



# INVESTIGATIONS HANDI-GUIDE

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## Swab Master Ltd. Investigation Policy

It is the policy of Swab Master Ltd. that all accidents, incidents (near misses), environmental and occupational illness be reported and investigated in a timely manner.

The purpose of such investigations shall be to determine the root cause of the incident so appropriate action can be taken to prevent recurrence. It is important to remember the focus of the investigation is not to lay or assess blame.

Supervisors are responsible to conduct and submit reports and then share the outcome of the investigation with their workers at a safety meeting to ensure everyone understands what really occurred and what corrective action has been or will be implemented.

A general review of incident reports and investigations will be included on the agenda at the monthly safety meetings.

All Rig Supervisors are now required to have investigations training. We have an in-house module to complete on our website or you can complete Module 6: Accident /Incident Investigation (2012) through the Alberta Association for Safety Partnerships (AASP).



## Investigations

We investigate accidents/incidents/illnesses to identify as many causes as possible so that corrective actions can be taken to improve the health and safety program and prevent similar occurrences in the future.

Types of Investigations include:

- Any accident and/or injury with the potential for loss, including events that happen over an extended period of time.
- Serious/major events causing injury and (or) damage to equipment or property.
- Minor and near misses which could indicate a condition or practice which, if it continues could cause injury or equipment damage.

An accident investigation should focus on the proactive aspect of preventing future accidents/incidents/illnesses by addressing basic causes rather than reacting to specific actions by individuals.

Accident investigation must be part of the preventive strategy of the organization that is serious about reducing accidents and injuries.

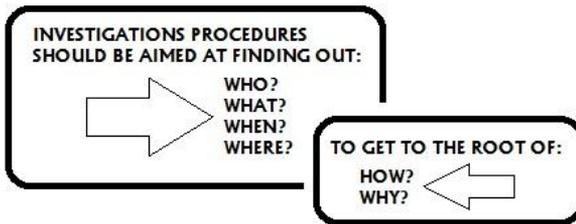
Statistics can be developed by Swab Master Ltd. to do an analysis on cause and effect.

All investigations must be properly documented and required forms filled out.

To investigate – Management, Safety Coordinator and Safety Committee members who have formal training in Accident Investigations are responsible for investigations of accidents / incidents / illnesses.

## Procedure

1. Report the event to all pertinent agencies  
(Refer to Emergency Response for contact information)
  - Emergency Services (as required)
  - Swab Master Management
  - Prime Contractor
  - Government Spill Reporting
2. Control The Scene
3. Complete The Incident Report Package
4. Gather Evidence
  - Position Evidence
  - People Evidence
  - Parts Evidence
  - Paperwork Evidence
5. Analyse Information



6. Apply Temporary Corrective Actions
7. Complete Investigation & Determine Root Cause
8. Report Findings to All Staff & Discuss Prevention
9. Implement Permanent Corrections

## **Reporting**

Emergency – 911

Swab Master Ltd.

Hong Guo – 403-409-9577

Shawn Gleisner – 403-376-4074

CANUTEC (WHMIS) – 613-996-6666

STARS Air Ambulance – 1-888-888-4567

Environment Canada Spill Reporting – 1-800-222-6514

Transportation Safety Board – 1-819-997-7887

## **Control the Scene**

Get everyone's attention & keep everyone out of the scene until evidence is collected. Ask someone for assistance to manage the scene.

Assess any injuries and ensure emergency response is activated. Assign someone to stay with the injured person until EMS arrive or apply first aid procedures if applicable.

Control secondary accidents. Stop others from stepping into a situation that could result in a secondary incident.

Identify sources of evidence and close the scene to preserve the evidence. Have someone block off the area to ensure the scene is maintained.

Collect your investigation kit and begin gathering evidence.

## Gather Evidence

Position Evidence – Take pictures of the scene **the way it lays** immediately after the event occurs. If a cell phone or camera is unavailable, draw a diagram of the scene.

People Evidence – Ensure all parties involved complete a witness statement as soon as is reasonable. If they are unable to write because of distress or skill, the lead investigator may interview the witness and write the statement for them. Do not use recording equipment. Listen first – ask questions – write them down.

Parts Evidence – Note the tools and equipment used when the event occurred. Inspect the tools and equipment for obvious deficiencies. Note the materials used. Examine the workstation or space for hazards.

Paper Evidence – Consider the employees training for the task. Review the policies or procedures in place and if they were followed. Review inspections and maintenance performed on tools and equipment. Take in account the schedule the employee worked before the event.

## Analyse Evidence

Confirm direct causes of accidents. Direct causes may be credited to unsafe acts, unsafe conditions or an Act of God (weather).

