

**LEAFLET 14**

**ACCIDENT / INCIDENT INVESTIGATION**

**CONTENTS**

Para

- LEAFLET FOR LINE MANAGERS
- 1 Introduction
- 3 Statutory requirement
- Definitions
- 4 Accident / Incident
- 5 Dangerous Occurrence
- 6 Board of inquiry
- 7 Objective of investigations
- 9 Duties
- 13 Levels and types of investigation
- 14 The investigation
- 15 Specialists
- 16 Records and forms
- 19 Competencies
- 20 Advice
- 21 References
- 22 Related leaflets

Table

Page

1	Levels and Types of Investigation .....	3
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Annex

- A Guidance for Line Managers
- B Guidance for Civilian Boards of Enquiry
- C Aide Memoir for Accident/Incident Investigations
- D Analysing the causes of accidents
- E Guidance on Investigation Report Format

**LEAFLET FOR LINE MANAGERS**

**INTRODUCTION**

1 Accidents and incidents may be caused by a combination of unsafe acts, unsafe conditions and personal factors. As part of any safety management system the aim of accident investigation should be to establish the root cause(s) of an event or events that have resulted in an accident.

2 The aim of this leaflet is to describe the actions needed to be carried out by line managers to successfully investigate accidents in the work place. Where this activity is undertaken by specially appointed investigators (e.g. Land Accident Investigation Team), on behalf of the line manager or his chain of command, the Specialist Investigation Team Procedures will apply. This leaflet should be read in conjunction with its associated guidance notes and advice sought from local safety advisors. Details of notification and reporting requirements can be found in Leaflet - Notifying and Recording of Accidents, Injuries, Diseases and Dangerous Occurrences: Procedures.

## **STATUTORY REQUIREMENT**

3 Regulation 5 of the Management of Health & Safety at Work Regulations 1999 places a general duty on employers to have in place arrangements for the monitoring of the preventative and protective measures in their organisations. This includes the requirement to adequately investigate the immediate and underlying causes of accidents and incidents to ensure that remedial action is taken, lessons are learned and longer-term objectives are introduced.

## **DEFINITIONS**

### **Accident / Incident**

4 Any event which causes, or has the potential to cause injury, loss or damage to people, plant or premises.

### **Dangerous Occurrence**

5 A specific, unplanned, uncontrolled event which has the potential to cause injury or damage and is listed in Schedule 2 of the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995

### **Board of Inquiry**

6 A formal structured process for conducting accident investigations. Note Service personnel should refer to the Queen's Regulations for convening Boards of Inquiry.

## **OBJECTIVE OF INVESTIGATIONS**

7 The objective of any investigation should be to determine what events or possible shortfalls in training, management or procedures lead to the accident. It is not the function of the investigation or inquiry to apportion blame or to recommend disciplinary action.

8 The investigation should aim to:

- 8.1 Discover the facts associated with the accident
- 8.2 Ensure the causes are properly established.
- 8.3 Prevent recurrence or similar accidents.
- 8.4 Ensure the any legal reporting/notification requirements are met.

## **DUTIES**

9 Heads of Establishments/Officers commanding

9.1 Indicate in their local arrangements the persons who will be detailed to undertake investigations having regard for the severity as indicated in Table 1.

9.2 Detail in local arrangements the person responsible for taking initial action to notify the relevant authorities of the accident.

10 Those tasked with the duty of undertaking an investigation, should as appropriate:

- 10.1 Confirm that the accident scene is still secure and no further incident is likely.
- 10.2 Determine the level of investigation required, see Table 1.

10.3 Determine if the police or specialists will be investigating the accident / incident. If the police or specialist teams are to investigate the accident / incident ensure that the scene is not disturbed until their arrival and assist them as requested.

10.4 Draw up a list of potential witnesses and evidence to be examined for the investigation, obtain any sketches, drawings, or maps relevant to the incident.

10.5 Obtain the assistance of specialist staff when appropriate.

11 All employees have a duty to co-operate fully with any investigation.

12 TU Safety Representatives have a legal right to carry out inspections of the workplace following a notifiable accident. Safety Representatives should be invited to participate in accident investigations.

**LEVELS AND TYPES OF INVESTIGATION**

13 The type of investigation or inquiry required is dependant on either the severity, or potential severity of the accident. These can range from; local questioning of an operative, by line management, and the completion of a MOD Form 2000; an investigation by the police or a specialist investigation team; a full Board of Inquiry carried out by senior management. The following table indicates the type of investigation required for various accidents.

