Incident investigation guidance 1. On scene Data points
Secure the scene to ensure evidence is not disturbed. Information from an incident scene is only of value if the scene is properly preserved. Once integrity has been lost then vital information is compromised.

All relevant staff shall be trained on what to do if they see an incident or attend an incident scene:

1. Identify who witnessed the incident and obtain their names and contact details
2. Collect and make a note of the initial facts including;
    a. What you saw when you arrived?
    b. What is the time?
    c. What is the weather?
    d. What is the lighting – where is the sun?
    e. What, if any non work related general clothes were people wearing
    f. Who was the person injured?
    g. What did the injured person say?
    h. What injuries were visible if any?
    i. What equipment was involved?
    j. What was the phase of operations, process condition, etc,
    k. Markings, scratches etc left by equipment involved,
    l. Where were relevant people and equipment
3. Ask witnesses what they saw, heard, smelt etc and make notes. Record who says what.
4. Ensure the road safety team is informed if it is a motor vehicle incident.
5. Take measurements, heights, distances etc of all evidence at the scene especially start and end points for tyres (MVI).
6. Stand back from the MVI scene in a safe place looking in the direction of initial travel of the vehicles involved (put yourself in their position where safe to do so and take multiple photos showing the whole scene then the location of evidences from the center line up to the point of impact and final rest position.
7. Take photographs and/or video of the scene as quickly as possible if it is safe to do so. Remember that taking too many photos is much better than not taking enough.
8. Inform the PDO and contractor management as soon as possible.

The investigation process

General

In general the investigating team should consider the following points:

1. Confirmation/correction of the initial potential risk and actual severity of the incident
2. Establish facts and establish the sequence of events.
3. Where information is fact then state this and give supporting evidence.
4. If information is by supposition then state this.
5. Keep asking 'why' until no more fundamental reasons or causes can be found.
6. Try to establish not only the immediate causes, but also the underlying and root causes.
7. Never assume anything.
8. There are never any silly or stupid question in an investigation.
9. Do not be ruled by forms or templates – ask any question you think needs asking.
10. Do not fall into the trap of simply blaming the injured person as there are often many causes.
11. Medium and high potential incidents require a more in-depth investigation.
12. Fatalities will often be investigated by the ROP as well as by the Company.
13. The construction of a diagram showing the connections between the various events and conditions leading up to the incident (an incident tree) is a useful tool in determining the underlying causes and conditions leading to an incident.

Preserving physical evidence

In some incidents components or equipment may be damaged or have failed. In these cases, the equipment should be stored in a secure place pending more detailed analysis.

Conducting special studies

Complex incidents can require specialists to determine causes of failure e.g. air crashes, crane failures and explosions. The need for and use of specialists should be determined and organised quickly with requests being made to the appropriate Corporate Functional Discipline Head(s). The investigation team should ask whether the ROP or the relevant medical officer have conducted any tests to determine if alcohol or drugs may have contributed to the incident.

Rules of evidence

The investigation team leader must avoid presenting supposition as though it were fact. Whilst it may be appropriate, sometimes even necessary, to evaluate the most likely cause(s) of an incident on the balance of probability, it must be avoided where the implication is that somebody specific was responsible for the cause of the incident. In such situations, the investigation must limit itself to the facts. This is especially important if there is any possibility that criminal proceedings may result. Supposition or assumption should be clearly stated as such and not confused with fact. **Always remember that the main purpose of incident investigation is not to assign blame to individuals.**

Analysing the evidence

The purpose of the analysis stage is to identify critical sequences of events and to draw conclusions with respect to immediate and underlying causes.

Data may be in the form of:

- Hard evidence such as written records, photographs of the undisturbed site, signs, procedures, training records, tool box talk records.
- Witness statements.
- Reports from tests carried out since the incident, such as root cause analysis.
- Circumstantial evidence: the logical interpretation of facts that leads to a single, but unproven conclusion.

Core stages in the investigation process

There are eleven core parts of an investigation:

1. Injured person (people)
2. Equipment
3. Environment
4. Third parties
5. Other parties
6. Witnesses
7. Activity taking place at the time
8. Activity taking place beforehand
9. Historical and management information
10. Causational pathway, underlying causes and wider learnings
11. Custodianship of evidence

Incident investigation guidance 1. On scene Data points
The injured person (IP)

You have to find out as much as possible about the IP to be able to see the incident from his view. Get inside his head at the time of the incident to better understand. When the IP is not immediately available for interview it may result in you drawing your own conclusions prior to seeing him.

