

SYDNEY TRAMWAY MUSEUM

- 13) any fire or explosion that causes damage to rail infrastructure or rolling stock, or both, or that causes the disruption or closure of a railway (even if the closure is only a precautionary measure),
- 14) any accident or incident on railway premises where a person inflicts, or is alleged to have inflicted, an injury on another person,
- 15) a suspected attempt to suicide,
- 16) if a rail safety worker employed by a rail transport operator has returned a result to a test designed to determine the concentration of alcohol or other drugs in a sample of blood or urine that suggests that the worker was in breach of a relevant safety requirement concerning the use of alcohol or other drugs at a relevant time,
- 17) the infliction of any wilful or unlawful damage to, or the defacement of, any rail infrastructure or rolling stock that could affect the safety of railway operations or the safety of people,
- 18) any accident or incident in a rail corridor that indicates that the security of the corridor is compromised and that affects, or may affect, the safety of railway operations.

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APPENDIX 1

The full definitions of Category A and B Occurrences as per the Rail Safety (General) Regulation 2008 are:

A. Category A Occurrence

The following are notifiable occurrences of Category A:

- 1) an accident or incident that has caused death, serious injury or significant property damage,
- 2) a running line derailment,
- 3) a running line collision between rolling stock,
- 4) a collision at a road or pedestrian level crossing between rolling stock and either a motor vehicle or a person,
- 5) a fire or explosion on or in rail infrastructure or rolling stock that affects the safety of railway operations or that endangers one or more people,
- 6) a suspected terrorist attack,
- 7) any accident or incident involving a significant failure of a safety management system that could have caused death, serious injury or significant property damage,
- 8) the theft of or from rolling stock or railway premises of a rail transport operator of security sensitive dangerous goods (within the meaning of the *Australian Dangerous Goods Code* prepared by the National Transport Commission as in force on the commencement of this Regulation) or the tampering with any such goods on rolling stock or railway premises of a rail transport operator,
- 9) any other accident or incident that is likely to generate intense public interest or concern.

B. Category B Occurrence

The following are notifiable occurrences of Category B:

- 1) a derailment, other than a running line derailment,
- 2) a collision involving rolling stock,
- 3) any accident or incident at a road or pedestrian level crossing arising from a failure of rail infrastructure or that caused a risk to safety or damage to a person or property,
- 4) the passing of a stop signal, or a signal with no indication, by rolling stock without authority,
- 5) any accident or incident where rolling stock exceeds the limits of authorised movement given in a proceed authority;
- 6) any failure of a signalling or communications system that endangers, or that has the potential to endanger, the safe operation of trains or the safety of people, or that causes or could cause damage to adjoining property,
- 7) any slip, trip or fall by a person on, to or from a train, railway track, railway bridge, station, platform, escalator, lift or stairs, or any person being caught in the door of any rolling stock,
- 8) any situation where a load affects, or could affect, the safe passage of trains or the safety of people, or causes or could cause damage to adjoining property,
- 9) any accident or incident involving dangerous goods that affects, or could affect, the safety of railway operations or the safety of people, or that causes or could cause damage to adjoining property,
- 10) any breach of a safe working system or procedure, or the detection of any irregularity or deficiency in such a system or procedure,
- 11) any irregularity in any rail infrastructure (including electrical infrastructure and any obstruction on a running line) that could affect the safety of railway operations or the safety of people,
- 12) any irregularity in any rolling stock that could affect the safe operation of the train or the safety of people, or cause damage to the rolling stock,

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7.4.3.7 Procedure for issue of Investigation Report:

When investigation report is completed and signed off by the investigation team it will be forwarded to the Board.

The Investigation Report will be distributed to the Directors for review and presented to the Board by the Rail Safety Manager. Once approved it will be filed and made available to ITSR.

The Board will ensure all recommendations have been completed and found to be effective and acceptable at which time it will close out the investigation.

All completed relevant paperwork will be filed in the office.

8. Documentation

The reporting forms for OTSI & ITSR and other details can be found on the following web sites.