**Table 1 Levels and Types of Investigation**

NATURE OF ACCIDENT / INCIDENT	KIND OF INVESTIGATION	CARRIED OUT BY	REPORT TO
<b>Trivial</b> E.g. injuries causing less than one hour of lost time	<b>Local</b> Accident Book Entry and if required by local arrangements MOD Form 2000	Line management and injured party	Local H&S Advisor CHASP Mainframe records if MF 2000 raised
<b>Slight</b> E.g. injuries resulting more than one hour but less than 3 days lost time or accidents causing minor damage to equipment/materials	<b>Local</b> Accident Book Entry and MOD Form 2000. Plus any records required by local line management	Line management and injured party.	Local H&S Adviser. CHASP Mainframe records
<b>Serious</b> A broad category between Minor and Major, e.g.: 1) 3 or more days lost time, requiring medical treatment but not admission to hospital 2) Requiring a formal report to the HSE under RIDDOR 3) Failure or corruption of safety measure or procedure (e.g. broken or damaged device) 4) Localised spillage or leak of pollutant e.g. short-term damage to flora and fauna.	<b>Informal</b> Informal with written record, supported by Accident Book entry and MOD Form 2000 HSE or Environment Agency may choose to investigate	Line management (C2 or above) and/or H&S Adviser in some circumstances the Police or Specialist Investigation Teams if necessary.	Commanding Officer/Head of Establishment/Unit. CHASP Mainframe records
<b>Major</b> 1) Victim requiring hospital treatment or several serious injuries. 2) Damage to system, facility, failure of safety measure or procedure. 3) Large release of pollutant, causing breach of environmental protection regulations.	<b>Formal</b> Fully documented, Board of Inquiry supported by Accident Book entry and MOD Form 2000 HSE or Environment Agency may wish to investigate	Head of Department (B2 or above) and H&S Adviser, Police or Specialist Investigation Teams if necessary.	Commanding Officer/Head of Establishment/Unit.  BLB, HLB & TLB H&S focal points. Summary findings to Service Principal Focal Points. CHASP Mainframe records

<p><b>Critical</b></p> <ol style="list-style-type: none"> <li>1) A fatality or severe injuries resulting in long-term illness or disability.</li> <li>2) Total loss of system or facility.</li> <li>3) Major release of controlled substance/pollutant, causing breach of environmental protection regulations.</li> </ol>	<p><b>Inquiry</b></p> <p>MOD Formal Board of Inquiry, supported by Accident Book entry and MOD Form 2000 in addition external agencies, e.g. Police Investigation Coroners Report HSE Investigation DETR/Environment Agency</p>	<p>Officers appointed in accordance with Queens Regulations or Senior Officer appointed by Establishment/Departmental/Unit, Police or Specialist Investigation Teams if necessary.</p>	<p>Commanding Officer/Head of Establishment/Unit. D SEF Pol Findings to Service Principal Focal Points, BLB, HLB &amp; TLB H&amp;S focal points. CHASP Mainframe records</p>
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**THE INVESTIGATION**

14 If it is determined that the investigation is to be carried out locally, see Table 1, an Investigating Officer should be appointed. The Investigating Officer should immediately start the investigation (Annex C may be of assistance) and:

14.1 Interview witnesses, including injured persons when available. These initial interviews should be informal fact finding sessions. The IO should take notes and advise the witnesses that they may be asked to make a statement, or appear before an Inquiry depending on the level of investigation.

14.2 Examine the scene of the accident and record details of equipment, positions, environment and weather conditions as relevant. Any material evidence that may be called upon by the Investigating Officer of the Inquiry should be made safe and stored in a secure area.

14.3 Assess evidence gathered and analyse the material to determine the events and likely causes that lead to the accident. Guidance on some of the points to consider when assessing evidence and carrying out basic analysis is contained in Annex D.

14.4 Present findings to the appointing authority in the form of a written report. A suggested format which addresses principle points to be considered is contained in Annex E.

**SPECIALISTS**

15 Specialist staff should be invited to assist line managers in accident investigations, where considered appropriate. Specialist Investigation Teams exist to carry out detailed investigations into specific accidents/incidents (e.g. Air Accidents Investigation Branch, Land Accident Investigation Team). These teams should be contacted to establish if they are to undertake the investigation before any local procedures are adopted.

**RECORDS AND FORMS**

16 Details of accident investigations and associated supporting evidence shall be retained in accordance with the requirements of Chapter 5 JSP 441. If the records cannot be stored locally, e.g. because of establishment closure, arrangements for alternative storage must be arranged through Focal Points.

