



**CONTROL OF MAJOR ACCIDENT
HAZARDS (COMAH) REGULATIONS 1999**

**GENERIC OFF-SITE CONTINGENCY PLAN
FOR FIFE ESTABLISHMENTS**

**Issued by:
Emergency Planning and Business Continuity Team**

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FOREWORD

Control of Major Accident Hazard Regulations 1999 Generic Off-Site Contingency Plan for COMAH Sites in Fife

The Control of Major Accident Hazards (COMAH) Regulations 1999 require any top tier site which is classed as a major hazard establishment, to have a safety management system in place incorporating two key plans namely:

- a) **On Site Emergency Plan**, prepared by the Site Operator that specifies the response to an emergency incident which may affect those who work on the site or any visitors thereon and;
- b) **Off Site Emergency Plan**, prepared by the Local Authority, to deal with the off-site consequences of possible major accidents. This off-site emergency plan details the roles and co-ordinated response of the emergency services and other external organisations in the event of a major accident occurring on site.

This plan has been prepared on the basis of information supplied to Fife Council by the operators at all top tier establishments in Fife. The information contained within this plan is intended to be available to key emergency responders in the event of a serious or major emergency incident occurring at any of these top tier sites and as well as focusing on the response to the initial incident, considers the associated off site consequences.

The provisions of this plan also apply to military top-tier hazard sites in Fife as identified under the Major Accident Control Regulations (MACR) 2000, which provide for a safety management system comparable with the COMAH regulations.

Any proposed changes to the content of this plan must be notified in the first instance to:-

Emergency Planning & Business Continuity Team
Fife Council
2nd Floor
Fife House
North Street
Glenrothes
Fife
KY7 5LT

Tel. No. 01592 583544
Email: emergency.planning@fife.gov.uk

Steve Grimmond
Chief Executive
Fife Council

DISTRIBUTION LIST

Organisation	Holder
<p>EMERGENCY SERVICES</p> <p>Police Scotland</p> <p>Scottish Fire & Rescue Service</p> <p>Scottish Ambulance Service:</p> <p>HM Coastguard</p>	<p>Fife Division Emergency Planning Officer</p> <p>Response & Resilience (East) CCA Advisor</p> <p>Resilience Advisor (Fife)</p> <p>District Operations Manager</p>
<p>SITE OPERATORS</p> <p>ExxonMobil Ethylene Plant, Mossmorran</p> <p>Shell NGL Plant, Mossmorran</p> <p>Diageo, Leven</p> <p>DM Crombie</p> <p>RAF Leuchars</p>	<p>Safety & Emergency Response Advisor</p> <p>Health, Safety & Environment Manager</p> <p>Risk & Safety Manager</p> <p>Head of Establishment</p> <p>Head of Establishment</p>
<p>FIFE COUNCIL</p> <p>Chief Executive Service</p> <p>Environment, Enterprise & Communities</p> <p>Corporate Services</p> <p>Emergency Planning & Business Continuity</p> <p>Transportation & Environmental Services</p> <p>Media & Marketing Department</p>	<p>Chief Executive</p> <p>Executive Director, Environment, Enterprise & Communities</p> <p>Executive Director, Corporate Services</p> <p>Manager, Emergency Planning & Business Continuity Team</p> <p>Head of Transportation and Environmental Services</p> <p>Head of Media & Marketing</p>
<p>OTHER AGENCIES:</p> <p>Health & Safety Executive</p> <p>Scottish Environment Protection Agency</p> <p>NHS Fife</p>	<p>Principal Health and Safety Inspector</p> <p>Resilience Officer, Riccarton, Edinburgh</p> <p>Emergency Planning Officer</p>

OTHER AGENCIES (Cont.):	
Emergency Planning College	Chief Librarian
Scottish Government	Learning & Development Coordinator

PLAN REVIEW SCHEDULE

Nature of Review	Name of Reviewer	Plan Version No.	Date Re-issued
Plan prepared following COMAH Regulations.	F. Wallace SEPO	Version 1	January 2000
Plan revised after Regulations amended	F. Wallace SEPO	Version 2	January 2009
Plan revised following 3 yearly review	D. Finnie EPO	Version 3	July 2013

RECORD OF EXERCISES

Exercise Name	Exercise Type	Venue	Date of Exercise
MACR 'Livex'	Live Play	RAF Leuchars	30 September 2009
Exercise White Blanket	Live Play	FEP Mossmorran	30 March 2011
Exercise Alligin	Live Play	Braefoot Bay Terminal	26 October 2011
Exercise Passing Cloud	Live Play	Braefoot Bay Terminal	25 April 2012
MACR 'Livex'	Live Play	RAF Leuchars	20 September 2012
Exercise Sycamore	Live Play	FEP Shell Mossmorran	24 October 2012
Exercise Explorer	Live Play	DM Crombie	04 November 2012
Exercise Skyfall	Live Play	Diageo, Leven	12 June 2013

SECTION 1 INTRODUCTION

1.1 Aim

The aim of this plan is to ensure an efficient, proportionate and effective multi-agency emergency response to a serious or major incident occurring at all designated top-tier COMAH sites and identified military MACR sites in Fife.

The Control of Major Accident Hazard (COMAH) Regulations, 1999 and the Major Accident Control Regulations (MACR) 2000 aim to prevent major accidents involving dangerous substances and limit the consequences to people and the environment following any accidents that do occur. The COMAH and MACR Regulations regard all major accidents as having equal status whether their effects are primarily on people or on the environment. Consequently, the need to take account of the environment is recognised in this plan.

1.2 Objectives

The objectives of this plan are to coordinate the actions of the organisations involved in the emergency response, as described in Schedule 5, Part 1 of the COMAH Regulations, 1999.

These objectives are:

- a. containing and controlling incidents so as to minimise the effects, and to limit damage to persons, the environment and property
- b. implementing the measures necessary to protect persons and the environment from the effects of major accidents
- c. communicating the necessary information to the public and to the emergency services and authorities concerned in the area
- d. provide for the restoration and clean-up of the environment following a major accident.

1.3 Scope

This plan provides an overview of how Fife Council, the emergency services and other external organisations will respond to an emergency incident at a top-tier COMAH and MACR sites in Fife. The plan is designed to 'dovetail' with the on site emergency arrangements maintained and activated by the site operators.

The plan is not intended to be an overarching emergency response plan or Standard Operating Procedure (SOP) for other agencies and organisations. It is the responsibility of all emergency responders to maintain their own emergency plans or procedures.

1.4 Guiding Principles

The plan sets out arrangements to ensure the response to an emergency incident at designated top-tier COMAH and MACR sites in Fife is proportionate to its scale or potential impact and sets out the activation procedures for incidents not only occurring on site but where there may be any associated off site implications.

The plan provides information concerning the role of Fife Council in ensuring a coordinated response between the site operators and other emergency responders during the response phase to an emergency incident.

Whilst any on site emergency incident will be managed through an established command structure, operating from the Emergency Control Centre (ECC) within the relevant site, this plan also considers the wider off site implications resulting from the on site incident. For example, there may be occasions due to the nature of the incident that evacuation of residents and/or businesses surrounding the plant may have to be considered. On such occasions, the content of this plan considers how the off site implications are managed, in tandem with but isolated from, the on site emergency command structure.

This off site plan is intended to complement the on site arrangements to allow for an effective and coordinated response to the report of any emergency incident.

1.5 Environment

The environment comprises built features, air, water, soil, flora and fauna. It includes protected, designated or controlled status features, such as controlled waters, sensitive land within site boundaries, protected buildings, monuments, ecological species and habitats or designated areas.

An environmental accident is considered as major if causing permanent or long term damage to a particular unique, rare or valued component of the built or natural environment, or widespread environmental loss, contamination or damage.

The effect of an accident on the natural environment may be direct or indirect, immediate or delayed, temporary or persistent. Consequently, the indirect effects of an accident need to be considered as well as the more obvious ones. Food and agriculture together with other features such as sewage and water treatment works require consideration.

1.6 Information to Other Establishments (Domino Effect)

In some circumstances a major accident at one COMAH establishment might be triggered by an accident at another COMAH establishment (Domino Effect). The initiating event need not necessarily be a major accident itself but must be at a COMAH establishment, either top-tier or lower-tier, and involve a defined dangerous substance.

The competent authority has advised that the adjoining sites operated by Shell NGL and ExxonMobil at Mossmorran and Braefoot Bay have been designated as Domino establishments.

SECTION 2 MANAGEMENT AND ADMINISTRATION

2.1 Responsibility

This plan is issued under the authority of the Chief Executive Officer, Fife Council in association with the emergency services, to meet Fife Council's responsibilities to prepare an off- site plan under the COMAH Regulations 1999.

2.2 Distribution

This plan is distributed as per the list in this document and will be published on Fife Council's Intranet.

Interim changes to the plan will be made, notified to recipients and updated on the intranet version. Revised copies of the plan will be circulated following the review process.

