		AGENDA ITEM			
		SSC/01/10			
Committee:	Safer and Stronger Communities Policy & Scrutiny Committee				
Date:	14 January 2011				
Scrutiny Review on the Off Site Emergency Planning Requirements around COMAH Sites in Essex					
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In September 2010 (Minute 49) the Committee agreed to pursue the following project with the objective:

'To undertake a scrutiny review of the off site emergency planning requirements around COMAH Sites in Essex'.

The Committee's chosen approach to the review is set out in the attached scoping document at Appendix A, and it will gather evidence in a variety of ways, and from a range of witnesses. *Please note that the work programme for the review has evolved as the planning of the review has moved forward.* 

At today's meeting the following witnesses have been invited to address the Committee about the off site emergency planning requirements that are linked to COMAH Sites, and answer Members' questions accordingly:

- David Johnson, Chief Fire Officer and County Emergency Planning Officer, Essex County Fire and Rescue Service
- Rosanna Briggs, Deputy County Emergency Planning Officer, Emergency Planning Service
- Keith Mead, Health and Safety Manager, Petrochem Carless, will be attending the meeting to answer any generic questions that arise where his professional experience may assist the Committee in understanding the operation and regulation of COMAH sites.

By way of background information a briefing paper has been commissioned from the Chief Fire Officer and County Emergency Planning Officer, and is attached to this report. The COMAH regulations are intended to protect communities and the environment from the effects of a major accident at specific sites. The Regulations are themselves relatively straight forward in their provisions however, when accompanied by their associated guidance produced by the Health and Safety Executive they extend to some 140 pages. In his briefing paper the Chief Fire Officer has sought to provide salient points in response to the Committee's questions as set in the scoping document for the scrutiny review, and has included more detailed information within the appendices accompanying the paper.

At the Committee's next meeting on 11 February 2011 a number of witnesses are in the process of being invited to present their evidence in respect of the off site emergency requirements around COMAH Sites.

Please note that the evidence obtained from witnesses at this meeting will be collated into a separate report together with evidence obtained from other witnesses for consideration by the Committee at a future meeting. The evidence will not be set out in detail in the Minutes of the meeting.

### **Action required by the Committee:**

The Committee is requested to consider the evidence presented to the meeting, and to identify any particular questions that Members may wish to pose to witnesses as part of this review.

## **Policy and Scrutiny Scoping Document**

Committee	Safer and Stronger Communities Policy and Scrutiny Committee				
Topic	Review of COMAH (Control of Major Accident Hazards) sites				
Objective	To undertake a scrutiny review of the off site emergency planning requirements around COMAH sites in Essex.				
Reasons for undertaking review	The Scrutiny Board has referred this topic to the Committee on behalf of Councillor Howard who had submitted a request from the Canvey Island Neighbourhood West Meeting that the County Council consider its concerns about safety in respect of two 'Top Tier' COMAH Sites on Canvey Island. The Committee agreed to look into the matter at its meeting in June 2010 (Minute 33).  Within the County Council's boundaries there are a total of five top tier COMAH sites. Therefore the Committee will investigate how COMAH sites are regulated, and the steps that have been taken to safeguard communities for the purposes of emergency planning in Essex.				
Method  Initial briefing to define scope Task & Finish Group Commission Full Committee	The full Committee will undertake this scrutiny review using a variety of methods to gather evidence including site visits to COMAH sites, interviewing witnesses, and cross examining witnesses at its meeting in November 2010. A briefing paper will be commissioned to address the issues set out below in the list of 'Issues to be addressed' in order to assist the Committee to develop its investigation within the parameters identified for the review.				
Membership  Only complete if Task  and Finish Group or  Commission	Full Committee				

### Issues to be addressed

What are COMAH Sites? What categories of site are there?

What are the requirements for planning for an emergency at a COMAH site, and how have those requirements been addressed in Essex?

What measures are taken at a local level to prepare and safeguard those communities that lie close to COMAH Sites in the case of a safety incident?

How does Essex County Council liaise with neighbouring local authorities, including Thurrock Council?

What are the main implications of the Buncefield Inquiry?

In the original request for a scrutiny review as set out in a letter dated 17 June 2010 from the Co-ordinator of the Canvey Island West Neighbourhood Meeting, reference was made to an incident at the Calor Gas site on Canvey Island:

- What were the main features of that incident, and what were the outcomes?
- What do the references to 'self regulation' mean, and how have concerns that it does not work been addressed?
- The County Council has been urged to consider the need for a safe siting policy to be adopted. What does this mean in practice?

# Sources of Evidence and witnesses

Initially a briefing paper will be commissioned to provide the Committee with an overview of the topic prior to gathering some evidence on COMAH Sites through site visits that will be taken by Members prior to its meeting in November 2010.

At its meeting on 19 November 2010 the full Committee will receive a briefing on COMAH and cross examine witnesses who will include the Chief Fire Officer and Deputy County Emergency Planning Officer.

Provision will also be made for the Committee to receive evidence from other witnesses including:

 Councillor Howard, who referred the matter to the Committee for scrutiny review, will be invited to address the Committee

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	as a witness,				
	<ul> <li>a representative of the Canvey Island Neighbourhood Wes Meeting and Mr G Whatley, who originally raised concerns about the regulation of COMAH sites,</li> </ul>				
	Health and Safety Executive,				
	Environment Agency,				
	<ul> <li>Emergency Planning initiatives within the Community to raise safety awareness,</li> </ul>				
	and any other technical expertise that the Committee may require.				
Work Programme	September 2010: The Chairman and Vice-Chairman will visit a COMAH Site at Foulness Island at the beginning of September, and will provide some initial feedback on that visit at the Committee meeting in September.				
	October 2010: Committee Members will be given the opportunity to visit some COMAH sites in Essex.				
	October/ November 2010: The Committee will seek evidence from a variety of witnesses.				
	November 2010: At the Committee's formal meeting on 19 November 2010, it will consider the evidence it has gathered and cross examine witnesses so that it may develop its conclusions for inclusion in a draft Scrutiny Report.				
	January/ February 2011: The Committee will consider its final Scrutiny Report together with any recommendations that it may identify.				
Indicators of Success	To be completed				
Meeting the CfPS Objectives	The Committee will act as a critical friend to the Executive by reviewing the Council's responsibilities in the regulation of COMAH Sites.				
Critical Friend     Challenge to     Executive	As part of its investigations, the Committee will consider public concerns and reflect upon those concerns in reaching its				

<ul> <li>Reflect Public voice and concerns</li> <li>Own the scrutiny process</li> <li>Impact on service delivery</li> </ul>	conclusions.  The Committee will be fulfilling its role as a scrutiny champion in response to concerns that have been drawn to its attention on the regulation of COMAH Sites.			
Diversity and Equality  Diversity and Equality issues are to be considered and addressed.	If any Diversity and Equality issues are identified during the course of review, they will be taken into consideration as appropriate			
Date agreed by Committee				
Future Action				
Governance Officer	Christine Sharland	Committee Officer	Matthew Waldie	
Service Lead Officer(s)	David Johnson, Chief Fire Officer  Rosanna Briggs, Deputy County Emergency Planning Officer			

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Safer and Stronger Communities Policy and Scrutiny Committee

Review of COMAH (Control of Major Accident Hazard) sites

Prepared by;

Mr David Johnson

**Chief Fire Officer & Chief Executive** 

**Essex County Fire and Rescue Service** 

Head of Emergency Planning on Behalf of Essex County Council

### 1. What are COMAH Sites? What categories of site are there?

In responding to this question and to generally aid this scrutiny process I thought it may be useful to also provide some background information in respect of the origins of the Regulations

(the following is an extract from the HSE document 'A Guide to the Control of Major Accident Hazards Regulations 1999')

It has been recognised for many years that certain industrial activities involving dangerous substances have the potential to cause accidents. Some of these accidents may give rise to serious injury to people or damage to the environment both close to, and further away from, the site of the accident. Such activities have come to be known as major accident hazards.

### Flixborough

In Great Britain, the approach to major hazards was profoundly influenced by a disastrous explosion at a chemical plant at Flixborough in 1974. The plant was destroyed, 28 workers were killed and there was extensive damage to property off site. Following that accident, a committee of experts, the Advisory Committee on Major Hazards, was appointed by the Health and Safety Commission to consider the problems of major accident hazards and make recommendations.

(a) identification of the sites;(b) control measures to prevent major accidents; and(c) mitigatory measures to limit the effects of any accidents which do occur.

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They proposed a three-part strategy:

### **Europe**

A number of major accidents occurred in Europe during the 1970s, the most significant of which took place in Seveso, Italy, in 1976. Here, the accidental production and release of a dioxin as an unwanted by-product from a runaway chemical reaction led to widespread contamination.

Such incidents, and the recognition of the differing standards of controls over industrial activities within the European Community, led the European Commission to propose a Directive on the control of major industrial accident hazards. The three-part strategy proposed in the UK was highly influential in shaping the Directive.

The Directive on the Major Accident Hazards of Certain Industrial Activities (82/501/EEC) was adopted on 24 June 1982, and is generally known as the Seveso Directive. It was implemented in Great Britain by the 1984 CIMAH Regulations.

Later, the European Commission undertook a complete review of the Directive and, as a result of this, published a completely new one, now known as Seveso II.

#### The Seveso II Directive

The Seveso II Directive retained the basic principles of major accident hazard controls set out in the original Seveso Directive but addressed some weaknesses and omissions.

The new Directive followed a review carried out by the European Commission in conjunction with the Committee of Competent Authorities for the Seveso Directive (made up of representatives of all Member States' governmental bodies enforcing the Seveso Directive).

It came into force on 3 February 1997 and was implemented in Great Britain on 1 April 1999 by the COMAH Regulations, except for land-use planning requirements which were implemented by changes to planning legislation.

The Regulations were amended from 30 June 2005 to reflect changes to Seveso II. This brief guide outlines the main duties and explains what you need to do if the Regulations apply.

Their main aim is to prevent and mitigate the effects of those major accidents involving dangerous substances, such as chlorine, liquefied petroleum gas, explosives and arsenic pentoxide which can cause serious damage/harm to people and/or the environment. The COMAH Regulations treat risks to the environment as seriously as those to people.

