted. Off site supplies should be recorded and permissions sought for it's use in the event of an emergency and methods recorded as to what means will be used to extract and deliver such supplies (for example, is access available for supplies to be drawn by High Volume Pumps?).

Foam stocks and type available for use in the event of emergency should be recorded. Availability of replenishing stocks from manufacturers and through mutual aid arrangements should be identified in advance.

9 Appliances and Equipment

A detailed inventory should be drawn up for the fire fighting equipment kept on site, and reference made within the tactical fire plan.

10 Specialist Equipment

Pre plan the type of specialist equipment that may be required in the event of an incident (for example High volume Pumps, rope access kit).

11 Mutual Aid

Look to form partnerships with site operators for the use of their equipment and manpower in the event of an emergency, reference to the statement of intention (refer to appendix 1)

12 Health Issues

Define and ensure adequate systems are in place should personnel require emergency treatment for injuries or health issues caused by the incident.

13 Environmental Concerns

Consider a controlled burn strategy in the event of an oil tank fire. Smoke plumes could result in a risk to public health. Plan for the containment of firewater run-off during an incident and its subsequent disposal.

14 Welfare Arrangements

Definition and establishment of welfare arrangements for all persons on site. Liaise with local authorities for off-site welfare arrangements

15 Incident de-briefing

Define de-briefing requirements - each agency should hold their own debrief of the emergency, with the outcomes of which should be fed into a multi agency debrief.

Appendix 4 Pre and Post Incident Asset Checklist

Pre- Incident Asset Checklist

*Delete as applicable

Asset

Type: Equipment/Foam Stock*
Description: _____

Equipment

Manufacturer: _____
Model Number: _____
Serial Number: _____

Date Purchased: _____

Cost — Invoice Available: Yes/No* — Reference: _____ — Attached: Yes/No*

Maintenance — Records Available: Yes/No* — Reference: _____ — Attached: Yes/No*

Photographs of Equipment — Reference: _____ — Attached: Yes/No*

Foam Stock

Foam Stock

Type: _____
Volume: _____

Date Purchased: _____

Cost — Invoice Available: Yes/No* — Reference: _____ — Attached: Yes/No*

Container

Container Type: _____
Container Condition: _____

Date Purchased: _____

Estimated Cost — Invoice Available: Yes/No* — Reference: _____ — Attached: Yes/No*

Photographs of Container — Reference: — Attached:

Authorisation

Asset Owner		*Requester*	
Name	Signature	Name	Signature
Company	Date	Company	Date

Post- Incident Asset Checklist

*Delete as applicable

Asset

Type: Equipment/Foam Stock*
Description: _____

Equipment

Manufacturer: _____
Model Number: _____
Serial Number: _____

Returned State: Damaged/As Delivered* (If damaged, complete below)

Description of damage: _____

Photographs of Equipment — Reference: _____ Attached: Yes/No*

Action: Repair/Replace*

Quotations — Reference 1: _____ Reference 2: _____ Reference 3: _____ Attached: Yes/No*

Foam Stock

Foam Stock

Type: _____
Volume Used: _____

Replacement Quotation — Reference 1: _____ Reference 2: _____ Reference 3: _____ Attached: Yes/No*

Container

Container Type: _____

Returned State: Damaged/As Delivered* (If damaged, complete below)

Description of damage: _____

Photographs of Container — Reference: _____ Attached: Yes/No*

Action: Repair/Replace*

Quotations — Reference 1: _____ Reference 2: _____ Reference 3: _____ Attached: Yes/No*

Authorisation

Asset Owner		Requester	
Name	Signature	Name	Signature
Company	Date	Company	Date

Appendix 5 Template Agenda – Partner Meeting

<table>
<tr><td rowspan="2"><Mutual Aid Scheme Name></td><td colspan="2">Meeting Agenda</td></tr>
<tr><td>Where:
<Location></td><td>When:
<Time>
<Date></td></tr>
<tr><td colspan="2">Mutual Aid Representatives:</td><td>Chair:</td></tr>
<tr><td colspan="3">Reference:

Agenda_<Mutual Aid Scheme>_ddmmyy</td></tr>
<tr><td colspan="3">Agenda Items

1. Introductions

2. Review of last minutes and actions

3. Review of Membership

4. Training and Competency

a. Review of exercise schedule

b. Next exercise – definition and requirements

c. Review of completed exercises (tool box talks)

d. Review of training and competency needs

5. Tactical Operations

a. Post incident reviews (regionally and nationally)

b. Review significant changes to tactical fire plans

c. Review significant changes to site emergency plans

d. Review of changes to inventory sheets

e. Interface issues with national inventory

6. AOB

7. Confirm date and venue for next meeting</td></tr>
</table>

Annex 15 Schedule 5 – Emergency Plans

Part 1: Objectives of on-site and off-site emergency plans

The objectives referred to in regulations 9(1) and 10(1) are –

1 containing and controlling incidents so as to minimise the effects, and to limit damage to persons, the environment and property;

2 implementing the measures necessary to protect persons and the environment from the effects of major accidents;

3 communicating the necessary information to the public and to the emergency services and authorities concerned in the area;

4 providing for the restoration and clean-up of the environment following a major accident.

Part 2: Information to be included in on-site emergency plan

The information referred to in regulation 9(1) is as follows –

1 names or positions of persons authorised to set emergency procedures in motion and the person in charge of and co-ordinating the on-site mitigatory action;

2 name or position of the person with responsibility for liaison with the local authority responsible for preparing the off-site emergency plan;

3 for foreseeable conditions or events which could be significant in bringing about a major accident, a description of the action which should be taken to control the conditions or events and to limit their consequences, including a description of the safety equipment and the resources available;

4 arrangements for limiting the risks to persons on site including how warnings are to be given and the actions persons are expected to take on receipt of a warning;

5 arrangements for providing early warning of the incident to the local authority responsible for setting the off-site emergency plan in motion, the type of information which should be contained in an initial warning and the arrangements for the provision of more detailed information as it becomes available;

6 arrangements for training staff in the duties they will be expected to perform, and where necessary co-ordinating this with the emergency services;

7 arrangements for providing assistance with off-site mitigatory action.