The OTSI web site is:

OTSI – Rail Occurrence Notification:

<http://www.otsi.nsw.gov.au/rail/occurrence-notification.php>

The ITSR web sites are:

ITSR – Fact Sheet - Notification of Occurrences:

http://www.transportregulator.nsw.gov.au/publications/fact_sheet_pages_08/rail_notification_occurrences.html

ITSR – Notification of An Occurrence Form:

http://www.transportregulator.nsw.gov.au/publications/forms/Form6_notification_occurrence.pdf

National Guidelines for the Reporting of Notifiable Occurrences:

<http://www.transportregulator.nsw.gov.au/statistics/Documents/ON-S1.pdf>

National Guidelines for the Top Event Classification of Notifiable Occurrences:

<http://www.transportregulator.nsw.gov.au/statistics/Documents/OC-G1.pdf>

ITSR's Role in an Investigation:

http://www.transportregulator.nsw.gov.au/publications/fact_sheet_pages_08/ITSRs_role_investigations.html

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The investigation team will look at the unsafe acts and conditions one at a time (remember not to seek blame or make it a witch hunt). Consider all possible remedies. The investigation team will recommend remedial action if required. Also other similar hazards are to be considered. The report will be reviewed and approved by the investigating team before the Rail Safety Manager passes it to the Board.

Some of the details to be included in the Investigation Report are:

- a) Qualifications and/or experience of each member of the investigating team;
- b) Details of the accident Trace back the sequence of events identifying all contributing unsafe acts and conditions – human, machine or environment factors;;
- c) Any witness statements;
- d) All details of any injuries;
- e) Authorities contacted, including ITSIR & OTSI;
- f) Any environmental factors (e.g. track conditions, weather conditions, day or night time, etc);
- g) Statements from the Traffic staff;
- h) Any sketches and/or photos of the accident;
- i) The results of the review of the Risk Register to ascertain if:
 - i. more risks need to be identified; and
 - ii. All of the current risks have been correctly rated;
- j) Copies of all inspections records of the various areas;
- k) Copies of any maintenance relevant records;
- l) Recommendations for improvements (if required).

A proforma for the Rail Safety Investigation Report is shown in STM6077A.

7.43.4 Review Risk Register

During the investigation, the report co-ordinator must review the Risk Register to ensure that all risks were identified and if not, then new risks are to be added to the register and rated. The review of the Risk Register must then be completed at the next RSMT meeting.

7.43.5 Registering Accident Reports

All accident reports must be recorded in the Register of Accident Reports (STM6173) by the Rail Safety Manager. The details to be recorded are:

- a) Report Number – format is YYNNN where YY is the current year and NNN is a sequential number in that year;
- b) Report Title – the title given to the accident report;
- c) The name of the person co-ordinating the report;
- d) Status – the current status of the report – IN PROGRESS or COMPLETE (the reason for IN PROGRESS is that a copy of the accident register should be given to the Board each month); and
- e) Report – whether the report is an INTERIM or FINAL report.

7.43.6 The Investigation report is to be distributed to:

- a) Infrastructure Manager;
- b) Workshop Manager;
- c) Overhead Supervisor;
- d) The Chief Engineer;
- e) Operations Manager;
- f) Traffic Manager; and
- g) The board of directors.
- h) The Rail Safety Management Team

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- c) not to seek blame (i.e. not to be a witch hunt)

In investigating the accident the Infrastructure, the track, the overhead, the tramcar operations and the crew must be examined.

Investigations of the Infrastructure will cover the inspections performed over the past 12 months and any maintenance or other work carried out on the area of the accident.

Investigations of the Overhead will cover the inspections performed over the past 12 months and any maintenance or other work carried out on the area of the accident.

Investigations of the tramcar or tramcars will cover the inspections performed over the previous 12 months and any maintenance or other work carried out on the tramcar (s).

7.43.1 Areas of Investigation

Investigations of the crew and the tramcar operations will cover:

- the qualifications of the crew;
- the speed of the tram at the time of the accident;
- the weather conditions;
- visibility of the area;
- the operating requirements of the tram;
- the results of any testing of the crew (drug and alcohol);
- the experience of the crew;
- the past history of the crew; and
- the statements from any witnesses.