#### Who is affected?

Mainly the chemical industry, but also some storage activities, explosives and nuclear sites and other industries, where <u>threshold quantities of dangerous substances identified in the Regulations are kept or used.</u>

The substances which cause the duties to apply are detailed in Schedule 1 of the Regulations as are the quantities which set the two thresholds for application.

Operators of sites that hold larger quantities of dangerous substances ('top tier' sites) are subject to more onerous requirements than those of 'lower tier' sites.

# 2. What are the requirements for planning for an emergency at a COMAH site, and how have those requirements been addressed in Essex?

There are two requirements when planning for an emergency within the Regulations and these refer to on-site and off-site planning. In respect of **on-site** planning the regulations state the following;

Regulation 9(1) Every operator of an establishment shall prepare an emergency plan (in these Regulations referred to as an "on-site emergency plan") which shall be adequate for securing the objectives specified in Part 1 of Schedule 5 and shall contain the information specified in Part 2 of that Schedule.

HSE guidance states the following;

Operators of top-tier sites must prepare adequate 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, such as catastrophic vessel failure.

The Regulations go on to state;

9(4) The operator shall consult the local authority in whose area the establishment is situated on the preparation of an on-site emergency plan, except this shall not apply where the local authority has been exempted from the requirement to prepare an off-site emergency plan in respect of the establishment pursuant to regulation 10(7).

HSE guidance continues;

For establishments for which the local authority is required to produce an off-site emergency plan under regulation 10(1) (and which have not been exempted from this requirement by regulation 10(7)), 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 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.

Full details of the regulations and HSE guidance relating to on-site planning can be found at appendix 1

Regulation 10 refers to off-site planning requirements and states;

(1) The local authority, in whose area there is an establishment, shall prepare an emergency plan (in these Regulations referred to as an "off-site emergency plan") in respect of that establishment, and such a plan shall be adequate for securing the objectives specified in Part 1 of Schedule 5 and shall contain the information specified in Part 3 of that Schedule.

HSE guidance goes on to state;

The local authority for the area where a top-tier establishment is located must prepare an adequate emergency plan for dealing with the off-site consequences of possible major accidents. As with the on-site plan, it should be in writing.

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 proportional to the probability and consequences of the accident occurring.

Full details of the Regulations and HSE guidance in respect of off-site planning are set out at appendix 2, the key requirements of the regulations however are;

- The 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
- Priority will need to be given to remedial measures which would prevent or mitigate further damage to the environment or indirectly to human health.
- 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.
- 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 agencies
- Longer-term restoration plans need to consider what action is required to restore
  the environment. This might include re-introducing species, and repairing
  damaged parts of the built environment (for example, buildings of special
  architectural or historic interest, ancient monuments and architectural areas).
- The plan should also consider possible effects on the food chain, ie through the contamination of crops or grazing land

 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.

# 3. What measures are taken at a local level to prepare and safeguard those communities that lie close to COMAH Sites in the case of a safety incident?

In the event of an emergency one of the most important aspects of public safety is the provision of information to those who may be effected, particularly the provision of information in advance of an emergency ever having taken place.

The provision of information is a specific requirement placed on the operators of a COMAH site and is covered by Regulation 14 which is extensive in the duties that it imposes. The specific regulations and associated HSE guidance are set out at appendix 3 however in summary they require an operator to ensure that within an area identified by the Competent Authority, that being an area which in their opinion would likely be effected by an emergency at the operator's establishment, to ensure

- every person who is likely to be in an area, and
- every school, hospital or other establishment serving the public which is situated in such area.

is supplied regularly with information, in the most appropriate form and without their having to request it, on safety measures at the establishment and on the requisite behaviour in the event of a major accident at the establishment; and to make that information permanently available to the public. The Regulations go on to specify the minimum information that is to be included.

This area is known as the public information zone (PIZ) which is determined 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.

The PIZ does not cover areas where a major accident might cause only environmental damage. 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.

Operators have to be proactive in providing this information, i.e. 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. This will include people passing through the area, for example people in vehicles and people who are visiting other premises within the PIZ such as shops and leisure centres. The duty extends to premises liable to be affected by a major accident so that those in charge of them can take the necessary action in respect of their employees and visitors in the event of a major accident.

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. 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 competent authority and local authority.

A number of operators now offer a free text messaging service providing advice, guidance and information in the event of an emergency.

Operators must consult the local authority when preparing information for the public. The value of this practice has been well demonstrated, and it should ensure that best use is made of local knowledge and expertise in communicating with 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 authority(ies)

The operator must review and as necessary revise the information provided every three years and must re-issue the information every five years or sooner if it is revised.

Emergency Planning cater for communications in the event of an emergency by ensuring that details of suitable contacts who can be used to deliver a public safety message (such as local radio stations) are included within the off-site plan. The emergency services also have extensive communication networks available for providing up to date information.

ECC Emergency Planning function has recently piloted a new initiative on Canvey Island proactively delivering a comprehensive safety message to schools on the Island setting out the actions to be taken in the event of an emergency.

The project entitled 'What if' was hugely successful and it is now intended to role this out county-wide in partnership with Essex County Fire and Rescue Service. Further details of this project are set out at appendix 4

## 4. How does Essex County Council liaise with neighbouring local authorities, including Thurrock Council?

[It is assumed that this is in respect of COMAH sites and not emergency planning generally].

Essex County Council has a contract for services with Thurrock and Southend Councils Under which ECC staff produce the COMAH off-site plans on their behalf and charge back reasonably incurred costs.

In addition to this The Head of Emergency Planning chairs the Local Authority Working Group (LAWG) which draws together district and unitary emergency planners on a regular basis to discuss relevant issues, Thurrock participate in this forum.

The Essex Resilience Forum also creates a platform for all category one responders to come together for emergency planning purposes under the Civil Contingencies Act.

### 5. What are the main implications of the Buncefield Inquiry?

'Early on Sunday 11 December 2005, a series of explosions and subsequent fire destroyed large parts of the Buncefield oil storage and transfer depot, Hemel Hempstead, and caused widespread damage to neighbouring properties.

The main explosion took place at 06.01:32 hours and was of massive proportions. It was followed by a large fire that engulfed 23 large fuel storage tanks over a high proportion of the Buncefield site. The incident injured 43 people.

Fortunately, no one was seriously hurt and there were no fatalities. Nevertheless, there was significant damage to both commercial and residential properties near the Buncefield site. About 2000 people had to be evacuated from their homes and sections of the M1 motorway were closed. The fire burned for five days, destroying most of the

site and emitting a large plume of smoke into the atmosphere that dispersed over southern England and beyond.'1

Buncefield was a catastrophe on a unique scale and represented the largest peace-time fire in post war Europe. Recommendations arising from the report were far-reaching and covered areas from design of sites to land planning requirements and emergency preparedness.

It would not be practical to go into all recommendations from the subsequent investigation as many would not be relevant and the subsequent investigation stretched to three volumes. One element of the investigation was however focussed on recommendations arising in respect of emergency preparedness and response (EPRR).<sup>2</sup>

Recommendations from the EPRR element of the final report fell into a number of different categories and for ease these have been separated into those affecting 'Buncefield type sites' those relevant to COMAH sites and those relevant to emergency planning. A number were relevant to central government departments and have thus not been included.

Appendix 5 categorises those recommendation which placed outcomes on site occupiers, the Competent Authority, emergency planners and emergency services. For ease these have been summarised into generic bulleted actions.

It was recommended that site occupiers

- revise and review onsite plans,
- review emergency arrangements including the reassessment of 'credible scenarios'
- evaluate the siting of emergency equipment
- provide protection for emergency resources (such as pumping stations)
- Indentify vulnerable emergency response resources
- Work more closely with emergency services
- Review arrangements for communicating with residents and businesses

#### **COMAH Sites**

• The CA should review COMAH guidance on preparing on-site emergency plans

<sup>&</sup>lt;sup>1</sup> Buncefield Major Accident Investigation Final Report Volume 2

<sup>&</sup>lt;sup>2</sup> Recommendations on the Emergency Preparedness for, Response to and Recovery from incidents' (EPRR)

• The CA should review its guidance to operators on communicating with residents and businesses

### **Emergency Planning**

- Review recovery arrangements
- COMAH emergency arrangements should be integrated with the Civil Contingencies Act
- Local Authorities should review off-site emergency response plans for COMAH sites
- Off-site plans should consider the welfare needs of emergency responders
- Local Authorities should identify the facilities, resources and actions that are critical to successfully responding to an emergency
- COMAH plans are tested within 12 months of production

Essex County Council's progress against the relevant recommendations is set out at appendix 6

- 6. In the original request for a scrutiny review as set out in a letter dated 17
  June 2010 from the Co-ordinator of the Canvey Island West Neighbourhood
  Meeting, reference was made to an incident at the Calor Gas site on
  Canvey Island:
  - i. What were the main features of that incident, and what were the outcomes?

An uncontrolled leak of approximately 163 tonnes of liquified petroleum gas (LPG) occurred on-site. The leak happened while a ship was unloading gas to the site early on 27 October 2008. The gas, which is stored in a liquid form, escaped from a pipe when an over-pressure safety device operated. The liquid evaporated on contact with the ground, forming a vapour cloud above the site.

LPG quickly forms an extremely flammable and explosive vapour when released into the atmosphere. In its vapour form, LPG can have a volume of up to 250 times that of its liquid form and can cause asphyxiation. If ignited, it can result in a serious explosion and fire.

Due to the large quantities of LPG stored at the site, the site is subject to the Control of Major Accident Hazards Regulations 1999.

A sensor, which is designed to detect leaks of LPG, raise the alarm and shut the emergency valves, **failed to operate** - allowing the release to continue unchecked.

Even when an employee eventually discovered the leak, no site emergency alarms were sounded. The company also failed to report the incident to HSE forthwith.

The gas cloud dissipated to atmosphere without ignition or injury to any staff or members of the public

The HSE's investigation into the incident found that Calor Gas Ltd had failed to provide effective measures to prevent the leak, and had failed to respond properly to the emergency when the incident occurred - including reporting to the HSE in good time, as a consequence of the leak the HSE prosecuted Calor Gas Ltd, who admitted breaching Regulation 4 of Control of Major Accident Hazards (COMAH) Regulations 1999 and Regulation 3(1) (e) Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 1995.