2.3 Training and Exercising

This plan shall be validated by regularly testing the emergency response arrangements involving the on site operators and relevant emergency responders. Persons with assigned emergency roles will receive appropriate training in advance of any such exercises.

Regulation 11 of the COMAH Regulations, 1999 stipulates that at least once, every 3 years, the on site and off site emergency plans should be reviewed and where necessary, revised. In addition, it is accepted as a minimum standard, that emergency plans are tested at least once, every 3 years. As part of the liaison between the site operators and Fife Council, the opportunity is taken to test elements of the off site plan, resulting from on site exercises. Notwithstanding, Fife Council, as part of their statutory responsibility, may hold specific off site exercises.

The Major Accident Control Regulations (MACR) 2000 stipulates a requirement to hold annual on-base exercises and 3-yearly multi agency 'live play' exercises.

The arrangements for the emergency services and other responder organisations to take part in exercises will be coordinated by Fife Council via the agenda of the Fife Strategic Coordinating Group (SCG) Training, Events and Exercising Group.

2.4 Monitoring, Evaluation and Review

This contingency plan has been prepared and will be maintained by the Fife Council Emergency Planning & Business Continuity Team. In line with the COMAH Regulations, the plan will be formally reviewed every 3 years.

The plan will be updated, as necessary, on an ongoing basis to reflect significant changes to organisational structures, roles and responsibilities or lessons learned following structured debriefs of exercises and/or live incidents.

SECTION 3 INFORMATION

3.1 Legislation

Regulation 10 of the Control of Major Accident Hazards (COMAH) Regulations 1999 details the responsibility of the Local Authority, in whose area there is a 'Top Tier Site' (TTS), to prepare an emergency plan in respect of that site.

Fife Council therefore has the responsibility to prepare such an emergency plan for all designated top-tier sites in the Fife area.

The COMAH Regulations 1999 do not apply to sites occupied by British Armed Services or Visiting Forces in the UK. However, the Ministry of Defence (MOD) has implemented arrangements to deliver, so far as is reasonably practicable, performance standards at least as good as those outlined in the COMAH Regulations. The MOD has therefore established a single system of safety reporting for MOD major accident hazard sites and has developed COMAH equivalent plans for major accident hazard establishments under its control. Parallel military regulations known as the Major Accident Control Regulations (MACR) 2000 are implemented at all MOD Major Accident Hazard establishments.

Fife Council also has the responsibility to prepare an emergency plan for identified MACR sites within the Fife area.

3.2 Competent Authority

The COMAH Regulations are enforced in Scotland by a joint competent authority comprising the Health and Safety Executive (HSE) and the Scottish Environment Protection Agency (SEPA). Both agencies have a shared objective of achieving high levels of protection from major accidents for both people and the environment.

HSE and SEPA not only have an advisory role in any major accident but also have an investigatory role post-accident to determine the cause and liability for such occurrences. Both agencies can issue Improvement and Stop Notices to COMAH site operators where a breach of the regulations has occurred.

A key regulatory activity for the Competent Authority is assessing the on site safety report to ensure appropriate safety measures are in place. They also provide advice and expertise in regard to the regulation of major hazards and coordinate activities that are consistent, transparent, targeted and proportionate in relation to a site operator's duties under the regulations.

3.3 Associated Plans

Fife Strategic Coordinating Group (SCG) - General Emergency Response Plan (GERP)

This plan sets out the arrangements in place to ensure an integrated emergency management response to any major incident in Fife. It details the roles and responsibilities of all Category 1 and 2 organisations, as defined by the Civil Contingencies legislation. The roles and responsibilities of the key post holders involved in both the strategic and tactical management of an emergency incident occurring in Fife are set out in that plan.

In the event of a major incident occurring at a COMAH top-tier site or MACR site in Fife, it is likely that the Fife SCG GERP would be activated. Any multi agency strategic or tactical incident management team formed as a result of any activation of

this plan would work in parallel with the incident management regime in place at the relevant site. This will ensure a fully coordinated response at the scene of the emergency incident and in dealing with the wider consequences, community impact assessment and recovery phase of such an incident.

Emergency Plans – Other Organisations

All organisations with a potential role in responding to an emergency incident at a top-tier COMAH site or MACR site in Fife hold their own emergency plans and/or Standard Operating Procedures which detail how that particular organisation will manage their own response(s) to an emergency incident. These plans will be activated, as required, by individual responders independently of any activation of this plan.

It is quite likely that in the response to a significant or major emergency occurring at a top-tier or MACR site a number of cross organisational emergency plans/procedures will be activated. For example, where the emergency requires an evacuation of people then Fife Council would activate their Emergency Reception Centre Plan.

3.4 Site Information

All site information specific to the relevant sites in Fife, as provided by the site operator, is contained within the individual Annexes A – G. This incorporates identified sites under both the COMAH and MACR Regulations.

These Annexes contain information relating to individual sites including maps and layout plans showing access routes, Rendezvous Points (RVP) and Emergency Control Centres (ECC).

For security reasons this information is not available for public viewing and is held centrally by the Emergency Planning & Business Continuity Team, Fife Council, along with the site operators.

Specific site information can be made available to all emergency responders and other relevant organisations upon request.

SECTION 4 SITE DESCRIPTIONS & POTENTIAL HAZARDS

4.1 COMAH Top-Tier Sites in Fife

The following is a list of the current COMAH top-tier sites within Fife:

- Shell Fife NGL Plant, Mossmorran
- ExxonMobil Fife Chemical & Ethylene Plant, Mossmorran
- Shell Fife NGL Marine Terminal, Braefoot Bay
- ExxonMobil Marine Terminal, Braefoot Bay
- Diageo, Leven

This COMAH off-site emergency plan is based around major accident hazards identified by site operators in their safety reports submitted to the Competent Authority, which require a response from the emergency services following an emergency incident occurring on site or where the incident affects people and the environment outside the boundary of their establishments.

4.2 Ministry of Defence – Major Accident Control Regulations (MACR) 2000 Sites

As intimated, the COMAH Regulations do not apply to sites occupied by the British Armed Services or Visiting Forces in the UK. The MOD has therefore established a single system of safety reporting for MOD major accident hazard sites and has developed COMAH equivalent plans for major accident hazard establishments under its control. Parallel military regulations, the Major Accident Control Regulations (MACR) 2000, implemented at all MOD Major Accident Hazard establishments, include the following sites in Fife:

- DM Crombie
- RAF Leuchars

4.3 Site Activities

The sites vary in their range of activities and include the following:

- Chemical or other modified storage
- Explosives
- Fuel Storage

Details of specific activities at each site are contained in the site specific annexes attached to this plan.

4.4 Major Accident Hazard Pipelines

Major Accident Hazard Pipelines (MAHP), often providing feedstock to or exporting products from top tier sites are not subject to the COMAH Regulations. Separate procedures apply for pipeline emergencies as provided for in the Pipeline Safety Regulations 1996. This plan should be read in conjunction with the "Major Accident Hazard Pipelines - Emergency Response Plan" prepared by Fife Council.

4.5 Hazardous Events Assessment

Hazardous events may affect people and operators should co-operate with local authorities, emergency services and other agencies to develop appropriate strategies to protect people from the effects of such events. HSE guidance assesses hazardous events arising from activities at top-tier sites in Fife in three separate areas, detailed in the following paragraphs.

4.6 Flammable Releases

These include flammable liquids, highly flammable liquids and extremely flammable gases and liquids based on relative flash point categories.

- a. A release of flammable material may result in a fire or explosion. The consequences depend on the nature and quantity of the material released, whether it is ignited and time between release and any ignition. If the release is a volatile liquid or a gas not ignited immediately, it will form a cloud which may disperse over a long distance becoming diluted with air as it moves away from the point of release.

Eventually its concentration will fall below the substance's lower flammable limit and so no longer present a fire hazard. The distance over which such a release may disperse depends upon the quantity, properties and state of the material, the nature of the release and the prevailing weather conditions.

The concentrations in the dispersing cloud may be estimated using appropriate computer programmes which combine a mathematical model of a physical description of cloud behaviour with data collected from experiments and incidents.

