

SWEEP TRAIN WORK INSTRUCTION**Work description:**

The purpose of this document is to describe how to ensure that the track is free from all obstacles (people, materials, equipment, etc.) and operations may resume safely. It is about the requirements when driving the Sweep Trains.

Scope: This document is applicable for the Operation and Maintenance Services on the Honolulu Rail Transit Project (H RTP).

References:

HNL-09516 Start of Service Work Instruction, HNL-09527 Fault Reporting Process Work Instruction, HNL-09518 OCC Controller Log Book Entries & OCC Log Work Instruction, HNL-09672 Train Operator Duty Event Form

PPE and precautions

Nil

Competencies or qualifications

Train Operator, Train Controller, Security Personnel and/or Track Maintenance staff

Licenses or permits required

Train Driver

Tools and equipment required

Train Key, Train Operator Duty Bag

Note

This process also applies to unscheduled sweep train operations due to line-side failures, track faults, or incidents.

Sweep Train Inspections

Sweep trains are provided before revenue service hours to check and to report on obstructions or abnormalities on or near the running track. They will always be operated without carrying passengers. A Train Operator must be assigned onboard each sweep train.

Initially, for the first 12 months, the Train Operators on board should manually drive the sweep trains using ATP mode at 20mph or less if visibility restrictions apply. The Train Operator should monitor the track at the same time and drive with appropriate sighting to stop the train before any obstructions if required.

After the first 12 months, the sweep trains will be driven automatically in AUTO mode at 20mph or less if visibility restrictions apply (the Emergency Drive Console should be opened and ready for use though). The Train Operators onboard should monitor the track. If any obstacle or anomaly is discovered, the onboard Train Operator must apply the emergency brake using the push-button on the **EDC** to stop the sweep train immediately.

Rust Train Inspections

In addition to the normal Sweep Trains, a Rust Train is run at track speed once a month for ensuring the continuous train detection. During the rust train inspection, the Train Controller must closely monitor the occupancy indication of the train on the track circuitry. The rust train inspection should also cover all switches that are not normally used during passenger service.

Driving the Sweep (Rust) Train Inspection**Train Operator**

The Train Operator will either manually drive the sweep train or be standing-by to stop it by Emergency Brake, when it sweeps through the required track sections.

The Train Operator must keep a lookout for any of the following hazards that may affect train running or the integrity of any equipment, for example:

- Protective earthing straps left
- Defective rails
- Materials, tools and equipment
- Maintenance material
- Objects obstructing the track
- Doors to equipment boxes left open
- Construction debris
- Any other defects or anomalies

This list is not exhaustive and other issues may manifest themselves on the track from time to time.

Approved By:☐ Director, Operations and Maintenance☐ Department Manager☐ Manager, HSE (Operations and Maintenance)**Signature:****Date:**

SWEEP TRAIN WORK INSTRUCTION

During the Rust Train Inspection

Train Controller

- Set the required and correct route for the rust train inspection
- monitor the occupancy indication of the Rust Train on the track circuit
- Log all defects discovered in train control log book

Identification of Items and Faults

Train Operator

Should the Train Operator see any items or faults on the mainline during the sweep, the following actions must be taken immediately:

- Stop the train immediately by pressing the emergency brake pushbutton
- Report the fault, follow the instruction of the Train Controller, and make the situation safe
- If the obstruction, defect, or infringement can be safely rectified by clearing/moving/retrieving it, seek approval from the Train Controller before doing so



Note

The Train Operator must not go trackside/ line-side unless he/she has been given specific instructions by the Train Controller to do so.

- Upon returning to the train, report the actions taken to the Train Controller and be instructed to continue with the sweep train run
- Report to the Train Controller by saying "Line Clear" if the sweeping operation is completed with no obstacles or anomalies encountered

All occurrences should be documented in the HNL-09672 Train Operator Duty Event Form.

Completing the Sweep Train Inspection

Sweep train inspections need to be completed every day and will not be finalized without completing the following activities.

Sweep Train Inspection is not completed until:

- The Train Controller has received the report of 'Line Clear' from all Train Operators on sweep trains
- Rectification works have been carried out to clear any obstruction, defect or infringement and the Train Controller has received a satisfactory report from the Train Operator
- If the sweep train identifies a problem that cannot be rectified quickly, the OCC Supervisor must decide as to the best way to start the revenue service and record the actions in the HNL-09518 OCC Controller Log Book Entries & OCC Log Work Instruction (to be included in the Daily OCC Operational Report)
- Where required, the Train Controller will report all obstructions, defects or infringements found to the Engineering and Fault Controller for immediate or follow-up actions subject to the severity of the infringement and the rectification
- This process also applies to unscheduled sweep train operations due to line-side failures, track faults, or incidents

This list is not exhaustive and other issues may manifest themselves on the track from time to time.