17 Where an accident has led to injury or short term ill health of an employee a copy of the MOD Form 2000 should be placed on the injured persons personnel file.

18 Where accidents may result in long term ill health, the investigation records in addition to the MOD Form 2000 shall be copied to the individuals personal file.

**COMPETENCIES**

19 Line managers should be trained in basic accident investigation techniques and have a sound understanding of departmental and local procedures.

**ADVICE**

20 If there is any doubt or concern on the application of the principles set out in this leaflet advice should be sought from the local H&S Advisor, or authority to whom the accident was notified in the first instance.

**REFERENCES**

## 21 References

- JSP 442 Accident Reporting Procedures (for MOD Form 2000)
- JSP441 Defence Records Management Manual
- Management of Health & Safety at Work Regulations 1999
- A Guide to Reporting Injuries, Diseases and Dangerous Occurrences Regulations 1995

**RELATED LEAFLETS**

## 22 Related Leaflets

- Leaflet - Notifying and Recording of Accidents, Injuries, Diseases and Dangerous Occurrences: Procedures
- Leaflet - Reporting of MOD Accidents and Incidents to the HSE

**LEAFLET 14 ANNEX A****ACCIDENT / INCIDENT INVESTIGATION****CONTENTS**

Para

	<b>GUIDANCE FOR LINE MANAGERS</b>
1	Introduction
2	Why investigate?
4	What should be investigated?
5	Factors to be considered
6	Who should investigate accidents?
	Conducting an investigation
11	Assembling the evidence
12	Direct observation
13	Interviews
17	Documentary evidence
18	Analysing the evidence
19	Accident causation
20	Investigation findings & report

**GUIDANCE FOR LINE MANAGERS****INTRODUCTION**

1 The aim of these notes are to provide line management with practical guidance on the conduct of accident/incident investigations, which will enable them to satisfy statutory and MOD mandatory requirements. The notes do not address the more specialist areas of accident investigation such as fire, environment, explosives, maritime, air, etc. as these are detailed in other MOD publications and require input from specialist accident investigation teams and individuals.

**Why Investigate?**

- 2 The primary aims of investigations are to:
  - 2.1 Ascertain immediate and underlying causes
  - 2.2 Review the adequacy of the policy and measures in place for discharging that policy
  - 2.3 Introduce measures to prevent a recurrence
  - 2.4 To reassure the workforce that safety is taken seriously
  - 2.5 Satisfy legal reporting and investigation requirements
- 3 And not to apportion blame.

**What should be investigated?**

4 All accidents, incidents, dangerous occurrences and near misses should be investigated. The depth of the investigation will vary according to the individual incident.

**Factors to be considered**

5 The following factors should be taken into consideration when deciding on the extent of the investigation to be conducted:

5.1 The type and severity of injury/damage or the potential for serious injury and/or damage

5.2 Whether the accident indicates the continuation of a particular trend in the organisations accident experience or the first one which could be repeated e.g. introduction of new process, and have implications for other areas

5.3 The extent to which materiel affected the accident e.g. machinery, work equipment, hazardous substances and causing damage or loss

5.4 The possibility of a breach of the law or MOD policy/procedures

5.5 Whether the injury or occurrence is notifiable/reportable to the enforcing Authority

**Who should investigate accidents?**

6 Investigations are to be led by an individual with the status and knowledge to make recommendations to the executive authority. For the majority of cases this will be line management. There will be occasions when it will not be practical for line management to investigate e.g. when the injured party is on detached duty. In these circumstances the investigation should be carried out by the host's representative at the detached duty station.

7 The level and kind of investigation required will need to be determined; Table 1 of the leaflet gives guidance. If events have serious or potentially serious consequences, the assistance of specialist investigation staff should be sought. The requirements for setting up a military Board of Inquiry is given in Queen's Regulations. Guidance for civilian Boards of Inquiry are given in Annex B.

8 TU/Employee safety representatives should be extended the offer of participating in an accident investigation as they provide a valuable contribution and interface between management and employees. In the UK they have a legal right to investigate accidents that have been reported to the HSE, if they so wish.

9 If there is any doubt as to type of investigation to be conducted or those parties that should be involved, advice should be sought from the Establishment/Unit Safety Adviser.

10 In the event of a fatality a police officer is required to attend the scene of the accident and make an initial assessment as to whether a charge of manslaughter is justified. Where a charge of manslaughter is not to be brought, the HSE will continue with its own investigation. This is in addition to the investigation conducted by the MOD.

