

MODEL EMERGENCY PROCEDURE FOR A QUARRY

This is a draft procedure developed to provide the basis for an effective emergency procedure for a quarry. This relates to good preparation for sudden, unexpected events and to several legal requirements, such as the Management of Health and Safety at Work Regulations 1999 - Regulation 8 (Procedures for Serious and Imminent Danger and for Danger Areas), the Quarries Regulations 1999 – Regulation 15 (Escape and Rescue Facilities at the Quarry) and the Regulatory Reform (Fire Safety) Order 2005 (issued 2006) that removed the need for fire certificates by enhancing the employer's responsibility for fire risk assessment.

The management of a quarry may use this model as the basis for developing a procedure, but it must be carefully considered and adapted to local circumstances. No guarantee is given that it is complete for every situation.

IMPORTANT: An emergency procedure must never be considered to be in place simply because written guidance has been provided. Everyone on the site must understand their role and whom to involve in an emergency. Appropriate equipment, regularly verified to be in good condition, and locational guidance must be provided. Review and refresher training at intervals is essential.

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Introduction

An emergency is an unexpected occurrence within or adjacent to the site premises which could give rise to any or several of the following consequences. It may be impossible to anticipate every eventuality or combination of circumstances, but there follows a list of foreseeable emergency situations:

Serious Personal Injury

Confined Space Injury or Incident

Loss of Life

Fire

Flooding - Storms, blocked drains, product spills, etc.

Pollution - Escape of products, fuel, oil, gas, etc into adjacent premises, surface or foul water drains, river etc.

Explosions - Compressors, bottled gas, kiln etc.

Serious

Property Damage - Vehicle impact, wind or lightning strike, etc.

Structural Failure - Instability or collapse

Severe Business Interruption - Bomb threats, protesters etc

An emergency may be the result of a malfunction of normal operation procedures, plant or human error, but may also be caused by uncontrolled outside influences such as:

Severe thunderstorm

Flooding

Aircraft crash

Emergencies outside the site - Road/rail traffic or at adjacent premises.

The following accident and emergency procedures have been devised for dealing with such circumstances.

A. Roles and Responsibilities

A.1

Person discovering the incident

- Takes immediate control of the emergency situation. He/she will be assisted by other staff as necessary. If a more suitable person becomes available, control may be passed over, but this must be clearly agreed and respected by all concerned so that actions are properly co-ordinated. His/her duties will be those of the Incident Controller outlined in section A.2 until he/she is relieved of those duties by a more senior member of staff. In an out of normal working hours situation this may take several hours to occur.

When a senior member of staff arrives at the incident, he/she will appoint **one person** to take control, who will be known as the Incident Controller. The Incident Controller may continue to be the person who discovered the incident, may be the senior person, or it may be deemed necessary to appoint an individual with specific experience at this point. All staff will then take further instruction from the Incident Controller.

A.2

Incident controller

- ◆ Assess the scale of the emergency.
- ◆ Ensure that emergency services have been alerted if required.
- ◆ Ensure that a company representative meets the Ambulance/Fire Brigade at the site entrance with sentries along the route to direct them to the incident scene.
- ◆ Secure the safety of personnel by evacuating non-essential workers from the affected area and facilitate containment of the incident.

- ◆ Ensure that any casualties receive medical attention as quickly as possible.
- ◆ Establish checking for missing persons, as applicable.
- ◆ Assume control of the works, dealing with all matters associated with the emergency.
- ◆ Take appropriate action to control plant, to reduce potential for injury to persons and releases to air, water and ground.
- ◆ In the case of an environmental incident with potential for ground water contamination, seal off affected drains and shut off outlet valves from site.
- ◆ If necessary call in contaminated waste removal specialists.
- ◆ Notify appropriate company management (contractors, etc.) and if necessary the Environment Agency and/or HSE.
- ◆ Instigate effective liaison with the families of affected persons.
- ◆ Advise personnel operating outside the affected area of any developments, and if appropriate inform any farms or other sensitive sites downstream.
- ◆ Liaise with emergency services to contain/curtail the incident and provide advice and information as required.
- ◆ Direct the shutting down and evacuation of plants, taking steps to minimise loss of material, property damage and business interruption.
- ◆ Arrange for the relief of personnel where the emergency is prolonged.
- ◆ Preserve evidence that would facilitate any subsequent inquiry into the cause and circumstances of the emergency.
- ◆ Keep the company's authorised spokesperson aware of the situation, subsequent developments and any approaches for information.
- ◆ Arrange for re-entry of the area after the emergency has ceased.
- ◆ Complete relevant check lists
- ◆ Complete relevant company report forms.