Part 3: Information to be included in off-site emergency plan

The information referred to in regulation 10(1) is as follows -

1 names or positions of persons authorised to set emergency procedures in motion and of persons authorised to take charge of and co-ordinate off-site action;

2 arrangements for receiving early warning of incidents, and alert and call-out procedures;

3 arrangements for co-ordinating resources necessary to implement the off-site emergency plan;

4 arrangements for providing assistance with on-site mitigatory action;

5 arrangements for off-site mitigatory action;

6 arrangements for providing the public with specific information relating to the accident and the behaviour which it should adopt;

7 arrangements for the provision of information to the emergency services of other Member States in the event of a major accident with possible transboundary consequences.

Annex 16 Schedule 6 Information to be supplied to the public

The information referred to in regulation 14(3) is as follows –

1 name of operator and address of the establishment;

2 identification, by position held, of the person giving the information;

3 confirmation that the establishment is subject to these regulations and that the notification referred to in regulation 6 or the safety report has been submitted to the competent authority;

4 an explanation in simple terms of the activity or activities undertaken at the establishment;

5 the common names or, in the case of dangerous substances covered by Part 3 of Schedule 1, the generic names or the general danger classification of the substances and preparations involved at the establishment which could give rise to a major accident, with an indication of their principal dangerous characteristics;

6 general information relating to the nature of the major accident hazards, including their potential effects on the population and the environment;

7 adequate information on how the population concerned will be warned and kept informed in the event of a major accident;

8 adequate information on the actions the population concerned should take, and on the behaviour they should adopt, in the event of a major accident;

9 confirmation that the operator is required to make adequate arrangements on site, in particular liaison with the emergency services, to deal with major accidents and to minimise their effects;

10 a reference to the off-site emergency plan for the establishment. This should include advice to co-operate with any instructions or requests from the emergency services at the time of an accident;

11 details of where further relevant information can be obtained, unless making that information available would be contrary to the interests of national security or personal confidentiality or would prejudice to an unreasonable degree the commercial interests of any person.

Annex 17 Summary of application of Part 1 of the Civil Contingencies Act and its associated Regulations in Scotland and Wales

Background

1 Details on the specific duties under the Act and how they apply in the Devolved Administrations can be found in Chapters 2 to 8 of the guidance document Emergency Preparedness.

Emergency preparedness in Scotland

2 The Scottish Executive departments are designated as leads on relevant issues in line with the 'lead department' principle at the UK level. In non-devolved areas the Scottish Executive works closely with the UK Government to ensure that Scottish needs are catered for.

3 Overall responsibility for civil protection policy in Scotland sits with the Civil Contingencies Division (CCD) of the Scottish Executive Justice Department. The Scottish Executive chairs the Scottish Emergencies Co-ordinating Committee (SECC), which ensures that steps are taken to respond to the changing risk environment and determines the national strategy for the development of civil protection.

4 At the local level in Scotland, eight strategic co-ordinating groups based on police force areas promote effective planning for all types of incidents in their area, involving risk assessment, making generic and specific emergency plans, engaging with the community, training, testing, exercising and reviewing.

Scottish Executive Justice Department Civil Emergencies website

Emergency preparedness in Wales

5 The Welsh Assembly Government (WAG) or Wales Office, depending on the subject matter, is represented on the key committees and forums within the UK government relating to civil protection. They work closely with UK government departments to ensure that UK civil protection policy and planning is tailored to Welsh needs. A dedicated team in WAG supports multi-agency co-operation in Wales and engagement with the UK Government on issues relating to civil protection and emergency preparedness.

6 As in England, Local Resilience Forums (LRFs) are the principle mechanism for multi-agency co-operation on civil protection issues. The respective Chief Constables presently chair the LRFs in the South Wales, North Wales, Dyfed-Powys and Gwent areas. The Welsh Resilience Forum (WRF) provides a national forum for multi-agency strategic advice on civil protection and emergency planning. The forum meets quarterly and is chaired by the First Minister or the Minister for Social Justice and Regeneration. Risk assessment at a pan-Wales level is undertaken by the Wales Risk Assessment Group (WRAG) reporting to the WRF.

7 A number of other groups provide forums for discussion and co-ordination of civil protection in Wales, including: the Joint Emergency Services Group; the Wales Media Emergency Forum; and the Welsh Borders Resilience Group.

Wales Resilience website The Welsh Assembly Government, emergency services, local authorities, health authorities and other emergency planning organisations work together in partnership to strengthen the resilience of services in Wales.

Annex 18 References to other information sources

1 Recommendations on the emergency preparedness for, response to and recovery from incidents

2 CA operational delivery guide 'COMAH On-site Emergency Planning and Mitigation (DG6)

3 Safety and Environmental Standards for Fuel Storage Sites (Process Safety Leadership Group) Final report

4 Safety Report Assessment Manual

5 CA operational delivery guide 'Assessment of Safety Reports' (DG1b)

6 CA operational delivery guide 'COMAH Off-site Emergency Planning' (DG7b)

7 Cabinet Office 'Emergency Preparedness', Chapter 19, The fit with other legislation

8 Cabinet Office 'Emergency Exercises'

9 Cabinet Office 'Emergency Response and Recovery'

10 Scottish Executive 'Preparing Scotland'

11 Cleveland Emergency Planning Unit 'Testing and Exercising within Cleveland'