**CONDUCTING AN INVESTIGATION****Assembling the Evidence**

11 There are three sources of information available to investigators and these involve direct observation of the accident/incident scene; documentary evidence which enables the investigator to establish what should have happened through procedures, risk assessments etc. and interviews with the parties involved which provide an opportunity to check back on any issues arising from the examination of the physical and documentary evidence.

### Direct Observation

12 The accident site should be visited as soon as practicable to prevent any relevant evidence being removed or cleaned up. However, the safety of the investigation team should also be considered and if there is any doubt whether the area is safe to enter then access to the site should be controlled until a competent person has assessed the site as safe to enter.

- Assess the risks of entering the area, determine whether any special precautions are required, e.g. Personal Protective Equipment
- Establish that statutory and other notifications of the accident/incident have been made to the appropriate persons/authority (consult Establishment/Unit Standing Orders for local notification procedures).
- When examining the site every effort should be made to preserve the evidence and to avoid possible contamination or destruction of the evidence. Subsequent investigation authorities must be advised if the scene of the accident is not safe to preserve in tact.
- Record physical details – these are to be recorded as seen and not as detailed in plans or other documentation. Look around and note anything of importance such as trip hazards, protrusions, accumulation of rubbish etc. Also take any photographs, measurements necessary and produce a simple sketch if considered appropriate

### Interviews

13 Interviews are to be conducted promptly before details fade or become confused and in a place where the injured person or witness feels comfortable. This, of course, depends on the condition of the injured person and witnesses. Always ensure that appropriate First Aid or medical treatment is rendered before trying to conduct the interview. If the injured person is fit to answer questions, adopt the following approach:

- Put the injured person at ease, remain calm and objective and be sympathetic, honest and courteous
- Ask them to recount what happened in their own words and take notes – you should repeat back key points at the end of the interview to check the details are correct.
- Do not ask leading questions, interrupt or argue
- Check the answers against your own observations and the review of documentary evidence

14 Adopt a similar approach with witnesses. Distinguish between fact and opinion and remember that eye witnesses are not always reliable. If there is more than one eye witness interview them separately.

15 To assist in the compilation of the investigation report it may be prudent to obtain written statements from the injured person and eye witnesses. These may be included as annexes to the report. An example of a proforma is given in Annex C.

16 Some personnel may have some concerns that the provision of a statement may prejudice them with regard to discipline or future litigation against MOD. Staff also have the right to have a friend, TU or Legal representative present during the interview.

### Documentary Evidence

17 Obtain copies of any relevant documentation e.g. written instructions, procedures, risk assessments, policies, records of inspections, tests, examinations and surveys and training records.

### **Analysing the Evidence**

18 Analysis of the evidence should determine:

- Any actions taken or not taken that contributed to the accident
- The adequacy or absence of suitable control measures
- The immediate cause(s) of the accident i.e. unsafe act or condition
- The underlying cause(s) of the accident i.e. management control failings

**ACCIDENT CAUSATION**

19 Good investigations identify both immediate and underlying causes, including human factors. Immediate causes include the job being done and the people involved. Underlying causes are the management and organisation factors that explain why the event occurred. A structured approach to determining accident causation is given in Annex D from the HSE's Successful Health & Safety Management – HS(G)65.

**INVESTIGATION FINDINGS & REPORT**

20 Final analysis of the information should determine the actions required to prevent a recurrence, assign responsibilities, priorities and suggested time scales for the actions identified.

21 A suggested format for an accident investigation report is provided in Annex E. The detail in the report will depend on the severity of the incident.

22 Final publication of any report will be subject to the normal security classification requirements.

23 Advice regarding disclosure of information may be sought from D SEF Pol Secretariat.

**LEAFLET 14 ANNEX B****ACCIDENT / INCIDENT INVESTIGATION****CONTENTS**

Para

- GUIDANCE FOR CIVILIAN BOARDS OF INQUIRY
- 1 Conduct of inquiry
- Release of "Inquiry etc." information
- 2 Proceedings and findings
- 3 Reports
- 9 Synopsis preparation
- 12 Summary preparation