Calor Gas Ltd were fined £27,500 with £27,185 costs.

### The incident remained on-site and as such the off-site plan was not activated.

ii. What do the references to 'self regulation' mean, and how have concerns that it does not work been addressed?

It is unclear what is meant by the use of the term 'Self-Regulation' in this instance. All COMAH sites come within the jurisdiction of the 'Competent Authority'.

The COMAH Regulations are enforced by a competent authority (CA) which is comprised of three organisations

- the Health Safety Executive (HSE),
- the Environment Agency (EA for England and Wales) and
- the Scottish Environmental Protection Agency (SEPA).

These three organisations are responsible for the enforcement of the Control of Major Accident Hazard (COMAH) Regulations.

The CA operates to a Memorandum of Understanding which sets out the arrangements for joint working.

The Regulations place duties on the CA to inspect activities subject to COMAH and prohibit the operation of an establishment if there is evidence that measures taken for prevention and mitigation of major accidents are seriously deficient. It also has to examine safety reports and inform operators about the conclusions of its examinations within a reasonable time period.

# iii. The County Council has been urged to consider the need for a safe siting policy to be adopted. What does this mean in practice?

It is unclear what is actually meant by a 'safe-siting policy', in view of the nature of the letter sent to Cllr Howard regarding the Calor site on Canvey Island it has been assumed that in this context it refers to the location of COMAH sites.

The construction of new sites is dealt with through the normal planning process and planning officers would take into consideration the proximity of any proposed site to, for example, domestic housing, water courses, other know risks etc.

In addition a number of planning policies, such as PPS 25 require developers and local authorities to assess risk to a proposed development from flooding.

Building regulations and planning policies are not retrospective and thus do not apply to existing sites as they currently are. Any further development would be controlled by existing legislation.

The MIIB considered numerous aspects of the land use and planning issues as part of the investigation and for information purposes recommendations from this element of the final report have been included at appendix 7

### **Appendix 1**

**HSE Guidance and regulations for on-site planning requirements** (extract from HSE publication)

### **Objectives**

Part 1 of Schedule 5 details the objectives of on-site and off-site emergency plans. 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:

- (a) 'people' includes all those who may be on site at any time, such as operatives, supervisors, managerial staff, non-production staff, contract workers and visitors;
- (b) 'environment' comprises built features, air, water, soil, flora and fauna, including those with protected, designated or controlled status, such as controlled waters, any sensitive land within the site boundaries, protected buildings and monuments, protected ecological species, and protected habitats or designated areas. If any of these features are found within the boundary of the establishment and could be affected by a major accident they should be considered by the emergency plan; and
- (c) 'property' to be considered in the development of the on-site emergency plan includes hazardous process plant and storage plant, along with those buildings with a function particularly related to safety or protection of the environment, such as control rooms.

The objectives 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 environment agency, the health authority and the water companies/authorities.

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. Even where a major accident has no potential for off-site consequences, there are considerable benefits in keeping those in the vicinity of the establishment informed about what is happening.

The on-site emergency plan details the roles that those who work on 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 dovetail 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.

The objectives include providing for the restoration and clean-up of the environment after a major accident. The plan should describe the arrangements for restoration of the environment after an accident, taking account of the particular environmental hazards associated with the activities at the establishment. It should also consider possible knock-on effects on the food chain, for example through the contamination of crops or grazing land.

- (2) The on-site emergency plan shall be prepared -
- (a) in the case of an existing establishment where the industrial activity carried on there was, immediately before the coming into force of these Regulations, subject to the requirements of regulation 10 of the 1984 Regulations, by 3 February 2001;
- (b) in the case of any other existing establishment, by 3 February 2002;
- (c) in the case of an establishment which has not started to operate, before it starts to operate;
- (d) in any other case, without delay but at all events within 1 year after the establishment becomes subject to this regulation.

The references to existing establishments are now irrelevant as the time provisions are now spent. Operators of establishments which become top-tier COMAH sites due to an increase in inventory must prepare their plans before they begin operation (regulation 2(6) makes the start of operation to be the date when the top-tier threshold is exceeded).

Operators of establishments which become top-tier due to:

- (a) a change in the CHIP classification of a substance which means an existing quantity then exceeds the threshold;
- (b) a change to a qualifying quantity in Schedule 1;
- (c) a change in knowledge of dangerous substances generated during loss of control of an industrial chemical process;

must prepare their on-site emergency plans as quickly as possible but no later than 12 months from the date when regulation 9 first applies.

- (3) The operator shall consult -
- (a) persons working in the establishment;
- (b) the Agency;
- (c) the emergency services; and
- (d) the health authority for the area where the establishment is situated;

on the preparation of the on-site emergency plan.

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. Consultation with employees and with contract staff may either be directly or through appropriately appointed employee representatives (see 'Notes on the COMAH Regulations' on page 1).

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. This will include ensuring that arrangements are in place with acute hospital trusts and other trusts responsible for managing primary and community care, for the treatment of any casualties that may arise. It will also include determining, where appropriate, the most suitable holding locations for supplies of up-to-date stocks of antidotes.

The 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 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.

### Statutory duty in respect of on-site planning

### On-site emergency plan

- **9.** (1) Every operator of an establishment shall prepare an emergency plan (in these Regulations referred to as an "on-site emergency plan") which shall be adequate for securing the objectives specified in Part 1 of Schedule 5 and shall contain the information specified in Part 2 of that Schedule.
  - (2) The on-site emergency plan shall be prepared -
    - (a) in the case of an existing establishment where the industrial activity carried on there was, immediately before the coming into force of these Regulations, subject to the requirements of regulation 10 of the 1984 Regulations, by 3 February 2001;
    - (b) in the case of any other existing establishment, by 3 February 2002;
    - (c) in any other case, before the establishment starts to operate.
  - (3) The operator shall consult -
    - (a) persons employed in the establishment:
    - (b) the Agency;
    - (c) the emergency services; and
    - (d) the health authority for the area where the establishment is situated;

on the preparation of the on-site emergency plan.

(4) The operator shall consult the local authority in whose area the establishment is situated on the preparation of an on-site emergency plan, except this shall not apply where the local authority has been exempted from the requirement to prepare an off-site emergency plan in respect of the establishment pursuant to regulation 10(7).

### Appendix 2

The Regulations and HSE guidance in respect of off-site planning are set out at (extract from HSE guidance)

The objectives given in Part 1 of Schedule 5 also cover off-site emergency plans. Consideration must be given to the potential off-site consequences to people, the environment and property (see paragraph 238) and how to assist with on-site mitigatory action.

The objectives include provision for the restoration and 'clean up' of the environment following a major accident. In accordance with the guidance on regulation 4 (see paragraph 122) operators must take appropriate measures or arrange for them to be taken. 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.

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. Priority will need to be given to remedial measures which would prevent or mitigate further damage to the environment or indirectly to human health.

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.

Remedial measures might include, for example, restricting access to contaminated areas; neutralising, removing and disposing of chemical contaminants; and removing dead animals, plants or contaminated soil or parts of the built environment. 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 agencies.

Longer-term restoration plans need to consider what action is required to restore the environment. This might include re-introducing species, and repairing damaged parts of the built environment (for example, buildings of special architectural or historic interest, ancient monuments and architectural areas). Part of the process should be to review the effectiveness and extent of the restoration and to revise the approach if needed. This implies a need for monitoring recovery of damaged areas or ones that have deteriorated.

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.

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.

- (2) The off-site emergency plan shall be prepared no later than 6 months (or such longer period, not exceeding 9 months, as the competent authority may agree in writing) after -
- (a) the receipt by the local authority of a notice from the competent authority informing the local authority of the need to prepare an off-site emergency plan in respect of the establishment;
- (b) the time an on-site emergency plan is required to be prepared for the establishment pursuant to regulation 9; or
- (c) the receipt by the local authority of the information referred to in paragraphs (3) and (5);

whichever is later.

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.

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.

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. 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.

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. 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.

- (3) An operator shall supply to the local authority in whose area the establishment is situated the information necessary for the purpose of enabling the authority to prepare the off-site emergency plan.
- (4) The information referred to in paragraph (3) shall be supplied no later than the time an on-site emergency plan is required to be prepared for the establishment pursuant to regulation 9.

The local authority cannot prepare an off-site emergency plan for an establishment without obtaining 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 must provide this information by the date on which the on-

site plan has to be prepared to comply with regulation 9(2) and should also ensure that any information supplied to the local authority is updated as necessary in the light of any other changes.

Some sites may be designated by the competent authority 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.

COMAH establishments designated as domino sites must exchange information to enable them to take account of the overall hazard in their:

- (a) major accident prevention policy documents;
- (b) safety reports;
- (c) on-site emergency plans; and
- (d) information supplied to the local authority for the preparation of off-site emergency plans.

More information on domino sites can be found in the guidance on regulation 16.

(5) The operator shall supply to the local authority any additional information it may reasonably request in writing to enable the off-site emergency plan to be prepared, and the information shall be so provided within such period as the local authority specifies in the request.

The local authority may ask the operator for additional information, in which case the sixmonth period of regulation 10(2) starts from receipt of the additional information. The additional information requested must be relevant to the requirements of those preparing the off-site emergency plan.

(6) The local authority shall consult the operator, the competent authority, the Agency, the emergency services, each health authority for the area in the vicinity of the establishment and such members of the public as it considers appropriate on the preparation of the off-site emergency plan.

Local authorities 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 Home Office's publication *Emergency response* and recovery10 and the former Scottish Office's *Dealing with disasters together*11 contain guidelines for local authorities, emergency services and others. These highlight the importance of a combined response, from all agencies involved, ie integrated arrangements for emergency management.

The 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 competent authority. For this reason the Agency is a separate named statutory consultee on the preparation of the off-site emergency plan. This distinction reflects the different objectives and timetables for these consultations. The Agency is normally consulted early and regularly during the development of the off-site plan to dovetail its response with the local authority. The competent authority is consulted to assess the regulatory sufficiency of the off-site plan.

The off-site plan must dovetail with the on-site emergency plan and the local authority will need to consult closely with the operator.