- b. If a developed cloud is ignited, it may burn as a flash fire back to the point of failure. If a release from a broken pipe, leaking flange or a hole in a vessel is ignited immediately, it may burn as a jet fire or a pool fire. Models exist for estimating the quantity of material released over time and the size and thermal radiation from jet and pool fires.
- c. Vapour cloud explosions (VCE) following a massive release of a gas or volatile liquid and boiling liquid expanding vapour cloud explosions (BLEVE) are low frequency, high consequence events. These may occur with certain flammable fluids under certain accident conditions. Methods are available for estimating the size of a VCE or BLEVE fireball, the thermal radiation consequences and the levels of blast over-pressure.
- d. A considerable range of possible accident scenarios exists involving the release of flammable materials with considerably different consequences and therefore different planned responses. Examples may be:

- A major fire, but with no danger of an explosion, for example, a fire in a non-crude oil storage tank:
The hazards would be high levels of thermal radiation and smoke of long duration. Evacuation may be required from buildings close to the establishment and directly exposed to severe thermal radiation. In addition, it may be necessary to evacuate areas severely affected by smoke.
- A major full surface fire in a large crude oil storage tank:
There is the potential for a boil over to occur, which could propel burning tank contents upwards and outwards up to ten times the tank diameter involved, whether or not fire fighting is taking place. The evacuation of all non-essential personnel from within the area noted, and arrangements to deal with any possible escalation, should be included in any plans.
- A fire threatening a major item of plant or a storage tank containing hazardous materials:

The safety report includes an assessment of the possible consequences of such an event, and identifies the area that may need to be evacuated. The planned response should give appropriate consideration to assessing the consequences.

- A fire threatening a major item of plant that develops too quickly to allow evacuation:
Best advice for those in the vicinity may be to remain indoors away from windows and shielded from line of sight of the fire. There may be significant risks in attempting to evacuate if a BLEVE or fireball occurs with people in the open.
- Cryogenic effects:
The sudden release of certain fluids (e.g. ethylene) may cause severe local cooling of the atmosphere and persons caught in the cloud of released gas may suffer 'cold burns' or damage to the lungs. However, these kinds of releases can be highly visible and people are unlikely to enter the affected area.
- Asphyxiation:
Releases of large amounts of gas or vapours (even non-toxic substances) at high concentration can cause asphyxiation due to exclusion of oxygen. However these conditions may only exist in close proximity to the point of failure.
- Noise:
A high pressure gas release creates a great deal of very intense noise which causes damage to people's hearing, albeit temporarily. A high pressure gas pipeline major failure may result in large numbers of people seeking medical attention for hearing problems. High noise levels can be very disorientating and may cause unexpected behaviour in people affected.

4.7 Explosives

An explosive means:

- A substance or preparation which creates the risk of an explosion by shock, friction, fire or other sources of ignition.
- A pyrotechnic substance is designed to produce heat, light, sound, gas or smoke or a combination of such effects through non-detonating self-sustained exothermic chemical reactions.
- Some major catastrophic events occurring without warning, for example, the accidental detonation of solid explosives, or lighting strike. In these situations, it may not be possible to take any prior emergency action. However, most events are of very short duration. The main consequence of any explosion would be from the blast over pressure and its effects on people and buildings can be calculated.

Blast effects and Projectiles:

- The pressure blast at the time of an explosion can be significant in close proximity to source but its effect will diminish quickly over distance. In the event of a major explosion cover materials including building materials, rocks, soil, hard-core, etc. will be thrown at high velocity into the air. Also blast pressures as low as 1 p.s.i. (pound per square inch) can damage 90% of window glass and potentially cause fatalities and such pressure can be achieved at a considerable distance

from the source.

- There are processes with stored energy in pipelines conveying gas where there can be a significant hazard potential of the fluid. The failure of a pipeline carrying a liquid will have a much lower blast effect owing to the incompressible nature of liquids.
- Gases conveyed as liquids and liquids with dissolved gases will have an immediate effect. The emergency response in these situations is to rescue, treat the injured, extinguish any secondary fires and mitigate any further damage.

4.8 Toxic Releases

Dangerous substances and preparations may also be categorised as being either Toxic or Very Toxic.

- a. The consequences of toxic releases may be more difficult to accurately predict than those of flammable releases because they are more time dependent and variable according to the distance from the release and the weather conditions.

Operators should be able to estimate the concentrations and durations of gas clouds at various distances from the point of release. This information may then be used with human vulnerability models to calculate the distances at which toxic effects might be expected, and hence the area in which appropriate emergency measures might be needed. The operator should estimate dispersion distances for various foreseeable events based on the toxicology of the material involved.

- b. Different events involving the release of toxic material may require different planned responses, for example:
 - A slow or intermittent release, for example, through leaking relief valve:
If it was expected that the release would not be controlled quickly, or would grow with time, the appropriate response might be to evacuate the people nearest to the establishment of release and most closely downwind of it, provided that this evacuation would increase their safety.

The benefits from evacuation (shelter from the toxic release in the safe area) should outweigh any associated harm of being exposed to the toxic release during the evacuation process.
 - A fire or mechanical damage that threatened an installation containing toxic material. If the fire could not be controlled and if there was likely to be a reasonable period before over-pressurisation or plant failure occurred, evacuation might be appropriate. Priority should be given to those nearest the plant and downwind.
 - Rapid events with a limited duration, for example, the fracture of a component that could be isolated within a reasonable time

For events that have grown and can be rapidly controlled, the proposed emergency response should not include evacuation. Any toxic cloud formed would be of limited size and likely to drift past a particular spot relatively quickly. For members of the public, the best place to be located would normally be indoors,

upstairs with doors (internal and external) and windows closed, in a room which faces away from the direction of the incident.

- A major event leading to a sudden release of a large quantity of toxic substance, which would form a large toxic cloud, for example, most of the contents of a storage tank escaping to the atmosphere through the failure of the tank shell:

Although the probability of such an event occurring should be extremely low, the consequences for people located close to the incident would be severe. The emergency response in these circumstances would be to rescue local people, treat the injured, make safe the affected areas and mitigate further releases.

- c. In most cases, releases of toxic clouds tend to be hazardous down to much lower concentrations than flammable clouds, and therefore remain hazardous over greater distances when dispersing. In all cases, however, the hazard is greatest close to the source and near to the downwind plume. In many cases, the best course is not to attempt evacuation, but to go indoors, close the doors and windows and to switch off any ventilation and heating which draw air in from outside.

In addition, if this action is followed, people will be situated where they can receive communications via radio, television and telephone. Also, if the decision is taken to evacuate they are in a fixed location to be picked up and transported to a place of safety outside the immediate hazard zone.

After the toxic cloud has passed, it is essential to get people to open all doors and windows and then to go outside until their homes are adequately ventilated.

4.9 Causes of Plant/Equipment Failure

The most likely causes of plant and equipment failure are included in the following list, which is not exhaustive:

- third party activities (accidental and deliberate, including sabotage)
- corrosion, internal and external
- mechanical failure, including:
 - material defects
 - construction defects, including weld defects
 - fatigue
 - stress corrosion cracking
 - operational errors
 - maintenance problems
 - natural hazards
 - subsidence/landslip
 - earthquakes

4.10 Off-Site Hazard Area (Public Information Zone)

It is essential that in any incident an immediate assessment is made of the particular hazard and whether or not evacuation of the areas at risk is to be implemented. For the purposes of this plan, the off-site hazard area is based on HSE guidance which takes account of the localities which might require potential evacuation or have other safety measures put in place.

The HSE has advised land-use planning consultation distances for sites, whose boundaries coincide with the Public Information Zones (PIZ), based on the maximum

credible accident that might occur.

Currently, these zones are deemed to extend from hazardous substance vessel or critical process location centroids, or the site perimeters, and are of varying distance based on the magnitude of the hazard as assessed by the HSE.

Occupied premises identified within any PIZ will be informed of any emergency situation taking into account factors such as their proximity to the sources of the hazard and the prevailing wind direction and speed.

4.11 Information to the Public – COMAH Regulation 14

An important feature of the COMAH Regulations is the requirement of the site operator to provide specific information, in advance, to people liable to be affected by a major accident at the site. This includes the need to make people aware, in writing, of potential hazards and safety measures, as outlined in Reg.14 of the COMAH Regulations.

This information is disseminated in consultation with Fife Council who will assist in identifying relevant postcodes of potentially affected addresses. The information which requires to be notified is:

- that the industrial activity is an activity which has been notified to the Competent Authority;
- the nature of the major accident hazard; and
- the safety measures and the action to be taken in the event of a major accident.

The letter must contain adequate information on how any public at risk will be warned and kept informed in the event of any accident and the proposed actions to be taken.

4.12 Warning the Public – Notifiable Categories

The COMAH Regulations identify three categories of people likely to be involved viz:

Category	Description	People Involved
One	People who live in the area	Residents within PIZ (Formal notification required)
Two	People over whom there is some form of control	Organised workers (e.g., farm workers or occasional contractors working up to site boundary fence)
Three	People over whom there is little direct control	People who cannot be identified in advance (e.g., passing vehicular or pedestrian traffic)

Persons falling within these categories will be advised of appropriate action to take at the time of any occurrence. It should be noted that for staff at the plant and casual visitors to the site, safety measures are the responsibility of the individual site management and that on-site procedures exist to cover such eventualities.

Responsibility for alerting the public in the off-site area in the event of an accident lies with the site operator. Arrangements for warning the public at risk from an on-site emergency with potential off-site consequences vary with some operators preferring to inform notifiable categories by automated telephone dialling schemes, some by site perimeter siren systems and others by relaying pre-recorded messages by vehicle mounted PA systems.