**GUIDANCE FOR CIVILIAN BOARDS OF INQUIRY****CONDUCT OF INQUIRY**

- 1 The following key points are to be observed:
  - 1.1 Inquiries etc. will be held in private. Members of the public and press will be excluded.
  - 1.2 Evidence will not be taken on oath.
  - 1.3 No member or witness may as individuals divulge the proceedings or findings of the Inquiry.
  - 1.4 Witnesses may, but should not need, to be represented as it is not the function of the Inquiry to apportion blame.
  - 1.5 The proceedings may, with advantage, be electronically recorded, if so each witness must be informed that such a recording is being carried out. The fact that a recording was made is to be stated in Part 1 of the report of the Board.
  - 1.6 When appointing members onto an Inquiry in which the disclosure of classified information may be necessary the Chairman must ensure that no person is appointed who is not properly authorised to have access to such information. In cases of doubt, the Head of Security should be consulted.
  - 1.7 Arrangements for the Board to meet should be made as soon as practicable after the event.
  - 1.8 At a suitable time before each witness gives evidence to the Board, the Chairman must explain:
    - 1.8.1 The Terms of Reference of the Inquiry.
    - 1.8.2 That in the event of a separate investigation or inquiry held by the HSE under the provisions of the Health & Safety at Work etc. Act 1974, The Department may be required to make the report of the Board available.
  - 1.9 The Board report should deal only with matters directly or indirectly connected with the Accident. Other matters affecting health and safety, which come to the attention of the Board and on which they consider action should be taken, should be the subject of a separate communication by the Chairman to the Head of Establishments/Unit or his representative. The Chairman may also be required to draft a synopsis of the Inquiry.

- 1.10 Additional guidance for Chairman may be obtained from local Safety Staff.

## RELEASE OF "INQUIRY ETC." INFORMATION

### Proceedings and findings

- 2 No member or witness of an "Inquiry etc." shall divulge the proceedings or findings of an "Inquiry etc." without being given authority by the convening authority in consultation with CL(F&S).

### Reports

- 3 Apart from the approved distribution list requests for copies of the report, whether from within or outside the Establishment concerned with the "Accident etc.", must be referred to the convening authority.

- 4 Release of Information to Safety Representatives. Where Committee of Inquiry discusses matters relating to health and safety of civilian employees, TU safety representatives should be informed of any recommendations that have a direct effect on their members. The information released will be at the discretion of the convening authority, and be achieved by, after time for preparation, an unclassified Synopsis of the Inquiry report (See Para 9), its conclusions and recommendations. Where applicable the convening authority should inform the safety representative (either Trade Union appointed or elected member of the workforce) of the ground for refusal of such a request. Where a case involves a death, a synopsis must not be released before any Public Inquest or Fatal Accident Inquiry is concluded.

- 5 Information affecting the health and safety of civilian employees established during a Local Investigation may be discussed with the local safety representatives, and information concerning any recommendations made available. No documents or copies of documents obtained during the investigation are to be passed to the safety representatives. When an "Accident etc." leads to a civil claim against the Ministry no information will be divulged to anyone, other than CL(F&S) and the Department Employers Liability Insurers. Requests for information should be referred to these organisations.

- 6 Release of Information to the Health and Safety Executive. Requests from the HSE for the release of Information or Reports should be authorised by D SEF Pol. The requesting office of HSE is to be informed that any such request should be directed to D SEF Pol Secretariat. Copies of the information requested by the HSE, approved by the Investigating Board, should be forwarded to D SEF Pol Sec for them to deal direct with the HSE.

- 7 Release of Information (other than Reports) from "Inquiries etc." to the Department Employers Liability Insurers. When an "Accident etc." which may give rise to a claim by an employee against the Department, is the subject of Committee of Inquiry, the Head of Establishment should have prepared a summary of the Inquiry and forward this together with a copy of the Report to CL(F&S), for onward transmission of the summary to the Insurers. Any requests for information from the Insurers should be referred to CL(F&S).

- 8 Requests for information from the Department Employers Liability Insurers in relation to a claim that has been made, and was the subject of a Local Investigation, should be assisted where possible, unless security implications apply, in which cases CL(F&S) and D MOD Sy should be consulted.

## SYNOPSIS PREPARATION

- 9 The synopsis required in respect of Para 4 should include the following:

- 9.1 A statement to the effect that the synopsis is passed to the health and safety at work representative in confidence solely for the purposes of SI 1977 No 500, Regulation 7 (Under the Health and Safety at Work Act 1974).

9.2 Points of legitimate interest to the civilian employees concerned except where publication of such points would breach the confidentiality of evidence given, disclose personal-in-confidence information, provide a cause for legal action or embarrass witnesses.

9.3 Conclusions and recommendations confirmed by the convening authority or superior authority.

10 The synopsis should not normally include the following:

11 Classified, i.e. Restricted or above information. Exceptionally it may be necessary to include classified material in order to ensure that the synopsis is an accurate and proper reflection of the facts. [In this case a draft synopsis, with the classification of particular passages clearly identified, should be referred through the relevant Authority to D MOD Sy.] Only with their approval may the synopsis be released.