7.43.2 Investigation Team

The investigation team to seek the most appropriate remedy in consultation with relevant personnel; e.g. Tramcar Maintenance/Workshop Manager, Infrastructure Manager, Operations Manager, etc. The Investigation team will compile the report.

The investigation team is to complete all necessary paperwork involved for rectification of the problem and to sign off the investigation.

The investigation team will follow up and evaluate effectiveness and acceptability of remedies suggested.

The Investigation team will be made up of one or more of the following personnel:

- a) Infrastructure Manager;
- b) Workshop Manager;
- c) Overhead Supervisor;
- d) The Chief Engineer;
- e) Operations Manager; or
- f) Traffic Manager.

Appointed and co-ordinated by the Rail Safety Manager who may co-opt other persons to take part in the investigation team. If considered desirable, the Board may take control of a particular investigation and exercise the RSM's powers of appointment and/or co-ordination.

7.43.3 Rail Safety Investigation Report Details

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If none of the above is contactable, then the OIC is to notify OTSI directly.

The following information to be provided to OTSI:

- 1) The name of the Accredited operator (*Sydney Tramway Museum*);
- 2) Brief details of the occurrence including the number of people injured or killed;
- 3) The emergency services who are attending;
- 4) The actions taken by the emergency services or Museum personnel in response to the occurrence;
- 5) The name and telephone number of an individual who can be immediately contacted by the Chief Investigator of OTSI and who can provide details of the occurrence and who, if practical, is at the scene of the derailment.

ITSR needs to also be notified within 72 hours of the occurrence and this will usually be done by one of the managers or directors as listed above.

After permission is received from the OTSI investigator (if notified), the RSM and Police (if applicable), the OIC will arrange for the recovery of the tram and will coordinate the removal of all obstructions. The Infrastructure Manager will arrange for damage to the track to be assessed and repaired. The damaged tram, is possible, will be declared unfit for service and removed to the depot for later inspection by the Workshop Manager.

All members of the crew must be stood down from traffic until after the investigation has been completed. The STM driver or drivers must be tested as per section 6.3 of the Drug and Alcohol program (STM6066).

7.32.2 Derailment on Other Lines – maybe Category A or B

If the derailment does NOT involve death or serious injury of a person, then only ITSR needs to be notified and this will usually be done by one of the managers or directors in accordance with Section 7.32 and 7.32.1 above.

OTSI will only need to be notified if:

- a) a fire or explosion on or in rail infrastructure or rolling stock that affects the safety of railway operations or that endangers one or more people, or
- b) any accident or incident involving a significant failure of a safety management system that could have caused death, serious injury or significant property damage

After permission is received from the OTSI investigator (if notified), the RSM and Police (if applicable), the OIC will arrange for the recovery of the tram and will coordinate the removal of obstructions. The Infrastructure Manager will arrange for damage to the track to be assessed and repaired. The damaged tram, is possible, will be declared unfit for service and removed to the depot for later inspection by the maintenance staff.

All members of the crew must be stood down from traffic until after the investigation has been completed. The STM driver or drivers must be tested as per section 6.3 of the Drug and Alcohol program (STM6066).

7.43 Investigation and Reporting Procedures

The accident investigation procedure aims to establish the sequence of events that actually occurred and compares these events to what should have occurred. The comparison will then highlight the changes that need to be implemented to prevent a recurrence.

An incident/accident investigation must:

- a) be systematic
- b) be done in the spirit of co-operation and involvement

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All completed Occurrence Report Forms (STM6033) will be collected by the Rail Safety Manager (RSM) or his nominee and the RSM will record the details in the Occurrence Report & Corrective Action Register (STM6067). This report will be used by the RSM to follow up the occurrences to ensure they are actioned and closed. If required a Corrective Action Report (STM6078) is to be raised, the RSM will organise for it to be completed.

Also the RSM will ensure that the Register of Injury form (STM6069) is tabled at the next Board meeting and the forms filed in the appropriate folder.