SECTION 5 ENVIRONMENTAL ASPECTS OF MAJOR ACCIDENTS

5.1 Background

The COMAH and MACR Regulations regard all major accidents as having equal status whether their effects are primarily on people or on the environment. Consequently on-site and off-site emergency plans for COMAH top-tier sites and MACR sites in Fife all take account of the environment.

In terms of COMAH and MACR the environment comprises built features, air, water, soil, flora and fauna. This includes those features which have 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.

5.2 Defining a Major Accident to the Environment (MATTE)

A major accident is defined as:

- An occurrence (including in particular, a major emission, fire or explosion resulting from uncontrolled developments in the course of the operation of any establishment and leading to serious danger to human health or the environment, immediate or delayed) inside or outside the establishment, and involving one or more dangerous substances.
- An accident is considered to be major if it causes permanent or long-term damage to a particular unique, rare or otherwise valued component of the built or natural environment, or if there is widespread environmental loss, contamination or damage.

The effect of an accident on the natural environment may be direct or indirect, immediate or delayed, temporary or persistent.

The indirect effects of an accident need to be contemplated as well as the more obvious ones. Food and agriculture, with other features such as sewage and water treatment works all require to be considered.

5.3 Emergency Planning for the Environment

The overall plan objectives take into consideration the following environmental issues:

- possible accident scenarios
- the predicted environmental effects of accidents
- implementation of specific measures to protect the environment
- liaison with other environmental organisations and the public
- environmental clean-up restoration

5.4 Major Environmental Accident Criteria

The criteria for defining a major accident for notification to the European Commission and the information to be notified are as follows:

Any accident covered in and MACR Regulations. JSP498 Chapter 1, Paragraph 6 and COMAH Schedule 7, Part 1, Paragraph 1(a) or at least having the

consequences described in paragraphs 1(b) through 1(e) must be notified to the Commission.

- Substances Involved
A fire, explosion or accidental discharge of dangerous substances involving at least 5% of the qualifying quantity laid down in Col. 3 of Parts 2 or 3 of Schedule 1
- Injury to Persons and Damage to Property
An accident directly involving a dangerous substance and giving rise to one of the following events:
 - a death
 - 6 persons injured within the establishment and kept within hospital for at least 24 hours
 - 1 person injured outside the establishment and kept in hospital for at least 24 hours
 - dwellings outside the establishment damaged and unusable as a result of the accident
 - the evacuation or confinement of persons for more than 2 hours (person x hours): the value is at least 500
 - the interruption to drinking water, electricity, gas or telephone services for more than 2 hours (person x hours): the value is at least 1,000
- Immediate Damage to the Environment
 - i. Permanent or long-term damage to terrestrial habitats:
 - 0.5 ha or more of a habitat of environmental or conservation importance protected by legislation
 - 10 or more hectares of more widespread habitat, including agricultural land
 - ii. Significant or long-term damage to fresh water and marine habitats:
 - 10 km or more of river or canal
 - 1 ha or more of a lake or pond
 - 2 ha or more of delta
 - 2 ha or more of a coastline or open sea
 - iii. Significant damage to an aquifer or underground water;
 - 1 ha or more
- Damage to Property
 - damage to property in the establishment of at least ECU 2 million
 - damage to property outside the establishment of at least ECU 0.5 million
- Cross-Border Damage
 - Any accident directly involving a dangerous substance giving rise to effects outside the territory of the Member State concerned.

5.5 Reporting of Accidents or Near Misses

Accidents or 'near misses' regarded by Member States as being of particular technical interest for preventing major accidents and limiting their consequences which do not meet the quantitative criteria above should be notified to the Commission.

5.6 Environmental Risk Assessments

The effects of an accident on the environment depend on a number of factors peculiar to the accident. COMAH and MACR site operators are required to carry out a detailed environmental risk assessment as part of the safety report for each establishment.

The aim of the risk assessment is to show which hazard and events contribute to the risks to the environment from an accident at the establishment. This will allow prioritisation of effort in managing risks. The depth of each assessment should be proportional to the risk posed by each establishment.

Risk assessments should consider the following:

- the substances and processes present at the establishment
- the pathways of contamination from the establishment to the environment
- the locations of establishments in relation to environmental features

5.7 Pathways to the Environment

The two main pathways for environmental contamination are by air and water but contaminants may also percolate through the soil. Airborne pollutants can cover a wide area and are more difficult to predict and control than pollutants released into the water. Precipitation may be in dry ash form, or dissolved in rain, snow etc.

The affected area will depend on weather conditions which can be ascertained by the Scottish Fire & Rescue Service (SFRS) invoking the Chemical Emergency Meteorological Scheme (CHEMET). The Meteorological Office can supply information on wind speed and direction in order to help define the area most likely to be affected.

Surface run-off into sewers (foul and surface water), drains, discharge pipes and watercourses causes downstream effects, potentially carrying contaminants a long way from the immediate area and possibly reaching ground-water. The importance of the vector for pollution depends on the speed and flow of nearby watercourses and on the nature of the local drainage system.

5.8 Categorising the Local Environment

It is important to characterise the features of the environment around the establishment. A preliminary study should be used to categorise broad features of land use in the area e.g. residential, agricultural, fisheries, water organisations or woodland. The Scottish Environment Protection Agency (SEPA) holds most of this information. Where an environmental survey is required, SEPA can advise.

Any environmental sensitive areas within range of the establishment need to be identified. In the case of rivers and aquatic sites or special scientific interest (SSSIs), sensitive areas put at risk from an accident may be some distances from the establishment.

Environmentally sensitive areas might include those with statutory protection such

as:

- SSSIs
- Areas of outstanding natural beauty
- Listed buildings
- Ancient monuments
- Trees protected by preservation orders
- Ground-water Protection Zones
- Water abstraction points or other areas of environmental importance, e.g.
 - salmonoid rivers
 - local amenity areas
 - zoned open space

The specific sensitivity of each SSSI needs to be determined. An SSSI might support a particular habitat type or species that is especially susceptible to some form of pollution. This information can be obtained from the local Scottish Natural Heritage (SNH) or SEPA office. Information on the location of important features relevant to the water industry including water abstraction points, the presence of aquifers and their vulnerability to pollution is obtainable from SEPA.

Information on the important parts of the built heritage may be obtained from the Royal Commission on Ancient and Historical Monuments for Scotland (RCAHMS). Other nearby areas may be of importance to the local community and information is obtainable from local conservation groups or special interest groups. Liaison between operators, Fife Council and landowners is also crucial. Areas identified as being at risk from a major accident to the environment are listed as appendices to the Appendices containing relevant site specific information.

5.9 Pollution Control

As a result of any flammable/explosive or toxic release, varying degrees of pollution could occur and an assessment would be required by Fife Council's Transportation and Environmental Services on any aspects of contamination and the implementation of necessary controls.

Any incident where pollution caused by spillage could affect any watercourse, either directly or through surface drains, or through pollution of water bearing courses must be notified to SEPA.

Such pollution could be the prime factor giving rise to the incident, or it could be the secondary effect of a related activity, e.g. chemical washed into the water course during fire fighting operations.

Similarly, Scottish Water should be informed if any such pollution affects or is likely to affect the public water supply or sewerage systems.

5.10 Environmental Clean-Up

One requirement of the COMAH and MACR Regulations is that the on-site and off-site emergency plans provide for the clean-up and restoration of the environment after an accident. The remedial measures should be proportionate to the amount of harm caused by the accident, and to the likely level of continuing harm to the environment.

The operator has a duty to mitigate the effects of major accidents under MACR and Reg. 4 of COMAH Regulations and under other environmental legislation such as the Water Resources Act 1991 and the Wildlife and Countryside Act 1981.

On-site emergency plans and the Fife Council Oil & Chemical Pollution Contingency Plan identify initiating procedures, contractors and where appropriate arrangements for:

- removing contaminated soil and debris
- restricting foodstuffs (including those grown at home)
- restricting access to areas
- restocking watercourses, lakes, woods, etc.
- remedial action on surface and ground-water supplies

5.11 Restoration and Remediation

Contaminated areas, even on site, can pose a continuing threat to the environment after an accident. Clean-up would require the removal or cleansing of soil, ashes may need containing to ensure they cannot blow away, and drums of chemicals need to be labelled and disposed of by licensed waste contractors. Contaminated water held in bunds or storage may need to be removed and processed to make safe and non-toxic.

Remedial work may involve replacing contaminated soil with clean soil, along with replanting vegetation. Fish populations in rivers and watercourses may require restocking. In severe cases, long-term projects may be required to rehabilitate areas and restore habitats.

The extent of remedial action covered by off-site emergency plans should take account of the particular environmental hazards associated with the operations carried out on the establishment and the specific off-site environmental conditions.

This might involve neutralising, removing and disposing of chemical contaminants, removing dead animals, plants or contaminated soil; re-introducing species; repairing damaged parts of the built environment etc. in consultation with the relevant local authority services and government agencies.

