

Case in Study:

Mitchell County Train Derailment

- 16 derailed cars
- 2 railcars contained ethanol
- 2 railcars contained molten sulfur
- 1 railcar contained corn feed
- 6 railcars contained “empty but not clean” petroleum residuals



The derailment happened alongside and up gradient from the North Toe River, which host the Appalachian Elktoe Mussel, an endangered species.

Railroad Culture

“Each Hour the Line is Closed,
Costs Us \$1 Million.”

Whatever it Takes to Get the Line
Open

Cut, Yank and Pull

* Sensitive Environment

Incident Command

Different Terminology For ICS Positions

- Transportation Officer
- Train Master
- Haz-Mat Manager
- Foreman

Multiple Agency Response:

- EPA
- Fish and Wildlife
- Federal Railroad Administration

Main Issues for Discussion

- Lack of Communications on Site
 - No Incident Action Plan (IAP)
 - No Objectives
- Personnel making decisions without input from other organizations
- Contingency Plan Developed But No Implementation

Contingency Plan

CSX was confident that the railcars were unlikely to leak, however EPA insisted to having contingencies in place.

1. Plugging Equipment on Site
2. Vac-Trucks On Site
3. Road to Rail Cars for Vac-Truck Access
4. Empty Rail Cars on site for storage

Agreement made that if rail car leaks, downloading would occur before up righting

Implementing Contingency Plan

While attempting to reposition railcar the valve was sheared and resulted in a ethanol leak.

-Access Road Was Too Narrow For Vac-Trucks

-Empty Rail Car Moved Back To Rail Yard Because it was in the way

-Wooden Plug Replaced with more Permanent Expandable Plug



Sheared Valve - Leak

Wooden Plug
Installed



Personnel Decisions

More Permanent
Expandable Plug Installed

Neither EPA or CSX
Incident Commander had
been informed of the
decision, and although
only minimal ethanol was
released, the potential for
a large release was
possible.

