

This is a model for a generic train derailment incident plan from the Two Rivers - Ottauquechee Regional Commission (TRORC). While not mandatory for every LEMP, municipalities with a high risk of derailment should have a derailment incident annex and may use this document (or any other format that suits their planning requirements) as a base. Incident plans should be tailored for local conditions, resources, and processes, but are often not used as-is - they are frameworks that can be quickly adjusted during an emergency to provide a usable incident action plan for the actual situation. Delete this paragraph in the final version of this document!

A train derailment can either be a minor mishap that merely causes a delay in rail traffic, or a major incident that creates mass casualties, environmental damage, necessitates evacuations, or blocks roads. **Any report of a derailment should quickly be followed up to determine its location, extent, and the possible response.** If initial reports are unclear, ICs should work from a precautionary stance that it may be a major event. Causes for derailments in Vermont have included collisions with vehicles or debris, but are often associated with track failure, especially washouts.

### **Assumptions**

- Derailments can require specialized outside resources with hours of needed response time, so it is important to order resources early and to coordinate with the respective railroad.
- Derailments will likely require mutual aid and a more robust Incident Command System than responders may normally use.
- Passenger train derailments can easily create a Mass Casualty incident.
- Derailments can occur in areas not near roads, and in rugged terrain, making access except along the rail line itself difficult.
- Derailments that occur at crossings can cause road closures, create significant detours, and require response from both sides (ICS divisions) as trains (especially freight) are large obstacles that can approach a mile long.
- Freight derailments should always be suspected as a HazMat event unless the train's condition has been surveyed.
- Diesel engines carry large amounts of fuel and are electrical generators.
- Train companies often know only the general location of the train at any moment, but they always know the cargo or number of passengers and crew.

### **Concept of Operations**

The rail system in the LEPC #12 region carries traffic by three railroads.

- The line that roughly follows along US 5 south of White River Junction and then near Interstate 89 northwest of White River Junction to Montpelier

carries AMTRAK passenger trains and New England Central Railroad (NECR) freight trains.

- The line the roughly follows US 5 up the Connecticut River valley north of White River Junction is a Green Mountain Railroad freight line, but does have occasional passenger excursion trains.

Railroads are best contacted through Vermont Emergency Management. As soon as practical in the response, the IC or their designee should contact the Vermont Emergency Management Duty Officer, who is available 24/7, by calling:

- 800-347-0488 or 802-244-8721, or
- by radio through Vermont State Police Headquarters in Waterbury.

The VEM Duty Officer will then contact the respective railroad and coordinate with the IC. The VEM Duty Officer can also alert the state HazMat Response Team Crew Chief, who is also always available 24/7. The direct phone for the Crew Chief is 800-641-5005.

VEM will coordinate with the rail lines to block/reroute any incoming trains.

If there is no ability to communicate with VEM, the railroads may be able to be contacted directly **for emergencies**.

- For NECR/AMTRAK, call 800-800-3490.
- For GMR, call 877-533-6913.

### **Minor derailments**

Minor derailments, resulting in little damage or injuries do happen, especially at slow speeds, and can be dealt with within most responders' experience, with the exception that they will have to work with the respective railroad.

If the derailment is minor, coordination with responders should be straightforward as the engineer should be available at the scene with details about the train, and should have been able to contact their company by radio. Railway representatives should generally be able to be on-scene within a few hours.

### **Major Derailments**

Since a freight train can be thousands of feet long, the IC should consider using divisions for the response on each side of the train, or for certain sections. On scene forces and the train engineer, if available, will have the best initial size-up of obvious conditions. If the engineer/manifest is not available, your forces will not know quickly exactly what/who is on the train. The size of trains, extent of derailment, obstructing buildings, smoke, and weather may make situational awareness difficult. Serious derailments with engine damage may not have been reported by radio by the engineer to the rail company due to destruction of the engine and/or incapacitation of the engineer. **If the engineer and manifest is**

**not available, the IC should ask VEM to obtain, and then transmit and fax, a passenger/crew or freight manifest from the rail company.** VEM can also activate Civil Air Patrol to provide daytime aerial digital video or still feeds within a few hours upon request.

All engines have large amounts of fuel that can be spilled, or if ignited create intense fires. Engines still running generate significant electrical power and firefighters must be aware of this hazard.

Trains are very heavy and difficult to move. Responders should not attempt to move/decouple a train, except in coordination with the railroads. Railroads have private contractors for moving trains with a 3-4 hour response. It is helpful for the rail company in planning their response to know if train cars are actually off the tracks, how many cars, whether the tracks themselves are damaged, and if either end of the train is still on the tracks.

### **Major Freight Derailment Considerations**

Actions the IC should consider for major freight derailments:

- Designate a Safety Officer immediately and remind all personnel to use HazMat scene awareness, assessing the scene from a distance and approaching from upwind. Freight trains do carry chemicals at times that can kill unprotected responders with little warning. Placarded cars may be hard to see or may have had the placards damaged.
- Contact the HazMat Team Crew Chief to discuss response, isolation and decon.
- Request from the VEM Duty Officer/train engineer a list of the rail car contents, by car number. Car numbers are simply the order in which they are on the train, starting at the engine end. Therefore it is important to know both the overall train makeup, as well as the condition/location of each car.
- When conducting size-up, have personnel work on both sides, in pairs, and in SCBA and with gas meters if the freight list and train condition warrant it.
- Establish an initial isolation zone in concert with law enforcement, VTrans and local road departments. If the train is carrying propane/LNG or many other substances, a one-half mile isolation zone may be needed. Maps showing this buffer along all rail lines are included in this EOP.
- Place the Incident Command Post so that it does not have to be relocated.
- Any road closures should be communicated to dispatch to route incoming response correctly.
- If evacuation is being considered, designate an evacuation coordinator and refer them to the Evacuation Annex.
- If an incident involves large spills or runoff from fire suppression, knowing the location of storm drains and surface waters is important, and actions to block runoff may be necessary.

- Establish ICS divisions for sides of train or areas of operation.

### **Major Passenger Derailment Considerations**

Actions the IC should consider for major passenger derailments:

- Request passenger/crew manifest from engineer, or if not available from the railroad through VEM.
- If scene indicates injuries or fatalities, request a Vermont State Police Public Information Officer to deal with media questions. VSP can also coordinate with the Medical Examiner for any fatalities.
- If more than a 5 trauma injuries are suspected, you may need to declare a Mass Casualty Incident (MCI) operation. Regional and full-time ambulances should have a MCI plan. Smaller departments may not and should request more experienced medical responders as needed. Ensure enough medical response is requested to staff positions such as a Triage Officer and Transportation Officer.
- Request that the lead hospital (Medical Control) provide patient routing and coordinate ordering of transport.
- If scene is poorly accessible, request ATVs, snowmobiles and rescue sleds, high angle teams, SAR teams, or other resources needed to carry out injured.
- Designate the staging areas for ambulances.
- Request VEM to activate Red Cross as needed for victim support.
- Ensure stability of train and request extrication equipment.
- Establish ICS divisions for sides of train or areas of operation.