It will be necessary to consult the appropriate health authorities. They have a responsibility to contribute to safeguarding the public health of the population within their geographical area. They are required by NHS guidelines to have in place appropriate plans and arrangements to respond to non-communicable environmental hazards, such as a chemical release. It is therefore important for them 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. The health authorities will themselves also consult, or facilitate consultation with, the appropriate hospital and emergency units and acute hospital trusts. Hospitals, accident and emergency departments and other trusts responsible for managing primary and community care within the vicinity of the establishment need, wherever possible, to be aware in advance of the possibility of dealing with, and treating, large numbers of people or casualties requiring symptomatic or special treatment.

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.

The local authority must also consult the public when preparing the off-site emergency plan. This could include:

- (a) consultation with elected councillors at county, borough or parish level (or equivalents); or
- (b) consultation with specially established groups representing residents in the vicinity of the site.

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.

- (7) The competent authority may in view of the information contained in a safety report exempt a local authority from the requirement to prepare an off-site emergency plan in respect of an establishment, and any such exemption shall be in writing and state the reasons for granting it.
- (8) Where an exemption has been given under paragraph (7), the local authority shall, for the purposes of these Regulations and while the exemption is in force, have no function in relation to the preparation, review, testing and putting into effect of an off-site emergency plan for the establishment concerned.

The decision to exempt a local authority from the duty to prepare an off-site emergency plan for an establishment lies with the competent authority. An exemption will normally only be considered following a formal request including reasons. In principle, anyone could 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 competent authority 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. The criteria to be used in reaching the decision will be the same as those used for the purposes of regulation 7(12). For further information on these criteria see paragraph 206 and Appendix 1.

#### Statutory Duty in respect of off-site emergency plan

**10.**(1) The local authority, in whose area there is an establishment, shall prepare an

emergency plan (in these Regulations referred to as an "off-site emergency plan") in respect of that establishment, and such a plan shall be adequate for securing the objectives specified in Part 1 of Schedule 5 and shall contain the information specified in Part 3 of that Schedule.

- (2) The off-site emergency plan shall be prepared no later than 6 months (or such longer period, not exceeding 9 months, as the competent authority may agree in writing) after -
  - (a) the receipt by the local authority of a notice from the competent authority informing the local authority of the need to prepare an off-site emergency plan in respect of the establishment;
  - (b) the time an on-site emergency plan is required to be prepared for the establishment pursuant to regulation 9; or
  - (c) the receipt by the local authority of the information referred to in paragraphs (3) and (5);

#### whichever is later.

- (3) An operator shall supply to the local authority in whose area the establishment is situated the information necessary for the purpose of enabling the authority to prepare the off-site emergency plan.
- (4) The information referred to in paragraph (3) shall be supplied no later than the time an on-site emergency plan is required to be prepared for the establishment pursuant to regulation 9.
- (5) The operator shall supply to the local authority any additional information it may reasonably request in writing to enable the off-site emergency plan to be prepared, and the information shall be so provided within such period as the local authority specifies in the request.
- (6) The local authority shall consult the operator, the competent authority, the emergency services, each health authority for the area in the vicinity of the establishment and such members of the public as it considers appropriate on the preparation of the off-site emergency plan.
- (7) The competent authority may in view of the information contained in a safety report exempt a local authority from the requirement to prepare an off-site emergency plan in respect of an establishment, and any such exemption shall be in writing and state the reasons for granting it.
- (8) Where an exemption has been given under paragraph (7), the local authority shall, for the purposes of these Regulations and while the exemption is in force, have no

function in relation to the preparation, review, testing and putting into effect of an off-site emergency plan for the establishment concerned.

### Review and testing of emergency plans

- **11.**(1) A person who has prepared an emergency plan pursuant to a duty imposed on him by these Regulations shall at suitable intervals not exceeding three years -
  - (a) review and where necessary revise the plan; and
  - (b) test the plan and take reasonable steps to arrange for the emergency services to participate in the test to such extent as is necessary,

and any such review shall take into account changes occurring in the establishment to which the plan relates and within the emergency services concerned, new technical knowledge, and knowledge concerning the response to major accidents.

(2) The local authority shall endeavour to reach agreement with the operator and the emergency services as to how the off-site emergency plan is to be tested.

### Implementing emergency plans

- **12.** A person who has prepared an emergency plan pursuant to a duty imposed on him by these Regulations shall take reasonable steps to put it into effect without delay when -
  - (a) a major accident occurs; or
  - (b) an uncontrolled event occurs which could reasonably be expected to lead to a major accident.

#### Charge for preparation, review and testing of off-site emergency plan

- **13.** (1) A local authority may charge the operator a fee for performing its functions under regulations 10 and 11.
- (2) The fee shall not exceed the sum of the costs reasonably incurred by the local authority in performing the functions referred to in paragraph (1) in relation to the establishment concerned, including (but without prejudice to the generality of the foregoing provision of this paragraph) any costs reasonably incurred by the local authority in arranging for the emergency services to participate in the testing of the offsite emergency plan.
- (3) When requiring payment the local authority shall send or give to the operator a detailed statement of the work done and costs incurred including the dates of any visits to the establishment and the period to which the statement relates; and the fee, which shall be recoverable only as a civil debt, shall become payable one month after the statement has been sent or given.

### Appendix 3

# Regulation 14 Provision of Information by the Operator and associated HSE guidance

#### PART 5: PROVISION OF INFORMATION BY OPERATOR

- (1) The operator of an establishment shall -
  - (a) ensure that -
    - (i) every person who is likely to be in an area referred to in paragraph (2); and
    - (ii) every school, hospital or other establishment serving the public which is situated in such area,

is supplied regularly and in the most appropriate form, without their having to request it, with information on safety measures at the establishment and on the requisite behaviour in the event of a major accident at the establishment; and

- (b) make that information permanently available to the public.
- (2) An area referred to in paragraph (1) is an area notified to the operator by the competent authority as being an area in which, in the opinion of the competent authority, persons are liable to be affected by a major accident occurring at the establishment.
- (3) The information referred to in paragraph (1) shall contain at least the information specified in Schedule 6.

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. The competent authority 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 competent authority 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.

The PIZ does not cover areas where a major accident might cause only environmental damage. 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.

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. This will include people passing through the area, for example people in vehicles and people who are visiting other premises within the PIZ such as shops and leisure centres. The duty extends to premises liable to be affected by a major accident so that those in charge of them can take the necessary action in respect of their employees and visitors in the event of a major accident.

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. 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 competent authority and local authority.

The information which must be provided is detailed in Schedule 6 but this is the minimum information and operators are free to provide more if they wish. The extent and degree of detail of information supplied will vary according to the circumstances of each case. It should be written in straightforward and simple terms, avoiding the use of complicated technical expressions. A clear explanation should be given for all technical terms where their use is considered necessary. The information should be readily understood by lay readers.

Some information will be vital in an accident, so operators should make every effort to hold the readers' interest and help them remember the advice, for example by highlighting key items and using illustrations. It is important to get this message across to children as well as adults.

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 it could include a durable card giving an illustrated summary of safety instructions. The public should be advised to keep this readily available in the event of an emergency. It could also be kept displayed alongside other emergency instructions in workplaces or places to which the public has access.

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 but possible options include displaying it at the major hazard establishment(s) or, subject to agreement, in public libraries or town halls. It should be available in a reasonable form and at reasonable times.

The information is required to be permanently available to the public but this is not the same as continuously available. Information posted outside the establishment would be both permanently and continuously available but it could be made available at certain times, for example normal office hours. Permanently means that the information never becomes unavailable. Operators and local authorities are encouraged to publicise its availability.

(4) In preparing the information required to be supplied in accordance with paragraph (1), the operator shall consult the local authority in whose area the establishment is situated and such other persons who appear to him to be appropriate, but the operator shall remain responsible for the accuracy, completeness and form of the information so supplied.

Operators must consult the local authority when preparing information for the public. The value of this practice has been well demonstrated, and it should ensure that best use is made of local knowledge and expertise in communicating with 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 authority(ies)/Scottish health board(s).

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

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

(5) Without prejudice to his duty under paragraph (1), the operator shall endeavour to enter into an agreement with the local authority in whose area the establishment is situated for that local authority to disseminate the information required to be supplied in accordance with that paragraph to the persons mentioned in it.

Operators should try to reach agreement with their local authority, as defined in regulation 2, to distribute the public information within the PIZ. The consultation required by regulation 14(4) should prepare the way for such an agreement. The agreement should be formalised, and should cover everything relevant to the distribution of the information.

This includes the area and method of distribution, including any special arrangements for certain premises such as workplaces, multi-occupied dwellings or places used by the public such as shops and hotels and the timing of the distribution. 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 recoverable from, the operator. If agreement cannot be reached, the operator will have to disseminate the information.

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.

- (6) The operator shall review and where necessary revise the information referred to in paragraph (1) -
  - (a) at intervals not exceeding 3 years; or
  - (b) in the event of a modifycation referred to in regulations 5(4) or 8(4).

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. The review will not necessarily mean there will be a change in the information; in some cases no changes will be necessary.

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

- (7) The operator shall ensure that the information referred to in paragraph (1) is supplied in accordance with that paragraph within a reasonable period of time after the off-site emergency plan has been prepared for the establishment and that the information is so supplied again -
  - (a) at intervals not exceeding 5 years; or
  - (b) if it is revised pursuant to paragraph (6).

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.

The public information must be re-distributed whenever it is revised or after five years if there has been no update. This will cater for changes in population and ensure that people who have moved into the area are properly informed. It will also remind people who have previously been informed.

Re-distribution may also be appropriate before the five-year limit. Operators may wish to carry out a representative survey of the people in the affected area to see how well people have absorbed the information they were given, to assess the need for a further distribution. Local authorities may also be able to give advice about this because of their local knowledge. Their broader experience in communicating with the public may also help operators to decide what to do.

