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	Shunting Rollingstock using a Tractor			

Document Status

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A Rev - 1	12/01/2018		SM (I Davis)		
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Revision Record

Revision	Date issued	Description of Changes
2	10/04/2018	Format changes, additional content
3	16/09/2018	Clarify roles and procedures of shunting crew using h/h radios
4	31/10/2018	Additional content

Shunting Rollingstock with a Tractor in the Oberon Yard and Rollingstock Shed

SOP-012 A.R-4

1: Introduction

This Operator-Specific (OS) Procedure is intended to ensure safe shunting operations using a tractor in the Oberon Yard and Rollingstock shed. Shunting with a tractor is prohibited outside of the Oberon Yard. The yard limits are defined by the Albion Street level crossing and the Buffer stop on the southern end of the yard.

Shunting is moving a rake of vehicles or vehicles to:

- Arrange or rearrange vehicle order in a consist
- Attach or detach vehicles to or from a train
- Move a vehicle in or out the Rollingstock Shed or around the yard to be stored or displayed.

2: Responsibilities

The Operations Manager or Rail Safe Manager (in the absence of the Operations Manager) is responsible for ensuring that all relevant OTHR personnel receive instruction in this procedure and understand its application in the workplace. OTHR Rail Safety Workers (RSW), are responsible for ensuring this procedure is followed.

3: Related Documents

- IND-006 OTHR induction / Rail Safety Worker training
- TB-001 Tool Box meeting
- TB-020 Risk Assessment
- F-047 Tractor Pre-start Checklist
- TRG-002 On the ground shunter
- SOP-006 Clipping points
- SOP-007 Hand signals
- Shunting with a Tractor SWMS

4: Scope

This Procedure shall apply to all OTHR staff accessing or working in the Oberon yard and Rollingstock Shed

5: Safety Factors

Safe shunting depends on all workers involved and all Rail Safety Workers shall:

- 5.1 Undertake a pre-shunt briefing (Tool Box Meeting) identifying risks, roles & responsibilities and planned movements. If the planned shunt is in the yard, the shunting crew should walk the planned path identifying any hazards, such as moving through turnouts. Also ensuring that the vehicle to be shunted has a working handbrake if not a match wagon with a working handbrake must be used in the shunting process. See location risks below.
- 5.2 Tractor drivers and two other RSW will form the normal shunting crew, but a driver and one other RSW is an option if hand held radios are used. The crew must come to an understanding about the planned movements. It may be necessary to reposition the tractor from a pulling movement to a push movement when going through turnouts.
- 5.3 When shunting, RSW (1) shunter/ brake person will walk adjacent to handbrake on vehicle being shunted. If not using radios, the other RSW (2) Observer will walk beside the tractor so that he /she can see RSW (1) and the tractor driver to ensure there is a visual contact between all the shunting crew.
- 5.4 Be aware of other train movements and people or equipment on or about the track by maintaining effective communications.
- 5.5 Ensure other operators in the area of the planned movement are aware of the planned movement and OTHR workers are kept aware of other operator's movements

Warning

Tractor Shunting may only be carried out by OTHR RSW using rolling stock that can be moved. Tractor drivers and at least two RSW must ascertain what type of coupling are fitted to the vehicles being shunted, to determined where the drawbar will be connected to. Examples are below:



Example of connecting the tractor to a S wagon



Example of coupling the tractor to an End Platform Car

5.6 OTHR Rail Safety Worker (RSW) Roles:

Only Rail Safety Workers that have been briefed in the specific shunt plan coordinated by the person in charge of the shunt are to participate in the shunting activities. Workers not briefed on the plan are to involve themselves unless specifically requested to do so and only in as far as directed by the person in charge of the shunt.

Rail Safety Workers must not remove wheel chocks or release handbrakes on any vehicles unless the coupling process is confirmed as successful.

Warning

Rail Safety Workers must always be in a position to stop the shunt in emergency. RSW must walk either in the 'six foot' or the 'cess' depending on track configuration.