A.3

Senior Manager on site

- ◆ Appoint Incident Controller.
 - ◆ Declare serious emergency if appropriate.
 - ◆ Engage serious emergency management team as appropriate – Meet in incident control room*.
 - ◆ Liaise with Incident Controller if different.
 - ◆ Assess situation and develop strategy.
 - ◆ Ensure there is a company spokesperson to provide consistent message for external enquiries.
 - ◆ Arrange communication and reporting as required.
 - ◆ Keep a log of all communications and actions taken.
 - ◆ Arrange for post incident investigation and evaluation of the company response to the incident.
- The Incident Control Room for the site is unless that is within the location of the emergency when alternative arrangements will be made at the time.

A.4

Employees *EMPLOYEES SHOULD NEVER PUT THEMSELVES AT RISK*

Once an unexpected incident which is likely to cause an emergency has been discovered, any employees in the area must work as a team, helping the individual dealing with the situation to ensure that:

- ◆ Others working in the area are warned by use of alarms or verbal communication and people are removed from danger.
- ◆ Incident Controller duties are carried out until a Supervisor or Manager is available (this is likely to require contacting emergency services – see (B)).

- ◆ A Supervisor or Manager and First Aider or Fire Warden are informed as required, giving as much detail as possible about the emergency and action already taken.
- ◆ Sentries are organised to guide emergency services to the incident.
- ◆ The situation is contained, without placing self or others in danger, until help arrives.
- ◆ The Emergency Services' instructions are followed.

A.5

Fire Wardens

- ◆ Regular alarm tests and evacuation drills for any reason (not just fire).
- ◆ Competent in basic fire prevention and use of standard fire extinguishers, ideally from a recognised training event. Pass on training to all personnel.
- ◆ Ensuring that personnel and contractors know the location of fire alarm points.
- ◆ Ensuring that primary and secondary escape routes are known, tested and kept clear.
- ◆ Evacuation planning for any reason – depending on the site there may be a requirement for nominated evacuation monitors to support them.
- ◆ Investigating automatic alarms to confirm fire (some brigades do not respond)

A.6

First Aiders

- ◆ Attend regular recognised refresher training.
- ◆ Responsible for first aid kit.
- ◆ Provide basic initial assessment and first aid / Call on assistance as needed.

B. Summoning the Emergency Services

IF IN DOUBT, IT IS BETTER TO BE CERTAIN THAT SERVICES ARE CALLED. THE EMPLOYEE WILL NOT BE CRITICISED FOR HIS/HER JUDGEMENT.

Emergency services may be called from internal telephone extensions by keying:

..... (typically 9-999)

In the event of a telephone system failure or an incident remote from the extensions, use a mobile 'phone to dial 999. Back-up mobile 'phones are available at:

.....
.....

(NOTE THE TIME OF CONTACT)

Information required by Fire, Police or Ambulance Emergency Services:

Emergency service(s) required

Address of site:

.....

Post Code:

Grid Reference:

Type of emergency - personnel and/or materials involved

Advised entry point into site – directions to incident *(SET SENTRIES?)*

Name of caller – contact number

Any knowledge that people are at risk (raises priority for the fire brigade)