Appendix 4

'What if' project

# **Briefing Paper for Leader of Essex County Council**

Report produced by Essex Emergency Planning Service on the Schools Project – "Promoting Community Resilience through Schools"

# **Background**

During 2003 through to 2007, the Essex Emergency Planning (EP) Service participated in three European funded Projects which sought to raise public awareness about the risks of flooding and how our communities can prepare themselves. Essex took the lead in this area of work and developed two films on a DVD which was aimed at professional and children. Additionally, the Service also developed a calendar aimed at children and introduced the idea of working with children to deliver this important message to the wider community and welcomed the two cartoon characters of "Molly and Ben" into the emergency planning world.

As a result of the schools work being showcased in the bid for Beacon status in 2006, the Board in awarding Beacon status to the Essex EP Service highlighted this particular piece of work as being exemplary, and expressed a wish for Essex to role this out nationally as it certainly fitted the Community Resilience Agenda. In September 2008, a meeting between the Deputy CEPO, the Cabinet Office and Department of Children, Schools and Families (DCFS now the Department of Education) was held and it was agreed that DCFS would fund a project to bring together the two areas of work on schools emergency planning which had been undertaken by Nottingham (also a Beacon Authority) and the Essex EP Service. Essex led on the educational part of the work which was ground breaking within the Emergency planning field and has had national and international attention. A grant of £60,000 was secured from DCFS; the other five Beacon authorities were approached to support the project through small contributions for their award grants. A total budget of £110,000 was raised for the project fro both Essex and Nottingham and it was agreed that this would become a National project with support by the two Government Departments.

## **Promoting Community Resilience through Schools Project**

The work with schools has been an innovative way to deliver the warning and information duty under the Civil Contingencies Act, and Essex has built on the work it has delivered over the last few years as well as developing new ways to achieve this through the production of interactive and on line toolkits.

All age groups have been targeted and reached from 6 years old to 15 years old and Emergency Planners have been involved in the delivery of this work in a variety of locations and schools around the county. Additionally, an independent School, New Hall nr Chelmsford approached the Service as they were aware of this work through an article and a request was made by the Head of Critical Thinking to deliver awareness training to their Year 8 Students. This was achieved on the 7<sup>th</sup> June 2010 and the Schools were delighted with the outcome, to the extent that the School has developed an examination paper to capture the valuable learning from the course work and exercise Emergency Planning delivered.

## **Canvey Island Project**

The Project needed to test and evaluate this work, and a pilot project which was held on Canvey Island from the 14<sup>th</sup> June until the 2<sup>nd</sup> July. The pilot achieved two important requirements; firstly to test the produced Essex has developed and designed with all the Schools on the Island (13 in total), secondly to engagement with the Canvey island community to ensure they are aware of local risks and raise their awareness about how they can prepare themselves for an emergency.

The first stages was to engage with the Head Teachers, and seek their support, this was agreed after a couple of meetings with all the heads and programme was produced to deliver the emergency planning message and it was agreed that year (6/7 year olds and year 5 9/10 years olds would be targeted)

The pilot ran over a three week period and the delivery was made through the emergency services and emergency planners. All of the schools were visited at least once during the 3 week period. Lessons took a variety of forms from testing the products (on line books, games and puzzles) as well as role play and other activities.

The culmination of this work was through a Celebration Event held at Leigh Beck Infants and Nursery School on Canvey Island on the 2<sup>nd</sup> July 2010 with the amazing support by

the Head, Mrs Gill Chapman. All the schools from the Island attended and displays were put up from every school and presentations were made by the Children. It was an exceptional event with full engagement of teachers, children and parents. Over 200 people attended the event, as well as local dignitaries. Cllr Terri Sargent represented Essex in delivering the key note address as well as Cllr Ray Howard who gave an impressive message to the local community about this work. Other guests included the local MP, the Chief Fire officer as well as local businesses and Board of Governors.

This work has certainly proved it is possible to deliver a national message at a very local level without frightening the community and it certainly engaged the children to the extent that the schools want to do this again. The organisation and delivery of this work has been through a partnership approach between the emergency services and the schools who embraced this totally. A DVD is currently in progress and has been produced to engage schools.

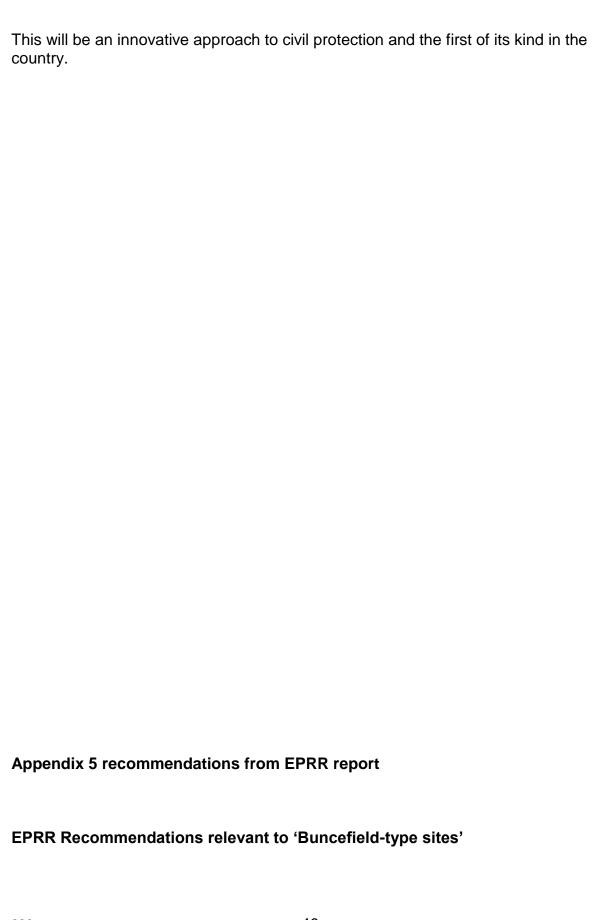
The final phase of the project is complete the DVD, arrange a joint launch with the Cabinet Office (which has been sent up to Ministers by the Cabinet Office Civil Servants as a recommendation) and complete the final report

# The "Way Forward" with Essex Fire and Rescue Service

The migration of the EP function to the fire service has provided an opportunity to reassess the overall direction and focus of both EP and bring it more in line with the work of ECFRS. Particularly civil protection, with Cllr Chapman supporting a change to title and direction, becoming a new Civil Protection and Emergency Management function, reflecting the modern role that it is moving to.

ECFRS currently deliver a fire safety package to all key stage 2 children in Essex and this product will now be redeveloped in line with the EP Schools Project so that the wider civil protection message can be delivered on the back of the success on Canvey Island.

Calor have been approached for funding as a partner and have indicated they may be prepared to input between £6 and £10k, other industry partners will also be approached to support funding this project as will EU funding streams.



Recommendations 1 and 3-8 apply to all 'Buncefield type sites' and these comprise mainly of top-tier sites, but include a number of lower-tier sites.

Recommendation 7 also applies to all COMAH top-teir sites generally and recommendation 8 also applies to all COMAH top-tier sites generally, addressing the operators duty to put in place arrangements for providing information to the public (COMAH Regulation 14), and as such relates to off-sire mitigation; this does form part of the wider emergency planning arrangements.

## Recommendations

- 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
- 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.
- 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.
- 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
- 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.
- 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.
- 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.

## EPRR Recommendations Relevant to COMAH sites

- 2. The Competent Authority should review the existing COMAH guidance on preparing on-site emergency plans.(Ref 7) This guidance needs to reflect the HSE's Hazardous Installations Directorate (HID)7 Chemical Industries Division inspection manual used by inspectors to assess the quality of the on-site plan in meeting the COMAH Regulations. In particular, reference should be made to the need to consult with health advisors and emergency responders
- 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.

## EPRR Recommendations Relevant to emergency Planning

- 10. The Cabinet Office should initiate a review of the arrangements to identify a minister (and their devolved counterparts) and their role to complement and support the emergency responders following a major incident to ensure national arrangements work as intended and there is continuity of government attention throughout the response and recovery phases. The review should include communications, public reassurance, the interface with planning for a return to social normality (Recommendation 27), and arrangements to ensure that recommendations made following major incidents are implemented.
- 11. The Civil Contingencies Secretariat, working with the Competent Authority, should ensure that COMAH emergency arrangements are fully integrated with those under the CCA with the aim of ensuring that major hazard events are dealt with consistently at all levels, from on site to national, in terms of planning, shared resources, and practical arrangements. The review should include, but not be limited to, confirmation that:
  - 1. response arrangements take account of devolved responsibilities;
  - 2. lead responsibility in government for ensuring emergency response arrangements at COMAH sites is dealt with consistently under COMAH and CCA;
  - 3. procedures and guidance are suitably aligned; and
  - 4. deployment of emergency equipment considers both COMAH and CCA sectors and sites.
- 13. The Civil Contingencies Secretariat should review guidance to responders on assessing the extent of the impact of an incident at a COMAH site to ensure appropriate scales of response and resources are provided, at local, regional or national levels.

- 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, i.e. periodically updated in the light of new knowledge of handling major emergencies.
- 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 multitank 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. The review should include but not be limited to the following:
  - 1. input from trained and competent emergency planners following clear guidance;
  - 2. working in conjunction with Regional Resilience Forums, and their equivalents in Scotland and Wales, in preparing their off-site emergency plans to understand potential impacts on the Region. The Local Resilience Forum structure encourages multi-agency co-operation and information sharing within a county. The Regional Resilience Forum, and their equivalents, should determine where further consultation is applicable and determine how this is done within and across regions;
  - 3. working in conjunction with neighbouring local authorities in developing their offsite emergency plans and involving these authorities in training and in emergency exercises
  - 4. extending co-operation beyond the statutory consultation distance (CD) supplied by HSE to take into account the worst possible impact of a major incident, in effect re-calibrating the public information zone, which conventionally aligns with the CD:
  - 5. considering with other primary responders the fitness for purpose of the plans for the different tiers of the command and control structure (gold/silver/bronze);
  - 6. taking account, with appropriate expert input, of the local environment to identify what would be at risk and to identify the potential consequences.
  - 7. CCS and the Competent Authority, as the enforcing authority under COMAH, should ensure the reviews are carried out.
- 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.