The Scottish Government Environment Directorate (SGED) is responsible for immediate actions to assess the potential risk to people and safeguard the public food supply following an accident. A chemical release during an accident may lead to local contamination of the food chain, usually through direct deposition onto pasture or crops from aerial releases.

In some cases, this may occur from uptake into plants through contaminated water posing a risk to grazing animals. Information on the extent and nature of the problem is gathered through these government departments' regional contacts. Investigation may involve taking blood samples where animals have been exposed, or sampling suspect food for laboratory analysis.

SGED officials and environmental health officers will generally obtain information from the emergency services, rather than from operators directly. Once the extent of any problem has been identified, control over the entry of affected foods into the food chain e.g. through the contamination of crops or grazing land, may be via voluntary restrictions on farmers or action by Fife Council.

Where this is inadequate, there are emergency powers which government can use immediately (Part 1 of the Food and Environment Protection Act 1985, and section 13 of the Food Safety Act 1990). SGED would take responsibility for providing information of a food emergency to the public and media, and this would take place through their press office or emergency centre as well as through regional offices and the Environmental Health Service.

Counter-pollution response will be provided by Briggs Environmental Services who are a locally based firm of pollution control specialists contracted to Fife Council.

SECTION 6 ROLES & RESPONSIBILITIES

6.1 Site Operators

Site operators have established safety management systems covering the organisation and arrangements for preventing, controlling and mitigating the consequences of major accidents at their installations. Specific arrangements for dealing with particular categories of emergencies form part of their safety management systems.

Potential emergencies have been the subject of a process of hazard identification and risk assessment. Having identified all types of emergency events, appropriate response measures and procedures the companies are prepared to deal with such eventualities.

These procedures are included in emergency plans prepared by the respective site operators which 'dovetail' with this Local Authority off-site plan in order to provide a comprehensive and effective response to emergencies.

The companies are responsible for maintaining emergency procedures in an up to date operational state, revising them as necessary to cater for any changes that may arise.

During an incident the responsibilities of site operators may be summarised as follows:

- Alert the emergency services
- Take initial action as required to prevent any escalation of incident
- Activate on site emergency plan
- Identify Incident Management Team
- Activate the Emergency Control Centre (ECC)
- Take an immediate head count of staff, contractors and visitors
- Provide information on known casualties
- Ensure a detailed site plan is available for emergency responders
- Provide technical advice and support to the emergency responders
- Providing accurate information to responders in connection with dangerous substances/chemicals stored or processed in affected areas
- Maintain an emergency management overview of the incident to conclusion, in liaison with the emergency responders

6.2 Police Scotland

The role and responsibilities of Police Scotland encompass the protection of life and property and coordination of all responding agencies.

In responding to any major accident at any COMAH site, the Police responsibilities may be summarised as follows:-

- The saving of life in conjunction with the other emergency services
- Call out or place essential services on stand-by
- Coordination of emergency services and other responders during emergency phase
- Appointment a Police Incident Officer

- Coordination of public safety measures off-site, including potential evacuation of areas at risk in consultation with other emergency responders
- Control of access and egress to the site and local traffic management including the staffing of traffic control points, diversions and roads closures
- Collation and dissemination of casualty information
- The protection and preservation of the scene
- The investigation of the incident in conjunction with other investigative bodies where applicable
- Identification of the dead on behalf of the Procurator Fiscal who is the principal investigator where fatalities are involved
- The restoration of normality at the earliest opportunity

6.3 Scottish Fire & Rescue Service

The fundamental functions of the Scottish Fire & Rescue Service (SFRS) are:

- to save life
- to protect property
- to render humanitarian services

The role of the SFRS within this plan embraces all of the following responsibilities:

- Rescue of trapped casualties
- Preventing further escalations of the incident by tackling fires, dealing with released chemicals and other hazardous situations
- Information gathering and hazard assessment to give advice to the other emergency responders and therefore provide advice around potential evacuations
- Liaison with Police Scotland and the on-site Emergency Response Team (ERT) regarding the provision of an inner cordon around the immediate hazard area to enable the Fire Service to exercise control
- Liaison with the Scottish Ambulance Service (SAS) Incident Officer and the Medical Incident Officer with regard to rendering immediate medical assistance and the priority evacuation of injured persons
- The safety of all personnel within the inner cordon
- Consideration of the environmental impact resulting from the incident and the action to be taken to minimise this
- Assisting Police Scotland with the recovery of bodies
- Participating in investigations as appropriate and preparing reports and evidence for inquiries
- Stand-by during non-emergency recovery phase to ensure continued safety at and surrounding the incident scene.

6.4 Scottish Ambulance Service

Responding to emergencies is a normal feature of the work of the Scottish Ambulance Service (SAS). The purpose of the Service is to provide immediate care to patients at the scene of an incident and care during transportation, to, from and between healthcare facilities. To supplement road transport, the Service operates an integrated air ambulance service using fixed wing aircraft and helicopters, controlled by the Scottish Ambulance Service Air Desk.

The SAS provides the Ambulance Control Point at which all NHS, and Voluntary Aid Society activity in support of the NHS, will be co-ordinated at the scene.

In the case of an incident requiring decontamination of people exposed to hazardous substances in the community the Service would assume responsibility for the triage and decontamination of those affected, as an extension of normal operational or major incident procedures.

In responding to an incident at any location in Scotland, responsibilities may be summarised as follows:

- The saving of life and the provision of immediate care to patients at the scene of the incident and in transit to hospital.
- The alerting of hospital services, immediate care GPs and other relevant NHS agencies.
- The management of decontamination for people affected by hazardous substances, prior to evacuation from the scene.
- The evacuation of the injured from the scene in order of medical priority.
- Arranging and ensuring the most appropriate means of transport for the injured to the receiving hospital.
- The supply of patient care equipment to the scene of a major incident.
- To arrange the transportation of appropriate medical staff and their equipment to the scene of a major incident
- Alerting and co-ordinating the work of the Voluntary Aid Societies acting in support of the ambulance service at the incident site.
- The provision and maintenance of communications equipment for medical staff and appropriate Voluntary Aid Society personnel at the scene of a major incident.
- The restoration of normality.

6.5 NHS Fife

NHS Fife is responsible for meeting the health care requirements needs of any person affected by an incident at a top tier site.

During an emergency incident there may be occasions where the level of NHS Fife involvement is heightened which places additional strain on existing resources dealing with the general health care needs of Fife residents. Where this strain on resources dictates, NHS Fife will implement their Major Emergency Plan. .

Casualties removed from any top tier site will be transferred to a 'Control Hospital' which in the case of Fife is the Victoria Hospital, Kirkcaldy. There may be occasions where the 'Control Hospital' authorises casualties to be transferred to other hospitals but that will be dependent on the prevailing circumstances. The responsibilities of NHS Fife following an emergency incident can be summarised as follows:

- Address the care and health needs for all affected by incident
- Alert key personnel within the Control Hospital and surrounding hospitals, as necessary
- Appoint a Medical Incident Officer (MIO) and Medical Team to attend on site, if required
- Activate NHS Fife Major Emergency Plan, where appropriate
- Liaise with the other emergency responders
- Liaise with NHS Scotland Resilience Team, if required
- Provide Public Health advice, as required
- Liaise with Voluntary Organisations, as required

NHS Fife has a responsibility to safeguard the public who may be at risk from the possible effects of airborne or waterborne hazards resulting from any major or emergency incident. In the event that injuries / illness are linked to the possibility of communicable disease, chemical or toxic material, the Duty Consultant in Public Health Medicine (CPHM) should be contacted.

The Duty CPHM will undertake assessment and investigation of any public health hazards and take appropriate action, including advice to the public in conjunction with other agencies.

6.6 Fife Council

Fife Council has a statutory obligation to oversee the coordination of the off-site emergency response. The Council's primary role in responding to an emergency incident is to provide support to the emergency services. The Duty Emergency Planning Officer (EPO) will act as the initial point of contact in regard to the notification of any emergency incident on site and he/she will coordinate the initial Local Authority response.

A Local Authority Liaison Officer (LALO) will be identified and will attend at the site ECC to liaise with the Site Main Controller (SMC) and other emergency responders.

In response to an incident at a COMAH or MACR site in Fife, Fife Council's response can be summarised as follows:

- Identify the necessary Fife Council services required to assist and support the emergency services
- Ensure appropriate incident management arrangements are in place
- Deploy a LALO to the on-site Emergency Control Centre (ECC)
- Activate Fife Council Emergency Plan, if required
- Activate Fife Council Emergency Reception Plan, if required
- Manage the recovery phase of the incident, as necessary
- Following incident, facilitate and coordinate a structured debrief to examine the off-site response

Fife Council also has responsibility for producing and maintaining an off-site contingency plan for the purpose of coordinating the off-site emergency response to an emergency incident occurring on a top tier site in Fife in line with the COMAH and MACR Regulations.