7.3 **Notifications To External Authorities**

Notifications to OTSI and/or ITSR will be made by the RSM. However in cases of extreme urgency, where the occurrence is a CATEGORY A occurrence and the RSM is not available and after consultation, if possible, with a director, another member of the Rail Safety Management team or the Operations Manager, the OIC may contact OTSI.

All CATEGORY A occurrences (see Appendix 1 for definitions) MUST be reported to OTSI and ITSR on the correct forms. **However for this category OTSI must be notified by telephone as soon as practicable after becoming aware of the occurrence as well as completing the OTSI notification form which needs to be faxed to OTSI.**

All CATEGORY B occurrences (see Appendix 1 for definitions) are to be reported to ITSR ONLY using the ITSR notification form. However if the presence of the media means that the occurrence is likely to generate INTENSE public interest or concern, then OTSI MUST also be contacted (by phone) and the OTSI notification form must be completed and faxed to OTSI.

Whether the derailment is a major one or a minor one, **ALL DERAILMENTS MUST BE REPORTED TO ITSR within 72 hours on the ITSR notification form.**

All incidents and **NEAR MISSES** are recorded by the RSM in the Occurrence Report & Corrective Action Register (STM6067) for review at the next RSMT meeting.

The ITSR notification form is:

ITSR Form 6 Notification Occurrence Form

The OTSI notification form is:

OTSI 72 Hour Incident Investigation Report

Copies of the ITSR and OTSI notification forms can be found in the OIC Manual which is kept in the safe in the Traffic Office.

When an **incident, accident or “Near Miss”** occurs an Occurrence Report (STM6033) must be completed by either the tram crew or the OIC as soon as possible. Depending on the incident or accident, it may have to be notified to the RSM immediately or at the end of the operating day.

Specific types of derailments are dealt with in sections ~~7.2.1~~**7.3.1** and ~~7.2.2~~**7.3.2**.

7.3.2.1 Derailment on Running Lines – Category A

If a derailment takes place on a Running line, it is classified as a Category A occurrence and MUST be reported to the OTSI by telephone as soon as practicable after the occurrence by the Museum. However the OIC must first contact one of the following people on the list, in order, to arrange for an officer to attend the scene and to make the report to OTSI:

- a) Rail Safety Manager; or
- b) Operations Manager; or
- c) a member of the Rail Safety Management team; or
- d) A director of the Museum; or

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See Appendix 1 for the full list of occurrences

- f) **Category B Occurrence (As per the Rail Safety (General) Regulations 2008)**
See Appendix 1 for the full list of occurrences
- g) **ITSR** Independent Transport Safety Regulator
- h) **Near Miss** *Any occurrence where the driver of a moving train takes emergency action, or would have if there was sufficient time, to avoid impact with a person, vehicle or other obstruction and no collision occurred. Emergency action includes continuous audible warning and/or brake application (from National Guidelines for the Reporting of Notifiable Occurrences).*
- i) **OTSI** Office of Transport Safety Investigations
- j) **Other Lines** refers to all of the tracks in Depot Yard and Cross Street.
- k) **RSM** – Rail Safety Manager
- l) **RSMT** - Rail Safety Management Team
- m) **Running Lines** refers to the main lines running through Tramway Avenue to both The Royal National Park station and to Sutherland. Also it covers the Depot Main which runs from Depot Junction, north to the loading platform in Lakewood Park.
- n) **STM-** Sydney Tramway Museum, a trading name of South Pacific Electric Railway Co-Operative Society Limited.
- o) **The nominated investigator** is the person nominated to investigate the incident/accident.
- p) **The sign-off** is the formal acceptance that the incident/accident is sufficiently documented and investigated. The sign-off includes a review to ensure: the root causes are established, potential consequences and likelihood are correctly ranked, corrective actions are determined and assigned and that key learnings have been identified.
- q) **The close-out** is the formal acknowledgement that, through an audit or review, all corrective actions have been completed and found to be effective
- r) **The supervisor** is the person who is directing activities at the time of the incident.

6. Actions

The main steps with an incident or accident are:

- Manage the response to an incident or accident;
- Notify the relevant people about the incident or accident; and
- Investigating and reporting on the incident or accident.