### **SUMMARY PREPARATION**

12 Notes for the guidance of those writing summaries are available from CL(F&S).

## LEAFLET 14 ANNEX C

### ACCIDENT / INCIDENT INVESTIGATION

#### AIDE MEMOIR FOR ACCIDENT/INCIDENT INVESTIGATIONS

##### GENERAL

Date of Accident:                      Time of Accident:

##### DETAILS OF ACCIDENT/INCIDENT

Accident location:                      Accident details (events leading up to accident, initial response etc.):

Sketches:                                  Photographs:                                  Weather conditions:

Details of equipment being used (manufacturer, serial numbers, dimensions, loads being lifted, test dates):

Details of hazardous materials involved, including form, quantity and nature of use:

Personal Protective Equipment (PPE) and other control measures used at time of accident:

Vehicles involved (make, model and registrations):

##### INJURED PERSON DETAILS

Name(s):                                      Personnel Status (MOD, Contractor, Public etc.):

Staff Number/Pay Number:                      Rank/Grade:

Contact Address:                                  Contact Telephone Number:

Line Managers Name (or in the case of a contractor the employers name):

Injuries (type of injury – laceration fracture etc., position Left/Right, part of body etc.):

First Aid Administered, hospital admission (what and by whom):

Details of Others Present (witnesses, attendees)

Name(s) and details (including contact numbers):

Attendance by emergency services (and details of action taken):

##### DOCUMENTATION

Risk Assessments (reference number, date etc.):

Material Safety Data Sheets:

Method Statements/Written Safe Systems of Work:

Training records:

Safety policies/directives:

Inspection records:

Maintenance records:

Witness Statements (See Annex C Appendix 1):

**LEAFLET 14 ANNEX C APPENDIX 1**

**ACCIDENT / INCIDENT INVESTIGATION**

**INJURED PERSONS/WITNESS STATEMENT**

<b>Personal Details: (Please Print)</b>	
<b>Surname:</b> .....	<b>Forenames:</b> .....
<b>Staff/Service Number:</b> ..... (NI No if non MOD employee)	
<b>Personnel Status:</b> MOD Employee <input type="checkbox"/> Trainee/Recruit/Cadet <input type="checkbox"/> Contractor <input type="checkbox"/> Agency Worker <input type="checkbox"/> Member of the Public <input type="checkbox"/>	
<b>Date of accident/incident:</b>	<b>Time of accident:</b>
<b>Location of accident:</b>	
<b>Statement of events:</b>	
<b>Declaration:</b> I confirm that the above information is correct to the best of my knowledge and recollection of events.	
<b>Signature:</b> .....	<b>Date:</b> .....
<b>Telephone Number:</b> .....	

**LEAFLET 14 ANNEX D****ACCIDENT / INCIDENT INVESTIGATION****CONTENTS**

Para

**ANALYSING THE CAUSES OF ACCIDENTS**

## Immediate Causes

- 1 Premises
- 2 Plant and Substances
- 3 Procedures
- 4 People

## Underlying Causes

- 5 Planning
- 6 Assessing Risks
- 7 Organisation: Control
- 8 Organisation: Co-operation
- 9 Organisation: Communication
- 10 Organisation: Competence
- 11 Monitoring
- 12 Review

**ANALYSING THE CAUSES OF ACCIDENTS****IMMEDIATE CAUSES****Premises**

1 Consider the premises and place of work first and ask "Was there anything about the place, the access or egress which contributed to the event?" e.g. holes in floors causing tripping, inadequate ventilation, inadequate weather protection. The most conclusions may be:

- 1.1 Premises not a significant factor – go to 2
- 1.2 Adequate premises/access/egress provided but not used – consider working procedures – go to 3
- 1.3 Adequate place etc. once provided but not maintained – consider planning – go to 5
- 1.4 Adequate place etc. never provided – consider planning – go to 5

**Plant and Substances**

2 Consider the precautions for plant, equipment and substances and ask "Was there anything about the adequacy of the controls which contributed to the event?" e.g. inadequate guarding, poor local exhaust ventilation. The most likely conclusions may be:

- 2.1 Plant and substances not a significant factor – go to 3
- 2.2 Adequate controls provided but not used – consider working procedures – go to 3
- 2.3 Adequate controls once provided but not maintained – consider planning – go to 5
- 2.4 Adequate controls etc. never provided – consider planning – go to 5

## Procedures

3 Consider the systems, instructions and methods of work and ask if they contributed to the event e.g. failure to use good equipment properly. (Consider both normal operation and emergency procedures). The most likely conclusions may be:

3.1 Correct system/method in use – go to 4

3.2 Correct system/method devised but not used. If so, consider:

3.2.1 Clarity and adequacy of instructions – go to 9

3.2.2 Adequacy of supervision – go to 7

3.2.3 Behaviour of person – go to 4

3.3 Correct system/method once devised and used but now lapsed. Consider:

3.3.1 Adequacy of monitoring – go to 11

3.4 Correct system/method never devised – consider planning – go to 5

## People

4 Consider the behaviour of the people involved and ask: “Did they do or fail to do anything which contributed to the event?” The most likely conclusion may be:

4.1 Behaviour not a significant factor

4.2 People unsuitable for the job (e.g. physical disability, sensitivity to certain chemicals). Consider whether the person was:

4.2.1 Never suitable – look at recruitment/selection/placement – go to 10

4.2.2 Once suitable – consider the adequacy of health surveillance – go to 6

4.3 Suitable person but not competent – consider whether the person was:

4.3.1 Never competent – look at training – go to 10

4.3.2 Once competent but performance not sustained – look at supervision – got to 7 and monitoring – go to 11

4.4 Suitable competent person but did wrong thing. Possibilities include:

4.4.1 Unintended actions – doing the right thing the wrong way or momentarily forgetting the right thing

4.4.2 Intended actions – choosing the wrong action in error or purposely doing the wrong thing

4.5 Consider:

4.5.1 Training – go to 10

4.5.2 Communication – go to 9

4.5.3 Controls/Supervision – go to 7

- 4.5.4 Planning – go to 5
- 4.5.5 Monitoring – go to 11
- 4.5.6 Co-operation – go to 8

## **UNDERLYING CAUSES**

### **NOTE**

Failures in Risk Control Systems/Management Arrangements

### **Planning**

5 Risk Control Systems (RCSs) are necessary for the supply, use, maintenance, demolition and disposal of premises and the supply, storage, handling, use, transport and disposal of plant (including all types of equipment) and substances. Where inadequate premises, plant and substances or procedures have been provided, consider the adequacy of the RCSs for the:

#### 5.1 Premises:

- 5.1.1 Design of structures/buildings
- 5.1.2 Control of structural design changes
- 5.1.3 Selection of buildings/workplaces
- 5.1.4 Purchase of buildings/workplaces
- 5.1.5 Maintenance of buildings/workplaces
- 5.1.6 Security
- 5.1.7 Demolition

#### 5.2 Procedures:

- 5.2.1 Preparation, circulation, revision
- 5.2.2 Practicality
- 5.2.3 Technical adequacy

#### 5.3 Plant & Substances:

- 5.3.1 Design of plant/equipment
- 5.3.2 Control of design changes
- 5.3.3 Selection of plant/equipment
- 5.3.4 Supply of plant
- 5.3.5 Selection or purchase of substances
- 5.3.6 Supply of substances
- 5.3.7 Construction and installation of plant

- 5.3.8 Transport of plant and substances
- 5.3.9 Maintenance
- 5.3.10 Commissioning
- 5.3.11 Selection of equipment on hire
- 5.3.12 Control of equipment in use by contractors
- 5.3.13 Changes to process/plant/equipment/substances
- 5.3.14 Emergency arrangements
- 5.3.15 Decommissioning/dismantling
- 5.3.16 Disposal of plant and substances

5.4 Where RCSs are absent or inadequate consider risk assessment arrangements – go to 6

5.5 Where RCSs are not used, consider:

- 5.5.1 Risk Assessment – go to 6
- 5.5.2 Communication – go to 9
- 5.5.3 Organisation – control – go to 7

### **Assessing Risks**

6 Consider the adequacy of risk assessment arrangements – if methods of hazard identification and risk assessment are:

- 6.1 Absent – consider organisation – go to 7
- 6.2 Inadequate – consider competence of those choosing them – go to 10
- 6.3 Adequate but not used, consider:
  - 6.3.1 Organisation, control – go to 7
  - 6.3.2 Monitoring – go to 11
- 6.4 Satisfactory but the results are inadequate – consider:
  - 6.4.1 Competency of those using them – go to 10
  - 6.4.2 Adequacy of technical standards used – go to 9
  - 6.4.3 Clarity of results – go to 9
  - 6.4.4 Involvement of employees – go to 8

### **Organisation: Control**

7 Where arrangements/procedures/systems are absent, not used or supervision is inadequate, consider the responsibilities of those devising, operating and maintaining the procedures/systems.