- 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.
- 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:
  - 1. All Category 1 responders should ensure their staff are trained within six months of production to deliver the emergency response
  - 2. 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.
- 20. Local Resilience Forums and devolved equivalents should assess and advise operators, local authorities and the Competent Authority on the effectiveness of communications with residents, local businesses, duty holders 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.
- 27. The Cabinet Office should confirm formally, to avoid any doubt, where lead ministerial responsibility lies for the recovery phase following a major incident until the affected community has regained social normality. We believe responsibility should lie, in most foreseeable situations, with Communities and Local Government (or its successors, or in the case of Scotland and Wales, its devolved administration counterparts) supported as necessary by other central departments. In the event it is agreed that another minister should assume this role in a specific situation, the transfer of responsibility should be made clear. Emergency arrangements should take full account of the need to ensure recovery starts as soon as possible, including a smooth handover of lead ministerial responsibility where appropriate.
- 28. Local authorities should ensure that recovery plans dovetail with offsite emergency response plans and the Regional Economic Strategy (and devolved equivalents) to ensure that all relevant organisations are involved at an appropriately early stage.

# **Appendix 6**

Essex County Councils progress against recommendations of the Major Incident Investigation Board (MIIB) in their report 'Recommendations on the emergency preparedness for, response to and recovery from incidents', following the Buncefield explosion on 11 December 2005

The MIIB report was released in July 2007 and contains 32 recommendations aimed at improving planning for emergencies and the effectiveness of the response to emergencies at major-hazard sites. These recommendations are wide-ranging and farreaching and set goals that the MIIB believe needed to be achieved to effectively deal with another Buncefield-type incident. The 32 recommendations form the structure of this report it must be noted that not all the recommendations are directly aimed at local authorities.

# Recommendations are grouped under the following four headings:

Assessing the potential for a major incident (Recommendation 1)

Managing a major incident on site (Recommendations 2-9)

Preparing for and responding to a major incident off-site, including central Government leadership in the planning for and early response to a major incident and setting up a means of assessing the public health implications (Recommendations 10-26)

Recovering from a major incident (Recommendations 27-32)

## Assessing the potential for a major incident

Recommendation 1 states that 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 (CA) should ensure that this is done.

The CA and industry have published guidance on what such a scenario means for a site in terms of the extent and scale of the explosion and the level of associated damage. Using the published guidance, all Buncefield-type sites are reviewing their emergency arrangements with respect to the scenario of an explosion followed by a multi-tank fire.

**ECC Status** ECC have liaised with the site operators and used the scenarios included in site safety reports as the scenarios within the off site plan. The site operators have provided ECC with copies of the On Site Plan, Site Safety Reports and any relevant safety data sheets. It is important ECC have this information to ensure the off site procedures dove-tail the on site procedures.

## Managing a major incident on site

Recommendation 2 states that the Competent Authority should review the existing COMAH guidance on preparing on-site emergency plans. This guidance needs to reflect the HSE's Hazardous Installations Directorate Chemical Industries Division inspection manual, used by inspectors to assess the quality of the onsite plan in meeting the COMAH Regulations. In particular, reference should be made to the need to consult with health advisors and emergency responders.

#### **ECC Status N/A**

Recommendation 3 states that for Buncefield-type sites, operators should review their on-site 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.

The CA published in July 2007 a template to be used by Buncefield-type sites for onsite emergency planning that it had developed with industry. After the MIIB report was published, this template was reviewed and has been amended to ensure that it reflects fully the guidance published in response to Recommendation 2.

This amended template and accompanying guidance have been published and the CA expects all Buncefield-type sites to have implemented this guidance by the end of

2009 at the latest. The CA will ensure that this is done through the monitoring process of targeted inspection it has in place for MIIB recommendations.

## **ECC Status N/A**

Recommendation 4 states that 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.

In July 2007, a CA/industry working group published guidance on fire-fighting arrangements at sites, including a methodology for the assessment of the resources and personnel required. This existing guidance was reviewed by the CA and industry in light of the MIIB report, and guidance for operators to determine whether or not they have sufficient staff to perform all emergency actions at sites was published by the CA in Autumn 2008.

**ECC Status:** An Emergency Planning College training event was carried out in 2009 at Calor Gas Canvey Terminal that provided an opportunity for Cat 1 responders and site operators to familiarise with the COMAH regulations. The course was mainly aimed at producing off site plans but linked in closely with on site procedures.

Recommendation 5 states that, 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.

The CA has published a methodology and guidance, developed with industry, for operators to evaluate the siting and/or protection of emergency response facilities. This guidance directs operators to evaluate emergency response facilities at sites that are capable of dealing with a scenario such as that defined in Recommendation 1 of this report, as well as with lesser events.

Operators will need to ensure that the emergency facilities at their sites are capable of doing so. The CA will ensure that sites have implemented this guidance by the end of 2009 at the latest.

**ECC Status:** ECC along with multi-agency members (including the operator) of the EPC Groupe Emergency Planning Working Group, the location of the "Emergency Room" was reviewed. The original location is Great Oakley Hall. Concerns had been expressed as this location is on the outside edge of the furthest blast zone. An alternative location at Old Moze Hall was investigated, this also is on the outside edge of the same blast zone, but due to financial constraints the secondary access that would be required across fields to the site eventually precluded this location. Planning has

reverted to the Great Oakley Hall site and EX WILDFIRE 2 was held in 20.05.09 to test the facilities and identify any remedial action required.

Recommendation 6 states that 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 with a duplicate set of plans and technical information.

As in Recommendation 5 of this report, a methodology and guidance for evaluating vulnerable critical emergency response resources has been published by the CA. This guidance directs operators to evaluate emergency response facilities at sites so that they are able to deal with a scenario such as that defined in Recommendation 1 of this report, as well as with lesser events.

## **ECC Status:** See response to recommendation 5

Recommendation 7 states that, for COMAH sites, if the operator relies on an offsite 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.

The CA has published a template and guidance that it developed with industry, detailing the arrangements required to meet this recommendation. The template will be used as the means of recording the agreement between operators and service providers. Operators will assess emergency tests and real events to check on the robustness of their arrangements.

The CA, industry, and fire and rescue service representatives are developing mutual aid arrangements (as required by Recommendation 23 of this report) and the results of this work will strengthen the interface between COMAH site operators and service providers

The CA will check that sites have implemented this guidance by the end of 2009 as part of the monitoring process it has in place for MIIB recommendations.

**ECC Status**: During the production phase of the plan ECC have liaised with all the emergency services to agree the wording within the off site plans. The liaison is done both at HQ level and at local stations.

Recommendation 8 states that, for COMAH sites, 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.

The CA has published guidance developed with local authority emergency planners and industry, which is being used by operators to review their arrangements for communication with the public. It covers:

- The purpose of effective communication with the public;
- Consulting with the local authority and the emergency services;
- The relevance and frequency of communications;
- Having a means of effectively dealing with queries and concerns/ complaints;
- Consideration of the use of mailings, newspaper articles/adverts, radio messages, posters and local shows;
- Press releases; and community liaison groups.

**ECC Status-** ECC have collated all of the sites correspondence and ensured that the correct information has been sent to the public. ECC have assisted a number of sites with wording of letters following the guidance documents produced by the HSE. ECC have worked alongside QinetiQ for the roll out of the Shoeburyness Emergency Alert Service. (SEAS) the system is a joint initiative between ECC, QinetiQ, Southend-on-Sea Borough Council and Rochford District Council. A letter and leaflet has been sent to residents within a Public Information Zone which explain the new service, the type of work that goes on at MOD Shoeburyness and details about how to sign up to the service. The service is an SMS alert warning system that will keep residents informed what to do in the unlikely incident at the QinetiQ site.

Calor Gas Canvey Island has had involvement with the Canvey Island Schools Project Pilot; the project aim was to instil an understanding of emergencies by engaging with children and schools, thereby encouraging them to be aware of personal risk and strengthen resilience at personal family and community level." The project wasn't specifically aimed towards COMAH but general risks that face the public.

Recommendation 9 states that the Competent Authority should review the Control of Major Accident Hazards (COMAH) guidance and should work with the Cabinet Office to integrate it and the Civil Contingencies Act 2004 (CCA) guidance, namely 'Communicating with the Public' guidance, so that communications regarding COMAH sites are developed jointly by the site operator and the local emergency responders.

As part of the work to review the CCA, the non-statutory guidance entitled 'Emergency Response and Recovery', first published in autumn 2005, will be

updated by the Cabinet Office's Civil Contingencies Secretariat (CCS) to include lessons identified from recent emergencies and new standards

## **ECC Status- N/A**

Preparing for and responding to a major incident off-site, including central Government leadership in the planning for and early response to a major incident and setting up a means of assessing the public health implications

Recommendation 10 states that the Cabinet Office should initiate a review of the arrangements to identify a Minister (and their devolved counterparts) and their role to complement and support the emergency responders following a major incident, to ensure national arrangements work as intended and that there is continuity of government attention throughout the response and recovery phases. Further, the recommendation said that the review should include: communications; public reassurance; the interface with planning for a return to social normality (recommendation 27); and arrangements to ensure that recommendations made following major incidents are implemented.

#### **ECC Status- N/A**

Recommendation 11 states that the Cabinet Office's Civil Contingencies Secretariat (CCS), working with the Competent Authority, should ensure that COMAH emergency arrangements are fully integrated with those under the CCA, with the aim of ensuring that major hazard events are dealt with consistently at all levels, from on-site to national, in terms of planning, shared resources, and practical arrangements. The recommendation specified that the review should include, but not be limited to, confirmation that:

response arrangements take account of devolved responsibilities; lead responsibility in Government for ensuring emergency response arrangements at COMAH sites is dealt with consistently under COMAH and CCA; procedures and guidance are suitably aligned; and deployment of emergency equipment considers both COMAH and CCA sectors and sites.

## **ECC Status-** N/A

Recommendation 12 states that CLG should complete and, where necessary, initiate an assessment of the need for national-level arrangements to provide, fund and maintain emergency response equipment (such as high-volume pumps (HVP), firefighting foam and specialist pollution containment equipment). Further, the review could also consider criteria for allocation and use of this equipment across the UK.

## **ECC Status-** Refer to recommendation 15

Recommendation 13 states that the Civil Contingencies Secretariat should review guidance to responders on assessing the extent of the impact of an incident at a COMAH site to ensure appropriate scales of response and resources are provided, at local, regional or national levels.