5.7 Other People

Workers undertaking shunting shall satisfy themselves that the shunt will not affect other people who may be in the vicinity of the proposed movement or may introduce hazards. Such persons are to be informed that shunting movement is about to take place if they are not directly involved in the shunting activities.

These other people may include;

- Maintenance workers
- Workers and visitors on or near the track

6.1 Equipment risks

- Compressed air hoses and equipment
- Electrical hazards
- Couplings, buffers and diaphragms
- Loose equipment, hoses, screw couplings, brake shoes and tools

6.2 Location risks

Including, but not limited to;

- Other trains nearby
- Track gradients
- Not placing any part of your body outside moving vehicles
- Not climbing on or off moving vehicles
- Narrow track and structures clearances
- Sharp curves and restricted visibility due to shadows
- Protruding points levers and rodding
- Drain covers and grates
- Uneven, unstable, muddy or slippery walking surfaces
- Weather conditions
- Visibility
- Noise
- Derail devices
- Boundary and level crossing gates across the tracks
- Point rodding, signalling wires and fuel, water and air hoses

7. Three step protection

Three step protections are used to provide positive safeguard for OTHR Rail Safety Workers be going between rollingstock in the danger zone, behind or under equipment.

- When attaching Rolling Stock, the OTHR RSW shall instruct the Tractor driver to stop at least 3 metres clear of the attaching rolling stock.
- The OTHR RSW on the ground will ask the Tractor driver to apply three step protections.
- The driver shall undertake the following three steps;
 - Apply the brakes
 - Move the gear lever into neutral
 - Set the park brake on

Once all three steps have been completed, the Tractor driver shall confirm with the OTHR RSW that three step protections is applied.

The OTHR RSW will advise the Tractor driver of the tractor that he/she is going in the four foot.

When the OTHR RSW advises the Tractor driver that he /she is in the clear and in a safe place, the driver shall confirm that the three-step protection has been removed.

When the RSW (1) shunter / brake person is giving the tractor driver instructions, the tractor driver must confirm / acknowledge that the instructions are received and understood.

8. Equipment

OTHR Rail Safety Workers shall use the following equipment:

- Personal Protective Equipment (PPE) including high-visibility vests, safety boots
- Hand held two-way radio

- Keys- SL Keys, point clips and SL locks may also be required for some shunting
- A tractor with 50 HP or more and weighs more than 3 tonnes

9. General Conditions: Maximum number of wagons that can moved at a time safely is 1, unless a match truck is required.

9.1 Shunting movements shall be directed by a Rail Safety Worker on the ground.

9.2 A verbal pre-shunt plan will be conducted with all RSW assisting with the shunt present.

9.3 All RSW will confirm that they have a clear understanding of the planned shunt.

9.4 Rail Safety Worker shall direct movements using spoken instructions via H/H radios, or hand signals. Implementation and use of 10 second radio rule. When propelling a shunt utilising HH radios, Instructions must be transmitted every 10 seconds, "keep coming all clear" or say "3 wagons / meters etc to catch on"... Should the Driver fail to hear from the shunter controlling the shunt within 10 seconds, the driver must immediately bring the shunt to a stand until clear communications is re-established. HH radios are not fail safe and can fail at any time.

9.5 Maximum speed when shunting inside the Oberon Yard Limits is walking pace.

9.6 The maximum speed within the Rollingstock shed is slow walking pace.

9.7 As the Oberon Yard has a slight gradient north towards Albion Street, where possible the Tractor shall always remain on the Albion end of the consist where possible, and/or attach a cover truck which has an operational handbrake.

9.8 Any shunts requiring special coupling arrangements must be authorised by the Operations Manager. *Refer Section 10; "Coupling Rolling Stock with drawhooks and links"*

9.9 Personnel shall not ride on rolling stock, other than within a designated operating station or other enclosed space designed to protect personnel during movement of rolling stock. Examples of such spaces are within a carriage or wholly within a truck with enclosed sides.

9.10 Riding on steps (even if originally designed for shunting) is prohibited.

9.11 Rail Safety Workers performing shunting shall always be in a safe place before authorising the Tractor driver to move.