7.1 Ask:

- 7.1.1 Are responsibilities clearly set out?
- 7.1.2 Are responsibilities clearly understood?
- 7.1.3 Do those with responsibilities have the time and resource to discharge their responsibilities?
- 7.1.4 Are people held accountable for discharging health and safety responsibilities?
- 7.1.5 Are people rewarded for good performance?
- 7.1.6 Are people penalised for poor performance?

7.2 If not, consider:

- 7.2.1 Competence – go to 10
- 7.2.2 The adequacy of senior manager commitment and resources devoted to health and safety

### **Organisation: Co-operation**

8 Consider how those working with risks are involved in risk assessments and devising procedures (including the operation of any health and safety committee).

8.1 If inadequate consider:

- 8.1.1 Competence – go to 10
- 8.1.2 The adequacy of senior management commitment to co-operation

### **Organisation: Communication**

9 Consider:

- 9.1 Is there sufficient, up to date information on law and technical standards to make good decisions about how to control risks?
- 9.2 Are written instructions for internal use clear and in sufficient detail?
- 9.3 Are the up to date versions of instructions available?
- 9.4 Is there sufficient information supplied to the users of products?
- 9.5 Is there sufficient visible senior management commitment to health and safety?

### **Organisation: Competence**

10 Consider the adequacy of arrangements for:

- 10.1 Recruitment/selection and placement to check that people have the right physical and mental abilities for their jobs including, where necessary, medical examinations and tests of physical fitness, aptitude or abilities
- 10.2 Assessing the health and safety competence of contractors as part of contractor selection

10.3 Identifying health and safety training needs at recruitment, when there are changes in staff, plant, substances, technology, processes or working practices. The need to maintain or enhance competence by refresher training and the presence of contractors employees, the self employed or temporary workers (and assessments of competence)

10.4 Competent cover for staff absences, particularly for those people with critical health and safety responsibilities and emergency procedures

10.5 Health checks and health surveillance based on risk assessments (including assessments of fitness for work, following injury or ill health)

10.6 Provision of health and safety assistance

## Monitoring

11 Consider the adequacy of the checks and inspections made of the workplace precautions and risk control systems before an accident (i.e. were they frequent enough and did they look at the right things in sufficient detail to ensure the safe use of premises, plant and substances and the implementation of procedures).

11.1 If checks were:

11.1.1 Absent – consider organisation control – go to 7

11.1.2 Not adequate – review risk assessment arrangements – got to 6

11.1.3 Not completed – consider organisation control – go to 7 and review – go to 12

11.2 Consider any previous accident/incident events similar to this one and examine if the investigation or lessons are helpful. If previous events have not been thoroughly investigated, consider:

11.2.1 The organisation: control – go to 7

11.2.2 Competence – go to 10

11.3 If the lessons have not been put into effect, consider:

11.3.1 Organisation control – go to 7

11.3.2 Review – go to 12

## Review

12 Consider the arrangements for following up actions to remedy health and safety problems.

12.1 If work is outstanding beyond the deadline, consider:

12.1.1 Organisation control – go to 7

12.1.2 Adequacy or resources and commitment to health and safety

12.2 If a second incident occurs before corrections were made, consider:

12.2.1 Mechanisms for prioritising remedial actions in investigation process

12.2.2 Competence of those prioritising remedial actions – go to 10

**LEAFLET 14 ANNEX E****ACCIDENT / INCIDENT INVESTIGATION****GUIDANCE ON INVESTIGATION REPORT FORMAT****GENERAL**

1 A suggested format for an investigation report is given below. The length and detail contained within a report will depend on the severity of the incident.

**The Event**

- A description of the circumstances, including the place, time of day and conditions.
- Details of any injured person, including age, sex, experience, training etc.
- Details of the event including:
  - Any actions, which led directly to the event.
  - The direct causes of any injuries, ill health or other loss.
  - The immediate causes of the event.
  - The underlying causes – e.g. failures in workplace precautions, risk control systems or management arrangements.
- Details of the outcomes, including in particular:
  - The nature of the outcome – e.g. injuries, or ill health to employees or other persons working on site; damage to property, process disruption; emissions to the environment; creation of hazards.
  - The severity of the harm caused, including injuries, ill health and losses.
  - The immediate management response to the situation and its adequacy.
  - Whether the event was preventable and if so how.

**The Potential Consequences****Conclusions****Recommendations**

- Detail the actions required to prevent a recurrence with responsibilities and targets for completion

**Annex(es)**

- Witness Statements
- Photographs and diagrams
- Copy of the basic investigation report or accident report form