#### **ECC Status-** Refer to recommendation 15

Recommendation 14 states that the Civil Contingencies Secretariat, working with the Competent Authority, should arrange for national guidance to local authorities to be prepared. It was further stated that 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. In addition, the guidance should be a living document, ie periodically updated in the light of new knowledge of handling major emergencies.

## **ECC Status N/A**

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. The review should include but not be limited to the following:

input from trained and competent emergency planners following clear guidance;

working in conjunction with Regional Resilience Forums, and their equivalents in Scotland and Wales, in preparing their off-site emergency plans to understand potential impacts on the Region. The Local Resilience Forum structure encourages multi-agency co-operation and information sharing within a county. The Regional Resilience Forum, and their equivalents, should determine where further consultation is applicable and determine how this is done within and across regions;

working in conjunction with neighbouring local authorities in developing their off-site emergency plans and involving these authorities in training and in emergency exercises;

extending co-operation beyond the statutory consultation distance (CD) supplied by HSE to take into account the worst possible impact of a major incident, in effect recalibrating the public information zone, which conventionally aligns with the CD.

Guidance, developed with industry, on Recommendation 1 of this report has been published by the CA, and operators should have the appropriate arrangements in place by the end of 2009 at the latest. This guidance contains information on the extent and severity of a Buncefield-type incident, which can be readily incorporated into off-site planning for large-scale fuel storage sites. Guidance for COMAH site operators on the information that they should provide for off-site plans was released by the CA in July 2007.

The practical implications of recalibrating the Public Information Zone (PIZ) are being considered by the CA and local authority emergency planners because, for some COMAH sites, this may result in a disproportionate response being required.

**ECC Status-** ECC reviewed the majority of the Off Site Emergency Response Plans following the guidance document mentioned above. A large number of the team also attended "producing a COMAH Off Site Plan" course. This course is run by the Emergency Planning College and links closely with the guidance documents.

The practical implications of recalibrating the Public Information Zone (PIZ) have been discussed on a site to site basis. When working with QinetiQ the decision was made to extend the Public Information Zone and make the SEAS system available to those residents outside of the HSE designated PIZ. (See Recommendation 8)

Recommendation 16 states that the Health Protection Agency (HPA), Health Protection Scotland (HPS) and National Public Health Service Wales (NPHS), Environment Agency, Scottish Environment Protection Agency (SEPA) and Environment and Heritage Service Northern Ireland (EHSNI) should provide local contact details to local authorities and Local Resilience Forums (LRF) to facilitate emergency plan development. This will ensure local authorities have clear consultation routes for the public health and environment aspects of their off-site emergency plans.

Local contact details have been provided to local authorities and LRFs by each of the stated health and environmental agencies. Local authorities now have clear consultation routes for the public health and environmental aspects of their off-site emergency plans and accordingly this recommendation is considered complete in England, Wales, Scotland and Northern Ireland.

**ECC Status-** These details are included on Call Down Lists and are also available in the Off Site Plans.

Recommendation 17 states that 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 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.

The emergency services make their own arrangements for relief and welfare provision. These are normally well-rehearsed and effective. It is likely to lead to confusion and wasted effort if these arrangements were to be duplicated by local authority emergency planners. The further measures in the recommendation are part of the generic emergency response in many areas.

However, when there is a large ongoing incident involving responders who are not able to be self-sufficient with respect to welfare facilities, the emergency plan should ensure that this factor is considered by emergency planners and a means of providing the requisite welfare facilities should be detailed. These matters were considered in Sir Michael Pitt's report into the summer 2007 floods and he also stressed the value of well organised welfare arrangements and the involvement of voluntary organisations.

Welfare support will be considered as part of the review of off-site plans and will be checked by the CA as part of its verification work on emergency arrangements.

As part of the work to review the CCA, the non-statutory guidance entitled 'Emergency Response and Recovery', first published in autumn 2005, will be updated by the CCS to include lessons identified from recent emergencies and new standards in response and recovery methodology. The updated guidance will include recommendations highlighted in the present MIIB report, Sir Michael Pitt's Review of the response to the summer floods in 2007 and the review of the response to the Foot and Mouth Outbreak in 2007. Developed in conjunction with responders, the updated guidance will be published in spring 2009 following consultation.

## **ECC Status-** None.

Recommendation 18 states that, 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.

## ECC Status- None

Recommendation 19 states that 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.

**ECC Status** Essex have 14 COMAH sites in their areas and have faced practical difficulties in attempting to test all of their revised plans within 12 months. COMAH legally requires that off-site emergency plans are tested within three years of revision.

EPC Groupe UK and QinetiQ have been exercised within the recommended 12 months. Other site have been exercised within the 3 year statutory requirement

Recommendation 20 states that Local Resilience Forums 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. Further, it was specified that the assessment should use an agreed standard in line with CCA guidance, 'Communicating with the Public', and include arrangements with local media to avoid conflicting advice being received, and to ensure key messages are transmitted.

## **ECC Status- N/A**

Recommendation 21 states that the Civil Contingencies Secretariat should conclude their review of arrangements for obtaining and using air quality data in an emergency. This revision of arrangements should be delivered no later than 2008. The review should include:

agreement on clear notification procedures;

agreement on roles and responsibilities for collecting air quality data; arrangements to disseminate the above to all responders and include them in emergency plans; and

agreement on performance standards for quality and delivery; and consideration for the provision of local meteorological stations in the vicinity of COMAH sites, which can provide local wind direction and speed.

The review has been concluded and DEFRA has agreed to fund the Environment Agency to take responsibility for providing air quality data in an emergency. Interim arrangements are now in place, with the full monitoring and modelling capability expected to be ready by April 2009 and fully operational from September 2009 following a series of validation exercises.

## **ECC Status** N/A

Recommendation 22 states that the Civil Contingencies Secretariat and Department of Health should clarify the different roles for providing health advice at Strategic Co-ordinating Group (SCG) (Gold Command and Control Centre) to

local responders. Local agreements should be in place in advance to allow health agencies to decide quickly who will do what in any incident so that the SCG chair receives the support they need. Different arrangements will exist in devolved areas and planning should take account of these. Information relevant to public health arising from the incident at the major hazard site in questions should be available at the outset to enable health responders to give accurate, useful advice when first needed.

The Scientific and Technical Advice Cell (STAC) concept has been developed and guidance has been issued to local responders in England on the establishment of a STAC within Gold Commands. A STAC will be established automatically wherever there is likely to be a requirement for co-ordinated scientific or technical advice, and it will cover both the response and recovery phases of any incident. A detailed training programme has been developed and was piloted early in 2008. The training for STAC chairs has commenced, with half the regions completed by July 2008 and the remainder expected to be completed by February 2009. Updated guidance will be issued in England and Wales shortly that will take into account lessons learned from STACs formed during the 2007 flooding and relevant sections of Sir Michael Pitt's report on that emergency.

#### **ECC Status** –N/A

Recommendation 23 states that the operators of industrial sites where there are risks of large explosions and/or large complicated fires should put in place, in consultation with the FRSs at national level, a national industry-FRS 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 the Civil Contingencies Secretariat.

In England, work is being taken forward by the joint CA/industry Process Safety Leadership Group (PSLG). This group is chaired by HSE and is currently working up options for the provision of a national mutual aid arrangement. Much of the mutual aid work is dependent on the results of Recommendation 24 below, although work that can be decoupled from that Recommendation has commenced.

Mutual aid agreements are scheduled to be in place by summer 2009 for Buncefield-type sites and for other sites by summer 2010.

#### **ECC Status-** N/A

Recommendation 24 states that Fire and Rescue Authorities (FRA) 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. Further, critical interface

components, such as foam equipment couplings used by the FRS, should be capable of use by the FRS and for any industry the authority may call upon.

#### **ECC Status-N/A**

Recommendation 25 states that the recommendations in the Hertfordshire FRS report into the lessons learned from the Buncefield fires that are widely applicable, should be put into effect where it is practical to do so as soon as possible.

## **ECC Status-** N/A

Recommendation 26 states that the Civil Contingencies Secretariat should review the procedures and arrangements in Government Offices in the English regions for deploying liaison staff, to ensure effective communications between central government and Gold Command (Strategic Control Group) in a major emergency. Further, the review should ensure that communications are managed in a way which minimises the demands on Gold Command and maximises efficiency. It should also ensure that the necessary level of human and technical resources can be sustained over a significant period, if required by the demands of the response and recovery phases. Further, the review should be conducted with the devolved administrations to ensure equivalent improvements in communication arrangements for incidents in devolved areas.

Procedures have been put in place that have been successfully exercised at a national level in the past 12-18 months, including with the devolved administrations. The CCS is now working on a review to ensure sustainability throughout the response and recovery phases and is in the process of producing a policy on departmental capacity and capability.

## **ECC Status-N/A**

# Recovering from a major incident

Recommendation 27 states that the Cabinet Office should confirm formally, to avoid any doubt, where lead ministerial responsibility lies for the recovery phase following a major incident until the affected community has regained social normality. We believe responsibility should lie, in most foreseeable situations, with Communities and Local Government (or its successors, or in the case of Scotland and Wales, its devolved administration counterparts) supported as necessary by other central departments. In the event it is agreed that another Minister should assume this role in a specific situation, the transfer of responsibility should be made clear. Emergency arrangements should take full account of the need to ensure recovery starts as soon as possible, including a smooth handover of lead ministerial responsibility where appropriate.

LGD for Recovery: Emergencies are usually complex events and the table of LGD is intended to provide a basis for planning and facilitate a smooth transition between the response and recovery phases of an emergency. Where the issues to be addressed predominantly affect the interests of one department, that department will normally manage the recovery phase even where the table indicates that the lead could lie elsewhere. Any uncertainty should be resolved as early as possible in the response phase.

## **ECC Status - NA**

Recommendation 28 states that local authorities should ensure that recovery plans dovetail with off-site emergency response plans and the Regional Economic Strategy (and devolved equivalents) to ensure that all relevant organisations are involved at an appropriately early stage.