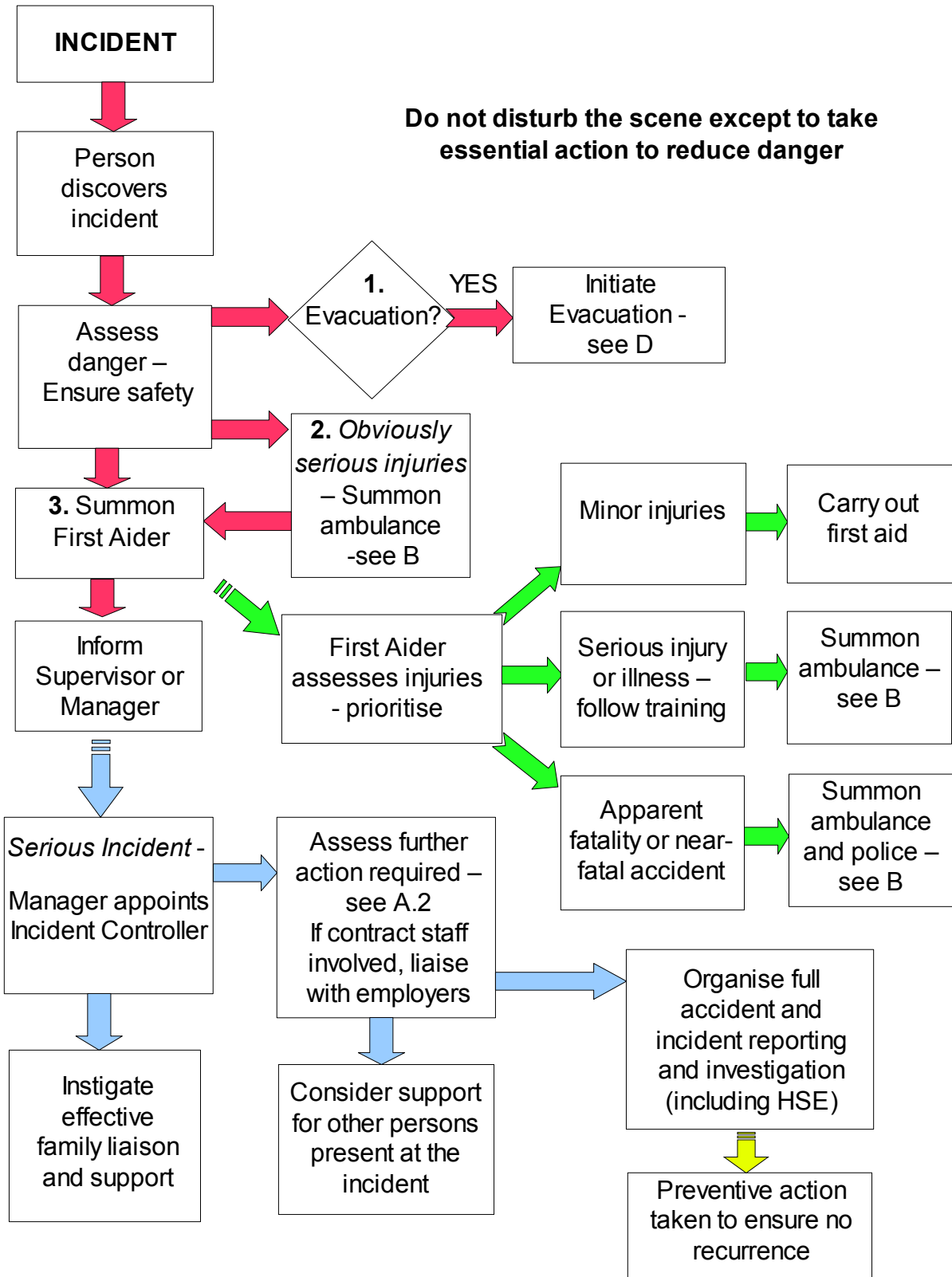
Water sources at the site are located at:

Site plans and other information are available in the Emergency Box located at:

(Near entrance)

To call out gas, water, electricity, environment agency, see appended contact list.

C. Injuries and Fatalities



D. Raising the Alarm and Evacuation

ADVANCE PLANNING FOR EVACUATION

- ◆ The requirement for shutting down processes and isolating machines or materials in the event of an emergency shall be reviewed as far as possible in advance as part of risk assessment, bearing in mind that individual safety is the priority and anything that may be left should be left. Areas of responsibility for verifying evacuation shall be allocated, with assembly points. Everyone should be aware of the action they must take when the alarm is raised.

INCIDENT OCCURS

- ◆ Assess the situation – is evacuation advisable?
- ◆ IF YES - Trigger alarm / use verbal communication.