1. Name, age, service with the company ....
   ....
2. Medical condition and medical results ....
3. Experience in role doing at time of injury ....
4. What was he employed to do? ....
   ....
5. What activity was he doing when injured? ....
6. Was he authorised to do the activity? ....
7. Was he competent in conducting the activity? ....
8. Is there evidence of competency through training or instruction in the job?
   ....
9. How many hours had he worked that day? ....
10. How many hours had he worked that week? ....
11. Had he reported feeling sick or poorly? ....
12. Was he happy about doing the activity?
    ....
13. How many hours had he driven?..
14. How many hours did he have to go in the journey? ....
15. Had he complained of problems relating to the activity or equipment prior to the incident?
    ....
16. What motivators were there for the employee to potentially break rules? ....
    ....
17. What is his character like? ....
    ....
18. What is his previous incident record like? ....
    ....
    .
19. What is his training attitude like? ....
    ....
20. What is his attitude to rule breaking and diligence like? ....
    ....
21. Had he just changed roles recently? ....
22. Has he been doing the same job for many years? ....
23. What did he do before being employed by you? ....
    ....
24. Had he been inducted in health and safety and when? ....
25. What is the content and makeup of the training received? ....
    ....
26. Can the company confirm through evidence the content of the training and instruction?
    ....
27. Can the company confirm through evidence the competency of the trainer or instructor?
    ....
28. Did the employee confirm he understood through testing?
    ....

Incident investigation guidance 1. On scene Data points

The equipment:

The equipment is often initially ‘blamed’ for the incident and it is therefore essential to evaluate whether the equipment played a causational part.

1. Record the serial numbers/number plates of all of the equipment involved in the incident to avoid confusion
   ....
   ....
2. Was the equipment the correct equipment for the task?
   ....
   ....
3. Visually check and record the state of the equipment at the scene
   ....
   ....
4. Record all defects found and judge whether or not they occurred as a result of the incident. Test and inspect the equipment to ensure it was in a good state of repair. Do it with someone who knows about the equipment as soon after the incident as possible
   ....
   ....
5. Was the equipment being used in the correct manner?
   ....
   ....
6. Review the servicing and maintenance records for the equipment.
   ....
   ....
7. Review whether pre-shift checks had been conducted for the equipment, the results and any follow up
   ....
   ....
8. Identify the history of the equipment in relation to defects, complaints or previous incidents it was involved in
   ....
   ....
9. Check if a cause of the incident was due to equipment not being used when in fact it should have been.
   ....
   ....
10. If equipment was not used as required, check if it was available to the employee
    ....
    ....
11. If not available then check if employee raised it as an issue and if so what happened as a result
    ....
    ....
12. Was any PPE needed to use the equipment?...
13. Was the PPE being worn correctly?..
14. Identify if the correct PPE had been issued
    ....
    ....
15. What was the condition of the PPE?
    ....
    ....

Incident investigation guidance 1. On scene Data points
The environment

The environment can have a significant influence on an incident. There are two types of environment: *Static* and *Dynamic*

- Static environment will change very little over time e.g. building layouts, road layouts, structures.

  - Dynamic environmental conditions are quickly lost. It is essential to capture as much info on the immediate environment as quickly as possible including the state of floors, road surfaces, spills, tyre marks, lighting, weather, animals, personnel, status of controls, alarms etc

Static Environment

The workplace or road layout and widths
………
……

Signage, road or walkway markings, where and what
………
……

Distances, to-from junctions, between machinery
………
……

Ambient conditions; machinery noise etc
………
……

Topography of surrounding area
………
……

Dynamic Environment

Weather and lighting conditions at the time of the incident
………
……

Positions of related objects, bodies, debris
………
……

Positions of controls, status of equipments
………
……

Skid marks, spills, (or puddles),
………
……

0. Dust conditions
………
……

1. Ground conditions & the state of it
………
……

Incident investigation guidance 1. On scene Data points
The third parties

Third parties are other people involved in the incident but who were not working in the PDO operation/contract. They can be difficult to involve in investigations as they may be in hospital, have left the scene, are upset, are uncooperative to avoid incriminating themselves or embellish the truth to make it more exciting. You have no rights over 3rd party witness, they are ‘volunteering’ information and attempting to formalize it may make them withdraw. Chat with them, ask questions, be interested but don’t make notes, write it down later.