6.7 Health & Safety Executive (HSE)

The Health & Safety Executive (HSE) and the Scottish Environment Protection Agency (SEPA) work together as the joint Competent Authority (CA) for COMAH sites in Scotland. Both agencies have a shared objective of achieving high levels of protection from major accidents for both people and the environment. The HSE also work closely with the site operators in preparation of their on site plan.

The HSE not only have an advisory role in any major accident but also an investigatory role post-accident to determine the cause and liability for such occurrences.

The responsibility of the HSE following an emergency incident on a COMAH site will include:

- Providing appropriate expertise on health and safety for the regulation of major hazards
- Coordination of activities that are consistent, transparent, targeted and proportionate in relation to duties under the regulations.
- Ensure that conflicting requirements are not placed on top tier site operators
- Work closely with SEPA and other agencies on issues of joint interest, so avoiding duplication of activity for themselves and for operators
- Ensure that site operators maintain detailed and accurate on site safety report that allow for an appropriate response to any incident occurring on site
- Undertake coordinated inspection programmes for COMAH establishments.

The HSE also have responsibility for overseeing key regulatory activities such as:

- Assessing safety reports
- Applying derogation procedures
- Designating domino effects establishments

HSE have an advisory role in any major accident as well as an investigatory role post-accident, to determine the cause and liability for such occurrences. The HSE can issue Improvement and Stop Notices to COMAH site operators where a breach of the regulations has occurred.

6.8 Scottish Environment Protection Agency (SEPA)

SEPA is responsible for environmental protection in Scotland and adopts an integrated approach to the protection and enhancement of water, air and land and associated natural resources.

During an emergency situation SEPA, will deploy its comprehensive scientific capability to give support and advice to other agencies and to the general public on such matters.

Additionally, SEPA has powers to prevent, minimize or reduce pollution of the environment and enforces environmental legislation. SEPA performs the following functions:

- Regulates the treatment, storage, movement and disposal of waste.

- Provides, as flood warning authority, regularly updated information on flood warnings (Floodline) across Scotland.
- Administers jointly with the Health and Safety Executive the Control of Major Accident Hazards (COMAH) legislation.
- Regulates the disposal of radioactive waste and manages Scottish interests in the Radioactive Incident Monitoring Network (RIMNET).

SEPA therefore wishes to be informed about any COMAH major incident that has lead, or may lead, to pollution of the environment, whether to water, air or land.

SEPA, as part of the Competent Authority, must be informed of all accidents at COMAH establishments so that, following the accident, a joint investigation with the HSE can be commenced pursuant to the requirements of Regulation 19(4). Reports can then be sent to the European Commission, in accordance with Regulations 21(1).

6.9 Voluntary Aid Organisations

The support of voluntary aid organisations may be required during the response to a major accident. The following organisations may be mobilised to assist the emergency services or general public:

- Women's Royal Voluntary Service
- British Red Cross Society
- St. Andrews First Aid
- Radio Amateurs Emergency Network (RAYNET)

Full mobilisation and operational capability details are contained in the Fife Council Emergency Response Plan.

SECTION 7

INCIDENT MANAGEMENT PLAN ACTIVATION & DEBRIEFING

7.1 Alert Notification

Site Alarm Systems

All top-tier operators in Fife have fixed alarm systems to give warning of emergency situations along with detailed procedures in their on-site plans to deal with them. These include a variety of audible and visual alarm systems, activated automatically or manually, tested at regular intervals to ensure reliability.

Notifying the Emergency Services

Some operators have direct telephone links to Police Scotland Sub Divisional HQ Contact Centre and the Scottish Fire & Rescue Service Control Room, Thornton to give warning of developing emergencies. It is also possible that emergency services may receive incident calls on the '999' network either from operators or other sources.

Through a more structured approach to formally debriefing training events, 'live play' exercises that test both the on-site and off-site plans and actual 'live incidents', safeguard protocols are now in place that has facilitated closer information sharing between all emergency responders. Therefore, where notification of an emergency incident is made to one of the 'blue light' services, processes exist to ensure the other emergency services are notified, as required.

7.2 Incident Categories

There are three categories of incident, classified as follows:

Category	Classification	Description
1	Minor Incident	One that can be dealt with safely by the operator's existing resources and does not require assistance from the emergency services or other key responders.
2	Serious Incident	One where a call for assistance has been made to the Emergency Services.
3	Major Incident	A serious incident where any of the responding key agencies declare the incident is of such a nature it significantly impacts on that agency and should be upgraded to a Major Incident,

7.3 Declaration of Incident

Site operator's emergency procedures automatically classify incidents into Minor or Serious. Immediately following the declaration of an incident requiring the attendance of the emergency services this off site plan will be activated. Details of the initial key actions are listed within this section in line with the plan activation process.

7.4 Declaration of Major Incident

A Major Incident can be declared by any of the emergency responders. However, where one of the responding agencies declares a major incident but it is not considered to be an emergency incident for other organisations, then the others will respond appropriately in a supporting role.

Where a Major Incident is declared, consideration will be given to activating the Fife Strategic Coordinating Group (SCG) General Emergency Response Plan. This plan sets out the arrangements in place to ensure an integrated emergency management response to any major incident in Fife. It details the roles and responsibilities of all Category 1 and 2 organisations, as defined by the Civil Contingencies legislation. The roles and responsibilities of the key post holders involved in both the strategic and tactical management of an emergency incident occurring in Fife are set out in that plan.

In the event of a major incident occurring at a top-tier site, it is likely that the Fife SCG GERP would be activated. Any multi-agency strategic or tactical incident management team formed as a result of any activation of this plan would work in parallel with the incident management regime in place at the top-tier site. This will ensure a fully coordinated response at the scene of the emergency incident and in dealing with the wider consequences, community impact assessment and recovery phase of such an incident.

All organisations with a potential role in responding to an emergency incident at a top-tier site hold their own emergency plans and/or Standard Operating Procedures which detail how that particular organisation will manage their own response(s) to an emergency incident. These plans will be activated, as required, by individual responders independently of any activation of this plan.

It is quite likely that in the response to a significant or major emergency occurring at a top-tier site a number of cross organisational emergency plans/procedures will be activated.

7.5 Site Operators

Immediately following the report of an incident, site operators have responsibility for activating their on-site emergency plan. A Site Incident Controller (SIC) will be identified who will deploy to the immediate scene of the incident. The site Emergency Control Centre (ECC) will be activated and a Site Main Controller (SMC) identified. The SMC will attend at the ECC and will liaise with the senior representatives from the responding emergency services.

During an incident the initial key tasks for site operators are:

Key Tasks:

- Alert the emergency services
- Take initial action as required to prevent any escalation of incident
- Activate on site emergency plan
- Identify a Site Incident Controller and Site Main Controller
- Activate the Emergency Control Centre
- Take an immediate head count of staff, contractors and visitors
- Provide information on known casualties
- Ensure a detailed site plan is available for emergency responders
- Provide technical advice and support to the emergency responders
- Providing accurate information to responders in connection with dangerous substances/chemicals stored or processed in affected areas

- Maintain an emergency management overview of the incident to conclusion, in liaison with the emergency responders

7.6 Police Scotland

The police service is responsible for coordinating the emergency response. A Police Incident Officer (PIO) will deploy to the site Emergency Control Centre (ECC) and liaise directly with the Site Main Controller and senior representatives from the other responding organisations. Police Scotland, Fife Sub Divisional Contact Centre (FCC) will arrange the deployment of police resources to the incident in liaison with the PIO.

During an incident the initial key tasks for the Police are:

Key Tasks:

- Provide an initial assessment of the incident in line with – ‘**SAD CHALETS**’
- Ensure the appropriate Rendezvous and Forward Control Points are in place
- Ensure coordination of the emergency response
- In liaison with the Scottish Fire & Rescue Service, ensure that inner and outer cordons are in place and appropriately staffed
- Coordinate the required off site public safety implications – e.g. – evacuation procedures
- Enforce traffic management around the site, including stop points and access/egress to the site
- Collate casualty information
- Support media management and public information arrangements, as required
- Conduct investigation into circumstances of the incident, including scene management and dealing with fatalities, if applicable

7.7 Scottish Fire & Rescue Service (SFRS)

The Scottish Fire & Rescue Service (SFRS) will deploy to the immediate scene of the incident and take the necessary action to mitigate any escalation. A Fire Operational Commander will attend at the scene of the incident, whilst a Fire Incident Commander will attend at the site ECC and liaise directly with the Site Main Controller and senior representatives from the other responding organisations.