ON HEARING THE ALARM / BEING ADVISED TO EVACUATE

- ◆ Quickly assess any equipment / materials you are responsible for. Is there a safety implication in leaving it as it is? Shut down / isolate if essential as planned, but do not take unnecessary time.
- ◆ Leave the danger area by the quickest safe route, closing doors and windows if in a building. Do not stop to collect belongings.
- ◆ Go to the assembly point and await instructions.

FIRE WARDENS / EVACUATION MONITORS

- ◆ Sweep designated areas for people as planned, closing any doors and windows.
- ◆ Report to assembly point. Ensure that roll calls are carried out, including visitors.
- ◆ Report successful evacuation or any issues to Incident Controller.

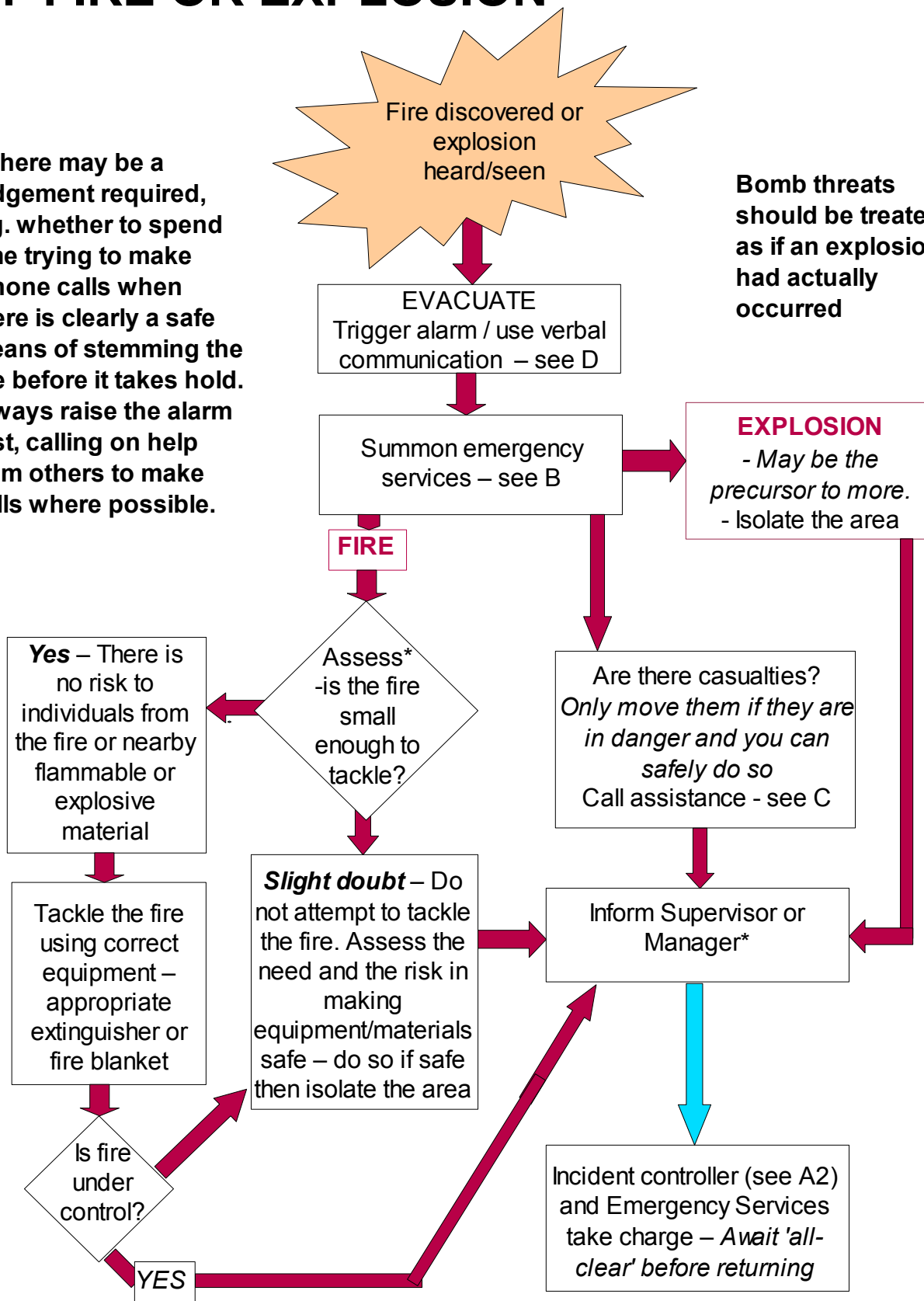
D1 Assembly Point locations

<i>WORK AREAS</i>	<i>ASSEMBLY POINT</i>	<i>LOCATION</i>	<i>ROLL CALL RESPONSIBILITY</i>

E. FIRE OR EXPLOSION

* There may be a judgement required, e.g. whether to spend time trying to make 'phone calls when there is clearly a safe means of stemming the fire before it takes hold. Always raise the alarm first, calling on help from others to make calls where possible.

Bomb threats should be treated as if an explosion had actually occurred



F. PUBLIC ENTERING SITE

Unauthorised entry is always a risk at a large site. In addition to incursions such as those by local youngsters, there can be the intention of theft and there has been at least one example where a group of people has gained entry as part of a protest against a minerals planning application, thus creating an uncontrolled risk to themselves.

UNAUTHORISED PERSON(S) OBSERVED ON SITE

- ◆ Contact Supervisor or Manager.
- ◆ Observe their movements. If they are far off and in a safe area, it may be best to let the Manager (Incident controller) arrive and deal with the situation.
- ◆ If they are close to a dangerous area, such as a face, a lagoon or machinery, or close to you, intervene diplomatically and explain that this is a private workplace and they must leave for their own safety.
- ◆ Avoid confrontation. If you believe that violence may result, move away and ensure that the Police are called.
- ◆ Ensure as far as you can that they do not move out of sight. If they appear to be leaving, try to maintain visual contact to ensure that they actually do so.