In dealing with third parties remember:

1. They may be in shock and so do not pressure them.
2. Liaise with the ROP as much as possible to ascertain what they have managed to discover.
3. Any information they give is to be treated as hear-say unless substantiated.
4. Remember the cultural differences which may be involved.

Ask them

What they saw? ....
....
Were they looking in the direction of the incident before it happened?
....
....
What they heard?
....
....
What was the weather like?
....
What was the lighting level like?
....
Who else was in the area? ....
....
Do they know the people involved in the incident? ....
....
What they smelt? ....
What they felt? ....

10. Where were they standing in relation to the incident?
....
11. How far away were they?
....
....
12. What did they do after the incident?
....
....
13. Is there anything they can remember which might be important?
....
....
14. How do they think the incident happened?
....
....
....
....

Incident investigation guidance 1. On scene Data points

The other parties

Other witnesses are a good source of information and can allow you to build up a mental picture of what occurred but be cautious as they may not be impartial to the people involved in the incident. They may embellish what they have seen to make it more exciting and what they think they saw may not in reality be true. They relay their perceptions to you. Collecting perceptions from a number of different witnesses allows you to make an informed judgement of what happened. Distinguish facts from opinions. If using an interpreter, ask short questions, wait for the answers. Don't argue with them, if you are unclear, act confused by their point, they may fill it in for you. Ask them :

1. What they saw?
   ....
   ....
2. Were they looking in the direction of the incident before it happened?
   ....
   ....
3. What they heard?
   ....
   ....
4. What was the weather like?
   ....
   ....
5. What was the lighting level like?
   ....
   ....
6. Who else was in the area?
   ....
   ....
7. Do they know the people involved in the incident?
   ....
   ....
8. What they smelt?
   ....
   ....
9. What they felt?
   ....
   ....
10. Where were they standing in relation to the incident?
    ....
    ....
11. How far away were they?
    ....
    ....
12. What did they do after the incident?
    ....
    ....
13. Is there anything they can remember which might be important?
    ....
    ....

Incident investigation guidance 1. On scene Data points

Witness statements

Witness statements can be vital in a successful investigation. Remember you are not interrogating the witness; you are trying to solicit information which will help you to piece together the chain of events. Interviews must be conducted in a timely and professional manner.

Try and collect statements in the following order:

a) Injured person (IP)
b) Witnesses
c) Line management

1. Identify the witnesses, make sure you have the correct names and contact details.
2. If the IP is unable to be interviewed gather as much evidence as possible from other witnesses and write down whatever they remember.
3. Ensure you have privacy and any equipment/information you may need ready to use.
4. Allow a person to accompany the witness if he asks for this but do not allow them to answer questions for the witness unless translating.
5. Put them at ease, ask how they are feeling etc, explain the purpose of the investigation, (incident prevention) to them and introduce yourself, even if you know them.
6. Use a chart or sketch of the incident scene if necessary to help.
7. **LISTEN** to the witnesses, allow them to speak freely, be courteous and considerate. Let them put forward their version of events.
8. Try not to stop the flow, if you are unsure or the witness goes off track try to bring them back gently by asking them to explain a point in more detail.
9. Take notes and type the interview up as soon as possible afterwards. Provide a copy to the witness if requested.
10. Word each question carefully and be sure the witness understands. Use a combination of open and questions.

a. Open – to elicit information; ‘what did you see?’
b. Closed – to clarify a point; ‘did you see the truck?’

11. Be sure to distinguish facts from opinions
12. Be sincere and do not argue with the witness.
13. Use the interview to attempt to clarify any points you are unsure of.
14. Not all people will react the same to a particular stimulus; a witness close to the event may have a completely different version to someone who saw it from a distance.
15. Stories may change with time and contact with other witnesses.
16. A traumatized witness may not be able to recall all the events.
17. Witnesses may omit entire sequences for various reasons such as failure to realize their relevance, failure to observe, personal reasons, bias etc.