During an incident the key tasks for the SFRS are:

Key Tasks:

- Through the initial responding personnel provide an initial assessment of the incident
- Ensure the appropriate Rendezvous and Forward Control Points are in place
- Rescue of trapped or injured casualties, where there is an immediate danger to life
- Take initial action as required to prevent any further escalation of the incident
- In liaison with the police, ensure that inner and outer cordons are in place and appropriately staffed
- Obtain a site plan from the site operators
- Consider CHEMET information and the potential impact on the immediate and wider environment
- Assist in any subsequent investigation into cause of incident
- Stand-by during recovery phase to ensure continued safety to those

required to enter scene

7.8 Scottish Ambulance Service (SAS)

The Scottish Ambulance Service (SAS), in liaison with the Fire Service and the on-site medical response team, will provide the initial clinical care for all those affected by the incident. An Ambulance Incident Officer (AIO) will be appointed who will initially deploy to the scene of the incident and liaise with the Site Incident Controller (SIC) and other emergency responders. Any additional resources will be arranged through the AIO.

During an incident the key tasks for the SAS are:

Key Tasks:

- Provide an initial assessment of the incident in line with – ‘**SAD CHALETS**’
- Ensure the appropriate Rendezvous and Forward Control Points are in place
- Provide resources as required to the established Rendezvous and Forward Control Points
- Preserve life through the triage and treatment of casualties, and thereafter the conveyance of the ill and injured to hospital
- Management of decontamination for people affected by hazardous substances, prior to evacuation from the scene
- Alert receiving hospitals, as necessary
- Provision of specialist patient care equipment and resources, as required
- Consider requirement for a Medical Team, where AIO would liaise with Medical Incident Officer (MIO)
- Alerting and coordinating the work of the Voluntary Aid agencies, acting in support of the SAS at the site
- Establish a Casualty Clearing Station and Ambulance Loading Point

7.9 NHS Fife

NHS Fife is responsible for ensuring that the health care needs of anyone affected by an emergency incident at all Fife sites. The nearest hospital to the emergency incident will generally be the Control Hospital directing transport and care of casualties. In the case of Fife itself, the usual designated Control Hospital will be the Victoria Hospital, Kirkcaldy.

During an incident the key tasks for NHS Fife are:

Key Tasks:

- Provide immediate health care requirements for all affected by incident
- Alert key personnel within the Control Hospital and surrounding hospitals, as necessary
- Appoint a Medical Incident Officer (MIO) and Medical Team to attend on site, if required
- Activate Fife NHS Major Emergency Plan, if necessary
- Liaise with the other emergency responders
- Liaise with NHS Scotland Resilience Team, if required
- Lead on and provide Public Health advice, as required
- Liaise with Voluntary Organisations, as required

7.10 Fife Council

Fife Council's primary role in responding to an emergency incident is to provide support to the emergency services. The Duty Emergency Planning Officer (EPO) will act as the initial point of contact in regard to the notification of any emergency incident on site and he/she will coordinate the initial Local Authority response.

A Local Authority Liaison Officer (LALO) will be identified and will attend at the site ECC to liaise with the Site Main Controller (SMC) and other emergency responders.

During an incident the key tasks for Fife Council are:

Key Tasks:

- Identify the necessary Fife Council services required to assist and support the emergency services
- Ensure appropriate incident management arrangements are in place
- Deploy LALO to on-site Emergency Control Centre (ECC)
- Activate Fife Council Emergency Plan, if required
- Activate Fife Council Emergency Reception Plan, if required
- Manage the recovery phase of the incident, as necessary
- Following incident, facilitate and coordinate a structured debrief to examine the offsite response

7.11 Health & Safety Executive

The Health & Safety Executive (HSE), through their competent authority role, in conjunction with SEPA not only has an advisory role in any major accident but also an investigatory role post-accident to determine the cause and liability for such occurrences.

Following an incident on site, the HSE's initial considerations include:

- Establish communication channels and gather sufficient information in connection with the incident to oversee response
- Liaise with the Site Main Controller and other emergency responders to decide if attendance at the ECC is required
- Provide appropriate expertise on health and safety matters relative to the on-going emergency incident
- Oversee response activity to ensure it coincides with the on-site safety report and on site plan
- Undertake their investigatory role to examine the causes of the emergency incident
- Maintain an overview of the incident until the restoration of normality

7.12 Scottish Environmental Protection Agency

SEPA, as part of the Competent Authority, must be informed of all accidents at COMAH establishments so that, following the accident, a joint investigation with the HSE can be commenced pursuant to the requirements of Regulation 19(4). Reports can then be sent to the European Commission, in accordance with Regulations 21(1).

During an emergency situation SEPA, will deploy its comprehensive scientific capability to give support and advice to other agencies and to the general public on such matters.

In responding to an incident SEPA will:

- Will deploy staff to meet local co-ordination arrangements.

- Provide advice on all aspects of environmental impact, protection and recovery.
- Assist in determining the footprint and movement of any contamination.
- Give advice about discharges to watercourses, containment, storage, transportation and disposal of contaminated liquid or solid waste.
- Maintain operational links with Scottish Water, Local authorities, Environmental Health Departments and Health & Safety Executive.

7.13 Additional Key Responders

Depending on the nature of the incident, there may well be the requirement to notify additional key responders to ensure an appropriate level of response to safely manage the incident through to the recovery phase. Whilst the following list is not exhaustive additional key responders may include:

- Maritime & Coastguard Agency
- Forth Ports Authority
- Utility Providers
- Procurator Fiscal
- Network Rail
- Airport Operators
- Harbour Authorities
- Highway Agencies

A full list of all Category 1 and Category 2 responders, as defined in terms of the Civil Contingencies Act, 2004 is contained within the Competent Authority guidance, which should be referred to in conjunction with this plan.

7.14 Public Safety – Emergency Broadcasts

Following any incident where there is an escape of gas or a plume of smoke occurring, the escape must be notified to the emergency services at the earliest opportunity.

The emergency services, primarily through the PIO will request that the company warns the public in the Public Information Zone (PIZ) by appropriate methods which have been previously tested. These include automated telephone dialling schemes and site perimeter sirens. In consultation with the PIO and through the assistance of the police, this warning mechanism may also include touring any area at risk, broadcasting a pre-recorded safety message via loudspeaker and advising those at risk what actions they should take.

These messages will be reinforced by emergency broadcasts via both local and national media which the police will co-ordinate, through the Police Media Relations Manager. Use will also be made of organisational websites, such as Fife Direct managed by Fife Council, to alert people to the on-going situation and provide appropriate advice. People living and working in the vicinity of the PIZ will have received prior information from the operator including recommended actions in the event of an incident at the establishment based on the message of “**Go in- Stay in- Tune in**”.

Additional safety measures might include switching off gas fires/boilers/cookers and other sources of ignition, sheltering indoors, evacuating a hazard area or diverting from certain roads. If evacuation is necessary the direction of travel, route to follow and location of the designated evacuee Reception Centre or Place of Safety must be provided. Police Scotland will have the primary role in overseeing any such evacuation.

7.15 Media & Public Communications

Following the report of any incident on site and dependent on scale, there will potentially be significant media interest and activity. Normally the Police Incident Officer (PIO) will have primacy around any media release during the initial stages. To that end, the PIO will require the assistance of the Police Media Relations Manager and that being the case, it may be necessary for the media relations manager to deploy to the site ECC.

Depending on the scale and circumstances of the particular incident a Media Briefing Centre (MBC) may require to be established. The MBC will be organised by the Police Media Relations Manager, in consultation with the site operators and other emergency responders, as appropriate. Should the scale of the incident dictate, there may be a requirement to establish a Public Communications Group to handle and respond to all media enquiries. The Media and Communications Team, Fife Council will take the lead as part of the Public Communications Group.

7.16 Emergency Control Centre

Under the COMAH Regulations every top-tier site is required to have an Emergency Control Centre (ECC) from which response operations to an emergency can be directed and co-ordinated.

Appropriate responders will attend the ECC and be dedicated to safely managing the incident. In the event of the ECC being unavailable due to the nature of the incident, an alternative ECC will require to be identified by the Site Main Controller.

Key responders within the ECC will usually include the following personnel who will be identified by clearly identifiable tabards:

- Site Main Controller
- Police Incident Officer (Quartered Blue and White)
- Fire Incident Commander (Quartered Red and White)
- Ambulance Incident Officer (Quartered Green and White)

Responders operating within the ECC will have access to;

- Communications systems for both internal and external communications
- Site plans and maps
- Logging systems for recording the incident in 'real-time'
- List of all personnel on site
- Sources of technical information and advice

7.17 Forward Control Point

Depending on the location of the incident, the first emergency response vehicle to approach the scene will become the Forward Control Point (FCP) and be the only vehicle displaying an illuminated blue revolving beacon.

The location should permit visual observation but will be determined by the nature of the incident and hazards present, ensuring the safety of all responders is not compromised.

7.18 Rendezvous Point

All COMAH sites in Fife have pre-determined Rendezvous Points (RVP) and these are detailed in the individual on site plans, attached within the individual site

appendices attached to this plan. If the designated RVP is unavailable, an alternative RVP will be established. The location of the alternative RVP will be dependent upon the nature of the incident and prevailing weather conditions, such as wind direction and speed.