- ◆ The Incident controller will invoke Police involvement if necessary and will accompany the intruders off the site, with later trespass proceedings if warranted.

(Remember that if no more senior person can be contacted immediately, YOU are the Incident controller and have to consider contacting the Police.)

- ◆ If there is any indication that the intruders intend deliberately to go close to plant or gain entry to a building, the Incident controller will need to consider shutting down and locking off the plant or buildings. Any problems associated with such action must be planned for as part of advance emergency planning.
- ◆ Where the intruders may be at risk from moving vehicles, including hauliers' lorries, the Incident controller will need to consider action to remove any danger, such as stopping activities or holding lorries near the entrance.

G. PUBLIC RELATIONS AND MEDIA

Emergency situations such as fires, fatalities or protests may well bring interest from the local or even national media. The company is advised to have a policy in place in advance so as to avoid mixed or inappropriate messages that may damage the company image, cause undue concern to relatives or even contribute to later liability proceedings.

- ◆ Never give opinions about any issue. Be aware that journalists may be selective in their use of commentary. Use the simple phrase “no comment” if necessary. The management will organise a formal spokesperson to provide a consistent viewpoint.
- ◆ If you are approached by a journalist or by a possible activist or councillor, ensure that the Incident controller knows exactly what is being said by them as well as what actually happened, so that the company can respond in an informed manner.

***NO INFORMATION OR STATEMENTS ARE TO BE GIVEN TO THE MEDIA
OR OTHER EXTERNAL ENQUIRERS OTHER THAN BY OR WITH THE
EXPRESS AUTHORITY OF THE AUTHORISED SPOKESPERSON.***

- ◆ In addition to providing official statements to other parties, the authorised spokesperson has a responsibility to communicate internally. Consideration should be given to circulating these statements within the company.
- ◆ The authorised spokesperson may receive requests for comment early in the process. Some situations require proactive contact with other parties. Subject to the need for prioritised actions to ensure safety, Incident controllers should keep the authorised spokesperson fully aware of any serious incident and developments.

