Management of Incidents and Near-Misses

1	10/2022	Review of section 5.4	*L. Garavini*	*T. Gondolini*	*L. Garavini*
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1 PURPOSE AND SCOPE OF APPLICATION

The purpose of this work instruction is to:

- Ensure that all the information on incidents and near-misses is collected as quickly as possible and disclosed to the interested parties.
- Manage incidents and near-misses effectively and in compliance with corporate and national standards while minimising consequences for people, property and surrounding environment.
- Have the necessary information to analyse incidents and near-misses so that to determine the actions necessary to prevent their recurrence and for the continual improvement of the Management System.
- Define the Incident Investigation process aimed at identifying the underlying causes of an incident.
- Communicate internally and externally (customers, subcontractors, etc.) a Safety Alert of the event, to explain what happened and how to prevent its recurrence.

This document is applicable to incidents and near-misses occurring at the TREVI DIVISION sites or other sites where the TREVI DIVISION carries out activities under its direct responsibility, affecting employees of the TREVI DIVISION or of third-party companies (subcontractors, vendors, customers, etc.).

2 ACRONYMS AND DEFINITIONS

2.1 ACRONYMS

The following acronyms are used in this document:

QHSE	Quality, Health, Safety and Environment
HR	Human Resource Dept.
Emp	Employer
NM	Near-Misses
PPSM	Prevention and Protection Service Manager
WSR	Workers' safety representative

2.2 DEFINITIONS

Immediate Cause	Unsafe action or condition that triggers the event. This occurs at the time and place of the incident.
Root cause	Human or organisational factor underlying the immediate cause.
Incident	An unplanned and uncontrolled event (or chain of events) that resulted at least in an injury, a property or an environmental incident.
Near-Miss (NM)	An unplanned and uncontrolled event (or chain of events), which did not lead to an incident, but had the potential to do so under other circumstances.
Corrective Action	Action to eliminate the cause of a nonconformity and to prevent recurrence.
Lessons Learned	Experiences distilled from past activities that should be actively taken into account in future actions and behaviours.

3 REFERENCES

3.1 STANDARDS

ISO 45001:2018 Occupational Health and Safety Management System

ISO 14001:2015 Environmental Management System

3.2 DOCUMENTS

AL-IMS-02-00-GTR_Investigation

4 RESPONSIBILITIES AND TASKS

Employer (Emp) / HSE Representatives	• Ensure adequate resources to support the investigation process and the implementation of the defined action plan. • Actively participate in the Investigation Team, ensuring the participation of relevant figures in the investigation (subcontractors, discipline experts, etc.), and collaborate with HSE in the analysis of incidents and near-misses. • Supervise and ensure the correct implementation of the corrective actions defined after the investigation.
Site HSE / HSE Manager /	• Lead and facilitate the incident investigation process (carried out by the **Supervisor** of incidents with injury potential <4 dd).

PPSM	• Prepare/collect the required reports at the end of the investigation process conducted by the Investigation Team and send it to the HSE Representatives / Emp and QHSE Manager. • Ensure a proper communication of Lessons Learned arising at the end of the investigation process in the relating areas of competence. • Conduct the Follow-Up and the Action Plan defined at the end of the investigation process. • Report any need for external resources (e.g., technical consultants) to the relevant Emp/HSE Representatives in order to conduct a thorough investigation process.
HSSE-Q Manager **PPSM**	• Ensure a proper communication of Lessons Learned arising at the end of the investigation process within the TREVI GROUP and to interested stakeholders (e.g., subcontractors or Clients).
Investigation Team	• Acquire factual information about the incident. • Analyse information to define immediate and root causes. • Identify suitable control measures and plan corrective actions.
Subcontractors	In the event of an incident or NM affecting them: • Inform their Trevi Group contact person. • Actively participate in the investigation process. • In case of actions to be performed, they are responsible for their implementation.
Workers' safety representatives (WSR)	• Receive information about injuries and occupational diseases. • Cooperate in the preparation, identification and implementation of prevention measures.

5 INCIDENT INVESTIGATION

Before carrying out an incident investigation, it is important to:

- forbid the access to the incident area to prevent it from being altered in any way;
- ensure medical treatment for the injured, including the support of external help;
- undertake actions to ensure the safety of others and avoid the escalation of the incident.

5.1 INVESTIGATION TEAM

In order to define how to manage an incident, it is necessary to assess its severity level (even for potential events) by means of the table shown below. This table allows a proper identification of the persons in charge of the investigation and the definition of the most appropriate corrective actions.