### Unsafe Acts:

1. Operating without authority, failure to secure or warn:
  - Starting, stopping, using, operating, firing, moving, etc.
  - without giving proper signal
  - failure to lock, block or secure vehicles, switches, valves, etc.
  - releasing or moving loads, etc., without giving warning.
  - failure to place warning signs, signals, tags, etc.
2. Operating or working at unsafe speed:
  - running or walking backward
  - feeding or supplying too rapidly
  - driving too fast or too slow
  - working too fast or too slow, endangering self or others
3. Making safety devices inoperable:
  - removing safety devices
  - blocking, plugging, typing, etc., of safety devices
  - replacing safety devices with those of improper capacity
  - Using unsafe or defective equipment
4. Unsafe loading, raising, placing, mixing, combining, etc.:
  - overloading, crowding or unsafe piling
  - raising without looking for overhead objects
  - arranging or placing objects or materials unsafely
  - introducing objects or materials unsafely
5. Taking unsafe position or posture:
  - exposure under suspended loads
  - entering vessel or enclosure without assessment
  - lifting with bent back or awkward position
6. Working on moving equipment
  - working on electrically charged equipment
  - cleaning, oiling or adjusting moving equipment
7. Distracting, teasing, startling, horseplay
  - practical joking, fighting, unnecessary noise
8. Failure to use safe attire or PPE
  - failure to use all applicable PPE
  - failure to report defective PPE

### **Unsafe Conditions:**

1. Improperly guarded
2. Defective:
  - rough, slippery, sharp edge, inferior strength or quality
  - decayed, aged, worn, frayed, cracked, etc.
3. Hazardous arrangement, procedure, etc.:
  - unsafely stored tools
  - congested work space
  - inadequate aisle space, exits blocked
4. Improper illumination
5. Improper ventilation
6. Unsafe dress or apparel:
  - PPE
  - loose hair, jewelry or clothing
7. Unsafe design or construction
8. Unguarded

### **Indirect Causes of Accidents:**

1. Worker unsuitable
2. Lack of training
3. Safe work procedure not developed
4. Safety equipment not provided
5. Poor supervision
6. Lack of instruction for employee
7. Deliberate disregard of safety protocols
8. Lack of inspections
9. Poor planning – no Pre-Job Assessment
10. Use of drugs or alcohol
11. Environmental conditions (smoke, dust, fumes, gas, etc.)
12. Inadequate guards
13. Defective equipment
14. Safety systems and controls not enforced

## Apply Temporary Corrective Actions

It is imperative to control the hazard that caused the incident, accident, illness or near miss. Employees must be kept from harm while the event is being investigated.

If an emergency action is required to control or eliminate a hazard that is dangerous to the safety or health of workers;

1. Only those workers competent in correcting the condition, and the minimum number necessary to correct the condition, may be exposed to the hazard.
2. Every reasonable effort must be made to control the hazard while risk controls are established

## Types of Controls

**Engineering:** are methods that are built into the design of a plant, equipment or process to minimize the hazard. Engineering controls are a very reliable way to control worker exposures as long as the controls are designed, used and maintained properly.

- Ventilation, Emergency Stop Button, Back up Alarms, Isolation, etc.

**Administrative:** are changes in work procedures such as written safety policies, rules, supervision, schedules, and training with the goal of reducing the duration, frequency, and severity of exposure to hazardous chemicals or situation

- Safe Work Procedures, Training, Emergency Response Plan, etc.

**Personal Protective Equipment:** to reduce employee exposure to hazards when engineering and administrative controls are not feasible or effective to reduce these risks to acceptable levels. PPE is needed when there are hazards present.

- Steel Toes, Hard Hat, Coveralls, Fall Protection, Eye Protection, etc.

## Complete Investigation & Determine Root Cause

With the situation in hand, all appropriate agencies notified, evidence collected and corrective actions applied – you can now complete the investigation and determine root cause. The Manager you initially reported the incident to, along with the Safety Coordinator may assist you in analysing and determining root cause.

## Report Findings to All Staff & Discuss Prevention

Once the investigation is complete and root cause is identified, we now need to determine how to prevent this event from happening again. The results of the investigation will be released to all staff members as promptly as possible.

The opinions of our workers have great influence on how we handle controls. The results will be discussed at the next safety meeting to settle which control will help prevent recurrence.

***If the event caused catastrophic, critical or serious loss to person or equipment – the investigation results will be shared immediately via email or phone call.***

## Implement Permanent Corrections

When the investigation has been shared and employees have given input as to which control will ensure prevention – the control will be implemented as soon as reasonably possible.

Until such time, the temporary control will be assessed for effectiveness and addressed with all staff to ensure they are aware of the potential hazard.