APPENDIX 1

EMERGENCY CONTACT TELEPHONE NUMBERS

FIRE, POLICE, AMBULANCE	999
LOCAL POLICE	.....
LOCAL FIRE SERVICE	.....
HOSPITAL ACCIDENT & EMERGENCY	.....
ENVIRONMENT AGENCY (EA)	.....
EA Emergency Hotline	.....
WATER	.....
GAS	.....
ELECTRICITY	.....
CLEAN-UP CONTRACTORS	.....
FARMS AND OTHER SENSITIVE SITES NEARBY	.....

HEALTH & SAFETY EXECUTIVE	.....
HSE Fatalities	.....
HSE RIDDOR	.....

APPENDIX 3

INCIDENT REPORT SHEET

Location:

Incident Type (see Introduction):

Date and Time of the initial Incident:

Incident controller 1:

Incident controller 2*:From:

Incident controller 3*:From:

* If handover

Other persons involved: Involvement:

Details of the Incident and Action taken (with times of significant events):

(In the case of a death or serious injury, include contact with family, etc.)

Any Fatalities, Injuries or Diseases:

Any Environmental Effects or Impacts upon Others:

Any Interruption to Business or Damage to Plant:

Completed by: Date:.....

(For serious Incidents, a more detailed report including learning for preventive action must follow)

APPENDIX 4

ADVANCE PLANNING

Here are some suggested areas for planning and testing emergency provisions in advance (risk assessment techniques for prioritising some of these are recommended). A site may have particular circumstances and this list is not exhaustive:

- ◆ Liaison with emergency services.
- ◆ Joint review with any separately managed facilities (e.g. concrete or asphalt plants; waste disposal facilities).
- ◆ Positions of power lines, gas supply, fuel tanks and other chemical stores
- ◆ Review, regular testing and test labels for fire extinguishers and fire blankets.
- ◆ Specialist advice and training on fire provisions and response.
- ◆ Nominated fire wardens trained.
- ◆ Nominated evacuation monitors for all working areas.
- ◆ Review of primary and secondary escape routes.
- ◆ Regular checks of escape routes to ensure clear, effective passage.
- ◆ Clarity over site plans and emergency services access to different parts of the site.
- ◆ Areas where visiting hauliers' vehicles may pull in during emergency, keeping access clear (in rural areas, approach roads may be narrow and backing up may be a risk – it may be necessary to station people as marshals).
- ◆ Water sources reviewed and known – with hard-standing access for fire appliances.
- ◆ Regular alarm tests and fire/evacuation drills.
- ◆ First aiders encouraged and given regular refresher training.
- ◆ Regular checks of first aid kits against recommended standards.
- ◆ First aid room provision and allocated extra areas for possible emergency.
- ◆ Identify and train for any essential shut-down / isolation procedures at evacuation.
- ◆ Electrical and mechanical isolation understood in case of injury involving contact.
- ◆ Review, regular testing and test records for lifting gear
- ◆ Review, regular testing and test labels for harnesses.
- ◆ Review, regular testing and test labels for breathing equipment.
- ◆ Confined space review for the site.
- ◆ Confined space rescue team in place - practice drills using equipment.
- ◆ Review of other dangerous areas (lagoons, old faces, etc.) and planning for rescue.
- ◆ Review, regular testing and test labels for life buoys at water areas.
- ◆ Boat provision for water areas.

- ◆ Review and record any hazardous materials (HAZMAT)
- ◆ Review and understanding of any unsafe structures to advise fire brigade (or materials such as asbestos; polystyrene-filled thermo-clad insulation panels)
- ◆ Agreement on suitable nominees for Incident controller.
- ◆ Nominated Incident controllers ensure understanding of site features.
- ◆ Agreement on composition of serious emergency management team (including support people to take notes and operate telephones, etc.).
- ◆ Temporary barrier provision to mark off areas.
- ◆ Emergency lighting for night rescue.
- ◆ Review of communication with neighbours and environmental impact potential.
- ◆ Awareness programme for everyone on site, with training for any specific roles. Inclusion of appropriate information in contractor induction programme.

AS WITH ANY RISK CONTROL, ANY PROVISION THAT CAN BE MADE IN ADVANCE TO ELIMINATE HAZARDS RATHER THAN TO CONTROL THEM SHOULD BE ADDRESSED.