

Safety Advisory 2022-01;

Use of Portable Derails

A Notice by the Federal Railroad Administration on 10/28/2022

SUMMARY:

FRA is issuing Safety Advisory 2022-01 to emphasize the importance of, first, ensuring that portable derails are clearly visible to train crews and operators of other on-track equipment, particularly at night and in other low-light conditions; and, second, having processes in place to ensure portable derails are removed when not necessary for on-track safety. This Safety Advisory recommends that railroads, and railroad contractors, review and revise their on-track safety manuals, as necessary, to ensure they include procedures and rules for the use of portable derails.

Background

On August 29, 2022, a train crew operating in a railroad yard at night encountered a portable derail placed on the track earlier that day to protect multiple engineering work groups working on the track. The train crew, which did not see the derail, operated their train directly into the derail, striking it at approximately nine miles per hour and derailing the first two cars of their train. The conductor, who was riding the lead car, was fatally injured when the car rolled over.

FRA's blue signal protection (BSP) requirements have long required mechanical derails to be used for the protection of workers on, under, or between rolling equipment to have a blue light illuminated at night. See 49 CFR part 218, subpart B (<https://www.ecfr.gov/current/title-49/subtitle-B/chapter-II/part-218/subpart-B>). Typically, in BSP work areas (e.g., mechanical shops), derails are located at known or fixed locations. Roadway workers, however, use portable maintenance-of-way (MOW) derails, which may be installed almost anywhere on non-controlled track for protection.^[1] Because portable MOW derails are not required to be marked or otherwise illuminated for conspicuity, even under conditions of limited visibility, they can become hazards themselves if not highly visible in low-light conditions. Accordingly, best practice dictates that portable derails installed on track should be equipped with a portable light or, at a minimum, reflectorized flags in low-light conditions.

In addition, portable derails should not be left on the track when they are no longer necessary. For example, some railroads require their roadway workers in charge (RWICs) to fill out a form before installing the portable derails. This form typically requires the RWIC to record the date, location, installation time, and removal time of the portable derail. Formalizing the process for installation and removal of portable derails heightens the awareness of the presence of portable derails and the importance of removing these derails from the track when they are no longer necessary.

FRA notes that some railroads require employees to place a tag on the steering wheel of their hi-rail vehicles when placing shunts on the track. A similar process for placing portable derails would safeguard against roadway workers unintentionally leaving portable derails on the track.

Recommendations

In light of the above discussion, FRA recommends that railroads and railroad contractors:

1. Review with their employees the circumstances of the fatal accident described in this Safety Advisory.
2. Review and revise as necessary, their on-track safety manuals to ensure the use of portable derails is adequately addressed and, at a minimum, that these manuals:
 - a. Provide that portable derails be equipped with a functioning light or a reflectorized flag when used at night or under other conditions of limited visibility; and
 - b. Include procedures to ensure that portable derails are removed when no longer necessary, such as procedures to track the location and use of portable derails.

Here is a form you can use to be sure derails are removed after use as a reminder to the craft or employee placing the derail.

PORTABLE DERAIL USE REPORT

Portable derail placed on track _____ at the following location.
Protected with Flag or light Yes _____ No _____
Date: _____ Time: _____
Employee or work group placing portable derail: _____

Portable derail removed from track _____ at following location
Date: _____ Time: _____
Employee or work group who removed the derail. _____