7.19 Debriefing of Incident

Once an emergency incident has been managed and concluded, Fife Council will facilitate and coordinate a formal debrief of the incident to examine the off-site response. The debrief will involve all key responders and will be held as soon as practicable following the conclusion of the incident but ideally within 7 – 10 working days.

A formal debrief report will thereafter be compiled highlighting any lessons learned as a result of the incident and will include specific action points for key responders to consider, taking remedial action where appropriate. It is envisaged this formal process will not only enhance but improve the emergency response to any future incidents on Fife sites.

SECTION 8 CONTACTS

8.1 Contacts

All contact details required for the activation of this plan are held by Fife Council Emergency Planning & Business Continuity Team. Contact details will be made available, as required, following activation of this plan.

SECTION 9 GLOSSARY OF TERMS & ABBREVIATIONS

9.1 Glossary of Terms

Ambulance Loading Point	An area, preferably hard standing, close to casualty clearing station where ambulances can load patients for transfer to A & E Hospitals
Body Holding Area	A point close to the scene where any victims can be kept pending transfer to a mortuary.
Casualty Bureau	Police controlled contact and information for all records and data relating to casualties
Casualty Clearing Station	An area at the incident scene set up by the Ambulance service in liaison with the Medical Incident Officer (MIO) to assess, treat, and triage casualties and direct their evacuation
CHALETs	Mnemonic used by police to assess extent of incident(Casualties / Hazards / Access/Locations/Emergency Services required/ Type of incident/Start a Log)
Competent Authority	Authority set up to regulate the Control of Major Accident Hazards Regulations 1999 (COMAH) comprising the Health & Safety Executive and the Environment Agency or the Scottish Environment Protection Agency as applicable
Dangerous Substance	Any substance, mixture or preparation (named or generic) specified in Schedule 1 of the COMAH Regs. and present as a raw material, product, by-product, residue or intermediate
Domino Effect	Combined consequences of major accident at one establishment or installation being triggered by an incident at another establishment or installation
Downwind	From the incident source following the direction of the wind
Emergency Control Centre	Establishment from which emergency operations are co-ordinated providing communications, power, maps, etc. for company and emergency services
Emergency Services	Police, Fire, Ambulance and Coastguard Services who are liable to respond to an emergency at the establishment
Environment	The surroundings around, over and under an establishment including the flora, fauna, buildings and infrastructure
Establishment	Whole area under control of the same person where dangerous substances are present at one or more installations. Two or more areas under control of same person separated only by a road, railway or inland waterway treated as one establishment. An establishment, consisting of a number of fragmented areas, may be split into two or more qualifying areas
Explosive	A material classified as an explosive hazard can be ignited explosively causing a shock wave. People can be affected by blast injuries or flying debris
Fire	A material classified as a fire hazard can ignite and produce smoke. The effects of fire on people normally take the form of skin burns

	caused by exposure to thermal radiation. Smoke may cause breathing difficulties
Forward Control Point	Advance position close to incident locus for visual observation but far enough back for staff safety. First emergency service vehicle at locus becomes FCP
Friends & Relatives Reception Centre	Secure area for use by Friends & Relatives set aside by Police with local authority and VAO support
Hazmat	Hazardous Materials
Head of Establishment	The individual at the establishment responsible for controlling site operations, including health and safety (MACR Sites)
Health Authority	In Scotland means a health board established under Section 2 of the National Health Service (Scotland) Act 1970
Heavier than Air	Vapours that are denser than air
Incident Control Point	Incident Control Point will be established within the company Emergency Control Centre where communication and support facilities will be provided.
Industrial Activity	Operation carried out in an industrial installation referred to in Schedule 3 of the COMAH Regs. involving or liable to involve one or more dangerous substances including on-site storage and on-site transport associated with operation unless operation is incapable of producing a Major Accident Hazard
Installation	A building or area within an establishment in which dangerous substances are present, or are intended to be processed, used, handled or stored
Key Personnel	People who have a significant role to play within the On-Site Emergency Plan
Life-saving Phase	Operations concerned with the protection of life and property
Local Authority	The local authority for relevant administrative area e.g. Fife Council. May include more than one authority if boundaries are close to establishment. In these instances it would be normal for one authority to have primacy
MACR Co-ordinator	The individual nominated by the Head of Establishment to act as the focus for all MACR matters relating to that establishment
Major Accident	An occurrence such as a major emission, fire or explosion resulting from uncontrolled developments that leads to serious danger to human health and or the environment, whether immediate or delayed, inside or outside the establishment and involving one or more dangerous substances
Major Accident Prevention Policy	A document compiled by an establishment to explain the policy relating to the prevention and mitigation of major accident hazards within the establishment
Maximum Anticipated	The maximum anticipated holdings irrespective of the amount held,

Holdings	the maximum capacity available or the maximum licensed amount
Media Centre	Central contact point for media enquiries established by Local Authority at Police request with communications and conference facilities
Mitigation	The process of reducing the scale of the consequences of a major accident
MOD CA	Authority, vested at 1 star level, set up to introduce and enforce the Major Accident Control Regulations - JSP 498
Non-toxic	Substance which has no known harmful effects on biological mechanisms
Notification	Formal submission from an establishment notifying the CA of its existence and qualification according to the LTS or TTS threshold criteria for the dangerous substance or category of dangerous substance held
Off-Site Emergency Plan	Document produced by local authority based around major accident hazards, identified by the establishment in Safety Report, that could affect human health and or the environment beyond the establishment boundary, or that will require the attendance of external emergency services in the event of an incident
On-Site Emergency Plan	Document produced by the relevant operator encompassing the establishment complete response to a major accident involving dangerous substances
People	All persons including company personnel, contractors, visitors and members of the public.
Police Incident Officer	The most senior officer at the incident scene who will take tactical decisions until Tactical Command is established
Public Information Zone	Area around establishment where people will be immediately affected by Major Accident and who require certain information on actions to take in emergencies
Rest Centre	Premises designated for the temporary accommodation of evacuees
Safety Report	Document demonstrating that establishment storing/processing dangerous substances has taken all measures to prevent major accidents and mitigate the consequences to human health and/or the environment of any that do occur.
Senior Emergency Services Officer	Usually the senior Police officer who has primacy over the developing incident and is located within the ECC
Significant Change	Changes resulting from introduction/ removal of hazards that could lead to a Major Accident, changes in operation or stock holdings of establishment, developments in surrounding area and/or changes to habitat or species awareness on or near the establishment
Site Incident Operator	Normally operates at the Forward Control Point and provides the interface between the Emergency Control Centre (ECC) and the incident

Senior Investigating Officer	Police senior detective appointed to investigate all aspects of the incident
Site Main Controller	Has overall responsibility for directing operations from the ECC
Toxic	A material classified as a toxic hazard can cause varying degrees of harm depending upon the nature of the material and the time of exposure to the material. The toxic effect can spread through water courses

9.2 Abbreviations - (As contained in the Guide to Control of Major Accident Hazard Regulations 1999 & Joint Services Publication 498)

ACCOLC	Access Overload Control
ACPO(S)	Association of Chief Police Officers(Scotland)
AIO	Ambulance Incident Officer
ALARP	As Low As Reasonably Practicable
ALP	Ambulance Loading Point
AONB	Area of Outstanding Natural Beauty
BFI	Bulk Fuel Installation
BT	British Telecom
CA	Competent Authority
COMAH	Control of Major Accident Hazards Regulations 1999
COSHH	Control of Substances Hazardous to Health
COSLA	Convention of Scottish Local Authorities
D SEF Pol	Directorate of Safety, Environment and Fire Policy
ECC	Emergency Control Centre
ECO	Emergency Co-ordinating Officer
EPA	Environment Protection Act 1990 (as amended by The Environment Act 1995)
ERA	Environmental Risk Assessment
EU	European Union
FC	Forward Control
HOE	Head of Establishment
HSE	Health & Safety Executive
HSWA	Health & Safety at Work etc. Act 1974
ICP	Incident Control Post
JSP	Joint Service Publication
LA	Local Authority
LALO	Local Authority Liaison Officer
LNR	Local Nature Reserve
LTS	Lower Tier Site

MA	Major Accident
MACR	Major Accident Control Regulations
MAPP	Major Accident Prevention Policy
MATTE	Major Accident To The Environment
MDP	Ministry of Defence Police
MIO	Medical Incident Officer
PIO	Police Incident Officer
PIZ	Public Information Zone
PPE	Personal Protective Equipment
PXR	Post Exercise Report
RIDDOR	Reporting of Injuries, Diseases and Dangerous Occurrences Regs. 1995
SAC	Special Area of Conservation
SEPA	Scottish Environment Protection Agency
SESO	Senior Emergency Services Officer
SG	Scottish Government
SGED	Scottish Government Environment Directorate
SGJCD	Scottish Government Justice and Communities Directorate
SNH	Scottish Natural Heritage
SPA	Special Protection Area
SR	Safety Report
SSSI	Site of Special Scientific Interest
TTS	Top Tier Site