

Management of Railway Track Signals

RLS-PR-001

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1. Introduction

1.1. Purpose

This procedure describes the responsibility and actions relating to the storage, stock control and disposal and Misfire of Railway Track Signals (RTS) by qualified workers. This procedure aims to clarify responsibilities and actions once railway track signals have been obtained from the Inventory Controller.

1.2. Scope

This procedure applies to all locations where RTS are stored, issued or used.

1.3. Procedure Owner

The Executive General Manager Enterprise Services is the Procedure Owner and is the initial point of contact for all queries relating to this procedure.

1.4. Responsibilities

It is the responsibility of the relevant ARTC Manager to ensure that all workers have read, understood and comply with this procedure for the safe handling, storage and usage of RTS.

FPPP-002 Inventory Management Procedure sets out the responsibilities for Inventory Controllers.

Workers required to work with RTS are to familiarise themselves with this procedure.

1.5. Reference Documents

The following list of documents and processes support this procedure:

- ARTC Safety Management System
- TA44 ARTC Emergency Management
- Network Rules and Procedures:
 - TA 20 (Victoria) ARTC Code of Practice for the Victoria Main Line Operations Network
 - ARTC Network Rules and Procedures NSW
 - Code of Practice for the Defined Interstate Network (SA, WA & Western Victoria)
 - ARTC Addendum to the Code of Practice
- AS 2187.1 – Explosives, Storage, Transport and Use
- Australian Dangerous Goods (ADG) Code
- FPPP-001 – Purchasing Materials Procedure
- FPPP-002 - Inventory Management Procedure
- Howard & Sons Pyrotechnics RTS MSDS

- NSW Explosives Act 2003
- South Australia Explosives Regulations 2006
- Western Australia Dangerous Goods Safety (Explosives) Regulations 2007
- Victoria Dangerous Goods (Explosives) Regulations 2011

1.6. Definitions

The following terms and acronyms are used within this document:

Term or acronym	Description
RTS	Audible Track Warning Signals, Detonators or Railway Track Signals
Qualified Worker	ARTC employee or contractor qualified to handle RTS.
IC	Inventory Controller
SDS	Safety Data Sheet
ARTC Manager	Team Manager, Project Manager or equivalent

2. Procedure

2.1. General

RTS are classed as an explosive (Class 1) under the Australian Dangerous Goods Code. Their Hazard Division is Class 1.4S indicating that they are a substance that presents no significant hazard as long as the inner packaging of the RTS remains intact.

RTS are used by qualified workers to provide an audible warning to rail traffic crews.

2.2. Licensing and Storage

Each state has different licensing and storage requirements which are outlined in Table 1 below.



	Package from Supplier	Maximum in storage	How to Store/Transport	Licence Required
NSW	50 x 12 RTS = 600 RTS = 6kg	10kg	Lockable box	NO
VIC	24 x 15 RTS = 360 RTS = 3.6kg	50kg	Lockable box	NO
SA	50 x 12 RTS = 600 RTS = 6kg	<3kg	Lockable box	YES FOR >3KG
WA	50 x 12 RTS = 600 RTS = 6kg	30kg	Lockable white box RTS in red 25mil high >8mt flammable goods (see pic B)	NO
	Storage box A		Storage box B	
				

Table 1: Licensing and Storage of RTS.

Day boxes and storage magazines shall be procured in accordance with FPPP-001.

The box or magazine shall be kept locked at all times except when in use.

The immediate area around the box or magazine shall be free of ignition or heat sources.

All doors leading to the storage area where the box or magazine is kept shall be lockable and remain locked when the area is unoccupied.

Only RTS shall be stored within the box or magazine.

The RTS shall remain in the inner packaging that they are delivered in.

At no time shall the plastic case of the RTS be removed to expose the explosive compound.

A copy of the SDS must be readily available at the location that the RTS are stored, in addition to being kept in the Hazardous Materials Register for the site.

2.3. Signage Requirements – Storage Areas

The outside of the box or magazine shall be labelled with the word EXPLOSIVES. A dangerous goods diamond 'Class 1.4S' shall be present on the outside of the box or magazine.

Each entrance to the storage area where the RTS are located shall display a dangerous goods class diamond along with a HAZCHEM sign and a composite sign (refer Figure 2). Other Class Diamonds will be required on the composite warning sign where other dangerous goods are stored in the storage area

A sign prohibiting smoking and ignition sources shall be visible at each entrance to the storage area.


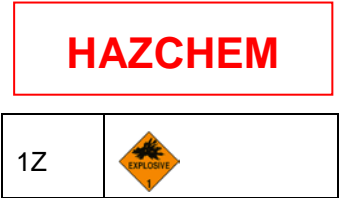
	
<p>Placarding for Magazine</p>	<p>Signage for Entrances to Storage Area Hazchem Sign & Composite Warning Sign</p>

Figure 2: Signage for RTS Storage

2.4. Management of Stock

Qualified workers are responsible for conducting a regular review of the shelf life of RTS they hold in vehicles or on site if they are not in the inventory. They must ensure the older RTS are used first and stock rotation is correctly followed. All expired RTS must be

returned to the IC for disposal and replacements ordered if required in accordance with FPPP-001.

2.5. Handling

- Do not place RTS near a naked flame or hot object.
- Do not smoke when handling RTS.
- Under no circumstances are RTS to be crushed dropped or hit.

3. Use of RTS on Worksites

When not in use on site the magazine or box shall be kept in a locked vehicle or locked container on a vehicle i.e. "double locked".

A register to record RTS used on site shall be maintained by Qualified Workers. This register must be kept in the magazine or storage box alongside the RTS.

Before use, the RTS shall be checked to ensure they have not exceeded their expiry date and the inner package has not been damaged. If there is any doubt, do not use the RTS and report to the relevant ARTC Manager.

RTS must be used in accordance with the relevant Rules and Procedures.

4. Disposal, Misfires, Theft and Reporting Requirements

4.1. Actions in the Event of a Misfire

A misfire will be assumed if:

- the number of reports counted is less than the number of RTS laid out, or
- the RTS is damaged and unfired content is exposed in a portion of the RTS.

Workers must not approach the misfired RTS until at least 5 minutes has elapsed since the rail traffic has passed over the RTS.

Where possible if unfired content is present the RTS shall be placed in a bucket of water for at least 10 minutes and then placed in a storage container and returned to the IC for disposal.

The relevant ARTC Manager shall inform the IC of:

- the lot and batch number;
- the date of manufacture and
- the date of expiry.

The batch and lot of misfired RTS shall be quarantined initially by the ARTC Manager and returned to the IC as soon as is practicable. The IC will quarantine any other batches with the same number and notify Howard & Sons Pyrotechnics as soon as is practicable.

4.2. Disposal

All expired RTS shall be returned to the IC for their disposal in accordance with section 7.3 of FPPP-001.

RTS shall be returned to the IC when the inner package has been damaged and there is a potential for the explosive compound to leak out from the inner packaging.

In the case of expired and damaged RTS they shall be packaged in a box or magazine and returned to the IC.

The relevant the Stock Control Sheet shall be updated.

4.3. Theft

Any theft of an RTS shall be immediately reported to the Police, the ARTC Manager and the Train Transit Manager at the Network Control Centre.

4.4. Incident Reporting Requirements

All incidents involving RTS that result in an injury to persons or damage to property shall be reported in accordance with the ARTC SMS Incident Reporting.