7. Procedure

7.1 Manage The Incident or Accident

To procedure to manage the incident or accident and the initial internal notification and documentation, is described in the procedure STM6034 – Emergency-Evacuation Procedure.

The Register of Injury form (STM6069) must also be completed if there are any injuries. These completed forms must be passed to the Rail Safety Manager for submitting to the Board.

7.2 Completion of Occurrence, Hazard and Corrective Action Report (STM6067)

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1. Purpose

The purpose of this procedure is to describe the steps that are to be followed when an incident or accident occurs at the Sydney Tramway Museum. The procedure covers:

- a) Managing the incident or accident;
- b) Notifying the relevant people of an incident or accident; and
- c) Investigating and reporting on the incident or accident.

2. Scope

This procedure shall apply to all STM staff involved in management and response, notification, and investigation of accidents or incidents.

3. Responsibilities

STM personnel are responsible for reporting any incidents or accidents to the relevant authorities and recording the details on the Occurrence Report Form (STM6033) as soon as possible. They will also be involved with the response to the incident or accident and the subsequent investigation.

4. References

Corrective Action Report Form (STM6078)
Drug and Alcohol Program (STM6066)
Emergency-Evacuation Procedure (STM6034)
Occurrence Report & Corrective Action Register (STM6067)
Occurrence Report Form (STM6033)
Occupational Health & Safety Act 2000
Rail Safety Act 2008
Rail Safety (General) Regulation 2008
Register of Accident Reports (STM6173)
The Rail Safety Investigation Report format (STM6077A)

5. Definitions

- a) **An incident** is any occurrence that results in adverse consequences to people, the environment, property/plant, or a combination of these, resulting in a near miss situation with no injuries and/or only minor damage. Also covered are unsafe actions of persons caused by ignorance or negligence of safety procedures or principles creating a risky outcome.
- b) **An accident** is an unexpected event causing injury and/or damage. The basic causes of such accidents are, in general, unsafe conditions or machinery, equipment or surroundings and the unsafe actions of persons that are caused by ignorance or negligence of safety procedures or principles.
- c) **An incident reporter** is the person who reports the incident/accident.
- d) **An investigation** is a detailed review of the incident/accident including, how it happened, when it happened, the root causes of why it happened, leading to a set of corrective actions and learnings to be communicated where relevant.
- e) **Category A Occurrence (As per the Rail Safety (General) Regulations 2008)**

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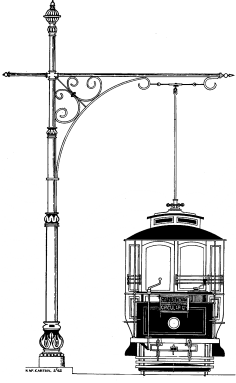
2. Version History:

Version Number	Date	Reason/Comments
1.0	14/01/2007	Initial issue
1.1	15/08/2007	Added details about the reporting of an accident
1.2	08/05/2008	Added reference to Drug and Alcohol testing
1.3	06/09/2008	Added reference to Incident Report (STM6033)
1.4	18/10/2008	Changed the title of Technical Services Manager to Tramcar Maintenance/Workshop Manager
1.5	27/03/2009	Clarified when to report to OTSI and added some web sites for reporting purposes.
1.6	19/06/2009	Added definitions of Running Lines and Other Lines and changed the definitions of Categories as per the Rail Safety Act 2008.
1.7	4/08/2009	Amended the definition of Running line
2.0	31/10/2009	Amended the procedure from comments from G Holliday (ITSRR) and the last ITSRR audit meeting.
2.1	08/03/2010	Updated the process for preparing accident reports.
2.2	18/07/2010	Amended the ITSR name
2.3	17/05/2011	Improved the procedure to explain the process for reporting minor incidents in STM6067 Occurrence Report Corrective Action Register.

Approved by **Signature & Date**

3. Distribution List

Position	Date	Copy Issued to (Yes/No)	Copy No.	Received
Rail Safety Manager		Y	1	
OIC Manual		Y	2	



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INCIDENT/ACCIDENT MANAGEMENT NOTIFICATION, INVESTIGATION AND REPORTING PROCEDURE

~~JULY 2010~~ **MAY 2011**