9.12 Keep in constant communication with the Tractor driver via portable radio or hand signals.

9.13 When shunting using hand signals, RSW (1) must always remain in sight of the RSW (2) Observer walking beside the tractor.

9.14 Bring the movement to a stand to align couplings and attend to air hoses prior to coupling rolling stock

9.15 Inform the Tractor driver about intentions to enter between rolling stock to couple or uncouple, and only do so when assured by the Tractor driver that the vehicles are safely secured by the application of three step protection.

9.16 Inform the Tractor driver when coupling / uncoupling has been completed and the other RSW is clear of the rolling stock

9.17 Even when shunting using radio communication equipment, the shunter must where practicable, walk within a line of sight of the Tractor driver, and should the Tractor driver lose sight of the shunter he/she will immediately attempt radio contact and will bring the movement to a stand if unable to do so. Shunter and driver will maintain continuous radio contact throughout any period where line of sight is not maintained.

9.18 When shunting is completed, the Rail Safety Worker directing the shunt must ensure vehicles are secured against movement as required by applying the hand brake and / or chocking the wheels.

Warning insure that the handbrake is applied before disconnecting the tractor example below



9.19 Lose shunting is prohibited.

9.20 Unattended vehicles must:

- not be left foul of running lines
- must be secured with handbrake on or wheel chocks.



9.21 If the RSW directing shunting is not assured that the points will hold their set positions, the points must be secured for the intended route.

10. Coupling Rolling Stock with drawhooks and links

10.1. General: OTHR operates a variety of rolling stock which includes vehicles equipped with drawhooks and links. On 19 May 2006, the ITSRR (ONRSR) issued a Prohibition Notice intended to ensure that the risks associated with the use of these couplings are minimised. A copy of the Prohibition Notice was issued with a General Order on 20 May 2006, and will be made available on request. The instructions contained in this Procedure are intended to give effect to the ITSRR (ONRSR) Prohibition Notice and replace the content of the General Order dated 20 May 2006. This Procedure is intended to ensure that there are no risks to personnel engaged in coupling or uncoupling rolling stock.

10.2. Operational Requirements: When a vehicle fitted with buffers, vestibules or diaphragm buffer plates and drawhooks is required to be coupled to another vehicle similarly equipped, the operation must not be performed unless;

- the buffers are in contact and
- the vehicles are stationary and
- are secured by the handbrake or air brake. Coupling operators must not stand in the rolling stock outline and must wait until the vehicles have been brought to a stand with the handbrake before attempting to couple the vehicles. When uncoupling a vehicle, the coupling operator, after closing the air taps, disconnecting the air hoses and applying the air brake or hand brake on the vehicles being uncoupled, must not stand in the rolling stock outline, but must come from between the vehicles before signalling the driver to ease up. When this movement has been completed and the vehicles are held in position by means of the air brake or hand brake, with buffers closely compressed, the coupling is to be removed. It is important that the air brake or hand brake is applied on both vehicles to ensure no movement is made while the coupling operator is engaged between the vehicles being uncoupled.

10.3. Care in shunting buffered rolling stock: Tractor Drivers and coupling operators are to exercise extreme care when moving vehicles and together to compress buffers to avoid risk of undue shock or damage to rolling stock.

10.4. Restricted clearances Coupling operators are to be aware of restricted clearances when stepping back from within the rolling stock outline during coupling and uncoupling operations.

10.5. Specific instructions for coupling drawhook types:

10.5.1. Coupling vehicles with ordinary buffers and drawhooks When coupling together, engine screw couplings must be used; when coupling to vehicles, the vehicle coupling is to be used, unscrewed to its full extent and the buffers compressed sufficiently to allow the coupling to be

passed over the point of the drawhook. In all cases the vehicle coupling is to be tightened only sufficiently to provide for contact of the buffers.

10.5.2. Coupling ordinary drawhook to

- buffered automatically coupled vehicles (e.g. S truck) or
- vestibule gangway buffer-equipped vehicle (e.g. FS carriage) or
- diaphragm buffer plate-equipped vehicle When coupling these vehicles, the transition links fitted to the automatic coupling head must be used and the length of the links selected between 'long' or 'short' to control the amount of slack between the buffers.

