Saving the Vermonter: How Teamwork and Coordination Led to a Successful Derailment Response and Locomotive Recovery

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On October 5, 2015 Amtrak Train #55 (Vermonter) collided with a rock slide at Milepost 65 on the New England Central Railroads (NECRs) Roxbury Subdivision in the Town of Northfield, Vermont (Site). The collision resulted in the derailment of the trains locomotive and five cars, with the derailed locomotive coming to rest at the bottom of a steep, wooded embankment between the railroad and a nearby stream (Bull Run Creek). Fortunately, only minor injuries to the crew and passengers were sustained as a result of the accident. Damage to the locomotive caused the release of diesel fuel, lubrication oil, and battery acid to soils lying directly upgradient of Bull Run Creek. However, thanks to close cooperation between Amtrak, NECR, town officials, and several subcontractors, the Site was successfully cleaned up and restored within five weeks.

The local fire department quickly mobilized to the Site following the derailment to stop the active release of fluids and prevent their migration to Bull Run Creek, which is located only a few miles upstream of the water supply for the town of Northfield. A short time later, TRC and two emergency response contractors established containment around the locomotive, proactively installed booms along the creek to prevent downstream impacts to the waterway, and initiated monitoring of surface water quality.

Within three days of the derailment, the five Amtrak coaches were re-railed and the railroad was put back in service. However, given the steep, unstable slope of the railroad embankment, re-railing the locomotive at that location was considered infeasible. As a result, the only alternative was to lift and haul the locomotive across Bull Run Creek to a local road and then transport it through the town of Northfield to the nearest grade crossing.

Prior to moving the locomotive, TRC coordinated with the Vermont Department of Environmental Conservation (VTDEC) and the U.S. Army Corps of Engineers to obtain all necessary emergency permits to transport the locomotive across Bull Run Creek. Large-scale tree cutting and grading were necessary to move the locomotive first to a clearing suitable for crossing Bull Run Creek. Then, following cutting back the stream banks to create ramps, the locomotive was carefully moved across the stream using four sidewinder. After transfer to a remote-controlled flatbed, the locomotive was walked approximately two miles to the grade crossing in Northfield.

After the locomotive had been removed, a permitted temporary road crossing was constructed to span Bull Run Creek. This enabled Clean Harbors to mobilize equipment to excavate the soils that had been impacted by the derailment, load it onto trucks, and transport it offsite for disposal. Subsequently, Clean Harbors backfilled, graded, and seeded the excavated areas, removed the temporary crossing, and restored and stabilized the stream banks. With the completion of these activities, the VTDEC determined that no further response actions were necessary.