ACTUAL AND POTENTIAL SEVERITY	LEAD INVESTIGATOR
Injury < 4DD	Site HSE / Supervisor
Injury <= 30dd	Site HSE / HSE Manager / PPSM
Injury >= 30dd	HSE Manager /PPSM / TBD (defined by HSE Manager / PPSM)

Where the Investigation requires specific expertise, a dedicated resource (or team) independent of the Managers of the areas involved in the incident shall be appointed to ensure greater objectivity.

In any case, the Lead Investigator of the team can cooperate with internal or external functions so that to obtain an accurate analysis of causes and a definition of corrective actions aimed at preventing the event from recurrence.

5.2 INVESTIGATION PROCESS

The Investigation process of an incident or near-miss is broken down in 4 main steps:

1. Information collection

   The Lead Investigator shall show up at the scene with the necessary material to record information. In order to obtain the information for carrying out the investigation, it is necessary to:

   - Obtain details from any witnesses;
   - Check the ongoing activity and the equipment, if the case;
   - Collect information at the scene and record it.

   In addition, the analysis of documentation shall be taken into account, such as risk assessment, training certificates, work system, work permits and maintenance records.

2. Identification of the event sequence, immediate and root causes

   A methodical and focused approach is essential while carrying out the investigation process, with the aim of:

   - Describing the sequence of events objectively, in order to identify the Immediate Causes.
   - Determining Root Causes and the associated controls that failed and that caused the event.

- Identifying the causes that can be corrected promptly (and controls that can be restored) so that to achieve maximum benefits in terms of improvements in activity time and performance.

3. Identification of corrective actions to prevent further occurrence of the event

   Once the causes have been analysed, appropriate corrective actions shall be identified. It is important that they are feasible, effective and that they ensure the respect of the hierarchy of risk controls (elimination, replacement, engineering controls, procedural controls, personal protective equipment).

   The process of investigating an incident or NM shall necessarily lead to the definition of an action plan identifying the expected date of closure and the person responsible for implementing the corrective action.

4. Completion of corrective actions and Follow-up

   Once the actions are completed, the Lead Investigator verifies the implementation of actions and, following the observation period to verify the effectiveness (if defined), controls that similar or expected situations have not occurred.

5.3 PROCESS OUTPUT

At the end of the investigation process, in order to avoid a repetition of similar events, adequate communication of Lessons Learned shall be ensured. Communications shall be disclosed through Safety Alerts, informative meetings or other communication instruments that favour the sharing of the message.

5.4 TIMELINE OF ACTIONS

Timescale	Who	Action	Notes
Immediately	Injured person	Inform the line Manager	Information shared in person, by radio or mobile phone
	Supervisor	Activates the Emergency Teams and, if present, informs the Site HSE	
	Supervisor	Informs the HSE Representatives of reference	
Within 1 hour	Supervisor	Informs HSE Manager / OHSM and HR	Information shared via e-mail with a brief description of the event
Within 4 hours	HSE Manager / OHSM	Informs the Emp and the Workers' Safety Representatives	Information shared via e-mail with a brief description of the event
When issued injury certificate	Injured person	For employees: deliver the accident medical certification issued by the clinic/hospital to HR Administration. For non-employees: the employer must inform the TREVI contact person.	Certificate forwarded in paper or by e-mail
Within 24 hours	Lead Investigator	Calls the first investigation meeting to determine the dynamics of the event. Forwards a copy to the HSE Manager / OHSM, Employer and Representatives, HR	Investigation Form (AL-IMS-02-00-GTR) page 1 and 2
Within 48 working hours	HR Administration	For the accidents of employees whose temporary inability for work is no more than three days, it forwards, for statistical and information purposes, the "Accident report" to INAIL (insurance). In the event that the prognosis is greater than three or there is a subsequent extension of the initial prognosis days such that the absence exceeds three days, it forwards, for insurance purposes, the "Accident report / communication" to INAIL (insurance). Note: to verify the correct dynamics of the accident to be included in the Report / Communication, HR is supported by HSE Dept.	
Within 72 hours	Lead Investigator	Carries out the investigation activity to review the dynamics of the event, its causes, and to define the corrective actions to be taken. Forwards a copy to the HSE Manager / OHSM, Employer and Representatives	Completion of the Investigation Form (AL-IMS-02-00-GTR)

At the closure date of the actions	Lead Investigator	Carries out the follow-up of the corrective actions defined to verify their implementations and their effectiveness	Investigation Form (AL-IMS-02-00-GTR)
When there are sufficient elements to understand how to prevent the event recurrence	HSE Dept.	Promotes the sharing of the Lessons Learned	Safety Alerts, Informative Meetings, etc.