The national recovery template last updated Nov 09

**ECC Status** Essex Recovery Strategy dated Jan 09. Multi agency document produced on behalf of the ERF by ECC EP. Recovery will normally be lead by the local authority affected. Where two or more are affected then leadership may be a matter of negotiation – either at District/Unitary or County level. Where the emergency is shared between local authority areas it is paramount that resources are allocated appropriately according to need. 'Memoranda of Understanding' exist between all Essex Local Authorities. These allow support of 'mutual aid', whether that is material or human. In a protracted emergency it might be that it is management expertise that is necessary to support either the Recovery process itself or the public services of the affected local authority.

## **COMAH Offsite Plan Template**

COMAH Recovery template for use by the Site Owner, produced Oct 09, updated Jul 10 and shared with operators.,

## Tactical & Operational Response Guidance

# Draft guidance produced Jul 10 by ECC EP

Recommendation 29 states that the CLG should review options for government support to communities affected by a disaster and produce practical recommendations without delay. The review should consider the merits and mechanisms for providing immediate, short-term financial assistance to affected communities, for instance through establishing special status, and how long the

period of special treatment should last. The lead Minister for recovery that we ask to be confirmed in Recommendation 27 should have responsibility for controlling special funding provided for recovery. Suitable indicators of social and economic well-being should be adopted to assist in the monitoring of the recovery. The equivalent administrations should be involved in the review to ensure that appropriate financial support arrangements are put in place in their areas.

Guidance notes setting out the sort of exceptional circumstances where Communities and Local Government (CLG) could consider providing financial support to local authorities in addition to the Bellwin Scheme, to support recovery efforts and the sort of costs that might be met in those circumstances. CLG's recovery funding arrangements would be activated at ministerial discretion in the event of exceptional emergencies that have a major impact on communities.

## DCSF Annex

Funding support would be activated at ministerial discretion – subject to the availability of funding – in the event of exceptional emergencies that have a major impact on communities, and the services to those communities that fall within the policy remit of the Department for Children, Schools and Families.

## **DEFRA Annex**

DEFRA recovery arrangements would be activated at ministerial discretion in the event of an exceptional emergency that has a major impact on the environment causing significant, long lasting or permanent damage, pollution and contamination

The Departmental lead for recovery is responsible for coordinating the cross government recovery effort in addition to their own departmental responsibilities. Funding for recovery issues will lie in accordance with departmental policy responsibilities. The Treasury should be engaged through departmental spending teams as appropriate.

## **ECC Status - NA**

Recommendation 30 states that central Government should give urgent consideration to support to assist in the recovery of the area around Buncefield, including to both help restore business confidence and attract new workers and new employment. The aim would be to apply to the area the principles of our recommendations during the period of implementing them.

## **ECC Status - NA**

Recommendation 31 states that the HPA and equivalent health bodies (HPS, NPHS and DHSSPS (Department of Health, Social Services and Public Safety, Northern Ireland)) should agree a framework for continued co-ordination of health impact assessment and response after the acute incident response phase stands down.

#### **ECC Status - NA**

Recommendation 32 states that 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 attaching to them. The objective is to improve information provided to aid planners and emergency responders.

**ECC Status - NA** 

# **Appendix 7 – MIIB Land Use planning Recommendations**

- 1. We recommend a cross-government and wide-ranging review of the land use planning system around non-nuclear major hazard sites in Britain. The review should include:
  - 1. the system for hazardous substances consents;
  - 2. the system for determining planning applications around major hazards sites;
  - 3. the relationship between planning applications around major hazard sites and development plans and planning;
  - 4. the scope of hazardous installations to which the land use planning system should be applied
  - 5. the integration of societal risk into the planning system around major hazard

The aim of the review should be to revise the planning system around major hazard sites in Britain to produce a more consistent and transparent system across the non nuclear.

onshore major hazards sector. The system should be responsive to levels of risk presented at each site. It should ascribe responsibilities to duty holders and the relevant authorities, including in the devolved administrations, in a proportionate and targeted manner. A minister should be responsible in each administration for seeing the review is carried out 16.

The review should be commenced without undue delay in order to implement its conclusions within a reasonable timeframe. Wherever feasible, work on revising the elements of the system should be undertaken simultaneously rather than sequentially.

2. The review should take account of our approach to improving the control of major hazard risks at major hazard sites.

## Our approach integrates:

- 1. integrity levels of the major hazard sites in relation to containment of dangerous substances and process safety;
- 2. mitigation against the effects of a major incident on off-site populations and installations;
- 3. preparedness for emergency response to limit the escalation of potential major incidents:
- 4. land use planning; and
- 5. the regulatory system for inspection and enforcement under COMAH and other relevant law
- 3. We recommend that the economic case for a revised land use planning system around major hazard sites arising from the wide-ranging review should consider the full range of the costs and benefits of restricted development, including costs to the relevant industry sectors, local businesses and regional economies, and the use of land for

housing and public amenity. This should be undertaken as part of the wide-ranging review called for in Recommendation 1.

- 4. We recommend that the use of market-based mechanisms identified in HSE's recently published economics working paper, are considered further to assess their potential application within the revised land use planning system around major hazard sites. We would expect HSE to co-ordinate this work with the wider economics community having an interest in the planning system.
- 5. We recommend that the workings of the revised land use planning system around major hazard sites are described in guidance in a form accessible to the general public. The guidance should have ownership of all the key government stakeholders, including the devolved administrations.
- 6. We recommend HSE adopts a policy for the consistent application of formal risk assessment of land use planning applications around major hazard sites that is responsive to levels of risk at particular sites.
- 7. Priority should be given to improving source terms and frequency data relevant to QRA at major hazard sites. This should include:
  - 1. improvements in defining major hazard scenarios at flammable storage sites called for in Recommendation 1 of our sixth report;
  - 2. improving recording and sharing of incident data and improvements to investigation of root causes of incidents and near misses called for in Recommendations 23–25 of our fifth report; and
  - 3. integrating the outcomes of the explosion mechanism project group set up in response to our seventh report.

We call on the COMAH operators and the Process Safety Leadership Group18 to take the lead in delivering these outcomes, and the Competent Authority to give technical support.

- 8. We recommend that HSE universally adopts individual risk of fatality as the criterion for expressing the consequence of events, in preference to the risk of receiving a dangerous dose or worse.
- 9. We recommend that the risk assessment methodology and criteria for land use planning purposes align with those for risk assessment under the COMAH regime. The methodology should take account of the reliability of the engineered systems designed to achieve improved standards of primary containment, as called for in Recommendation 1 of our fifth report. The methodology should also incorporate a realistic major incident scenario in the light of Buncefield (explosions, multi-tank fires) as called for in Recommendation 1 of our report making recommendations for emergency preparedness etc. Account should also be taken of the vulnerability of the surrounding population and any mitigatory measures that apply to people or buildings and other physical assets. The Competent Authority should see that these revisions are carried out to a satisfactory

standard and that appropriate guidance is issued to ensure the necessary improvements to risk assessments are delivered in practice.

- 10. Operators of major hazard sites should, as a priority, review and amend as necessary their management systems for maintenance of equipment and systems to ensure their continuing integrity in operation. Where there are a number of operators at a facility (as there were at Buncefield) the review should be integrated between site operators to the appropriate extent. The Competent Authority should see that this is done.
- 11. We recommend that the regulatory regime for major hazard sites should ensure proper assessment of safety integrity levels (SILs) main website link through the development of appropriate standards and guidance for determining SILs. main website link Application of the methodology should be clearly demonstrated in the COMAH safety report submitted to the Competent Authority for each applicable site. Existing safety reports will need to be reviewed to ensure this methodology is applied.
- 12. We recommend that CLG and the relevant ministers in the devolved administrations, HSE and BERR consider reforms to the major hazardous substances consent system, with the aims of:
  - streamlining and simplifying the withdrawal of consents on sites that are 'dormant': and
  - 2. allowing the size and nature of the hazardous inventories to be varied to enable realistic risk assessment for off-site planning purposes, including for revised development plans.

13.In moving to a fully risk-based system, and as part of the review called for in Recommendation 1, there should be a wider perspective given to the management of new planning applications where off-site development already exists. Consideration should include:

- 1. the parties who should come together to give relevant and necessary advice and expert support to the planning authority;
- 2. the size and nature of the existing population exposed to the risks on site;
- 3. the safety integrity levels and environmental protection measures on the site relevant to the nature and intensity of operations;
- 4. the mitigatory measures (i.e. means of reducing the consequences of a major incident) achievable for off-site buildings;
- 5. the emergency preparedness and response arrangements;
- 6. the needs of the regional economy as formally determined by the relevant authorities, and expressed in regional policies such as the Regional Spatial Strategy and Regional Economic Strategy;
- 7. the strategic economic/national interest issues if relevant; and
- 8. the further reductions that may be achieved in residual risk arising from the major hazard site.

- CLG, the Welsh Assembly Government, the Scottish Government and HSE should give consideration to this issue and produce the necessary guidance to see the revised approach is implemented effectively.
- 14. We recommend that HSE should bring together key stakeholders and experts in the planning system (planning authorities, developers, operators, regulators, risk assessment specialists) with a view to reaching agreement as early as possible on:
  - 1. the way societal risk is measured and assessed;
  - 2. the data sources required for assessment purposes;
  - 3. the acceptability criteria for societal risk values around particular sites; and
  - 4. a suitable weighting factor for more serious, less frequent events (scale aversion).
- 15. HSE should take necessary steps to amend the Pipeline Safety Regulations with the aim of extending land use and emergency planning controls (and other suitable regulatory protections if necessary) to major pipelines carrying gasoline (petrol).
- 16. We recommend that HSE should review, update and publish documentation on the process for handling land use planning risk assessments around major hazard sites by local authorities, and the main contributors to the decision-making process. The resulting publication should be capable of being understood by a lay audience.
- 17. Local planning authorities and the administrations responsible for them should ensure the necessary expertise and other resources are available to implement the revised planning system around major hazard sites, as well as management systems to ensure maintenance of competencies, monitoring, audit and review of the planning systems in their authority.
- 18. The Competent Authority should agree a priority programme with site operators and planning authorities for assessing societal risk at sites of identified concern using the risk assessment methodologies developed in line with our recommendations. Account should also be taken whether the ALARP threshold has been raised due to considering previously unaccounted hazard scenarios.