



Browns, IL Train Derailment



Name of Incident	Browns Train Derailment
Location	Browns / Bellmont, IL (Wabash County)
OSCs Responding	Falconio / Fancher / Vrabec
Date	July 18, 2025
Type and Amount of Product Spilled	Molten Sulfur
Cause of Spill	Derailment caused by two trains colliding
Key Operational Activities	Large initial response including NS Corporate Sulfur solidified once out of containment and cooled off Air monitoring and evac of 6 homes
Agencies Involved	Local FDs and HazMat, IEPA, USEPA, Norfolk Southern and their contractors
Major Lessons Learned	Response started large and scaled back. Very remote location as well as middle of the night. Unified Command / IAPs not established after initial

Notification Overview

- July 18, 2025
 - NRC # 1437331 received at 2035 hrs.
 - OER Manager responded immediately and coordinated with FOSC via phone.
- July 19, 2025
 - OER Manager departs while FOSC and SOSC are in route
 - FOSC and SOSC arrived and began oversight

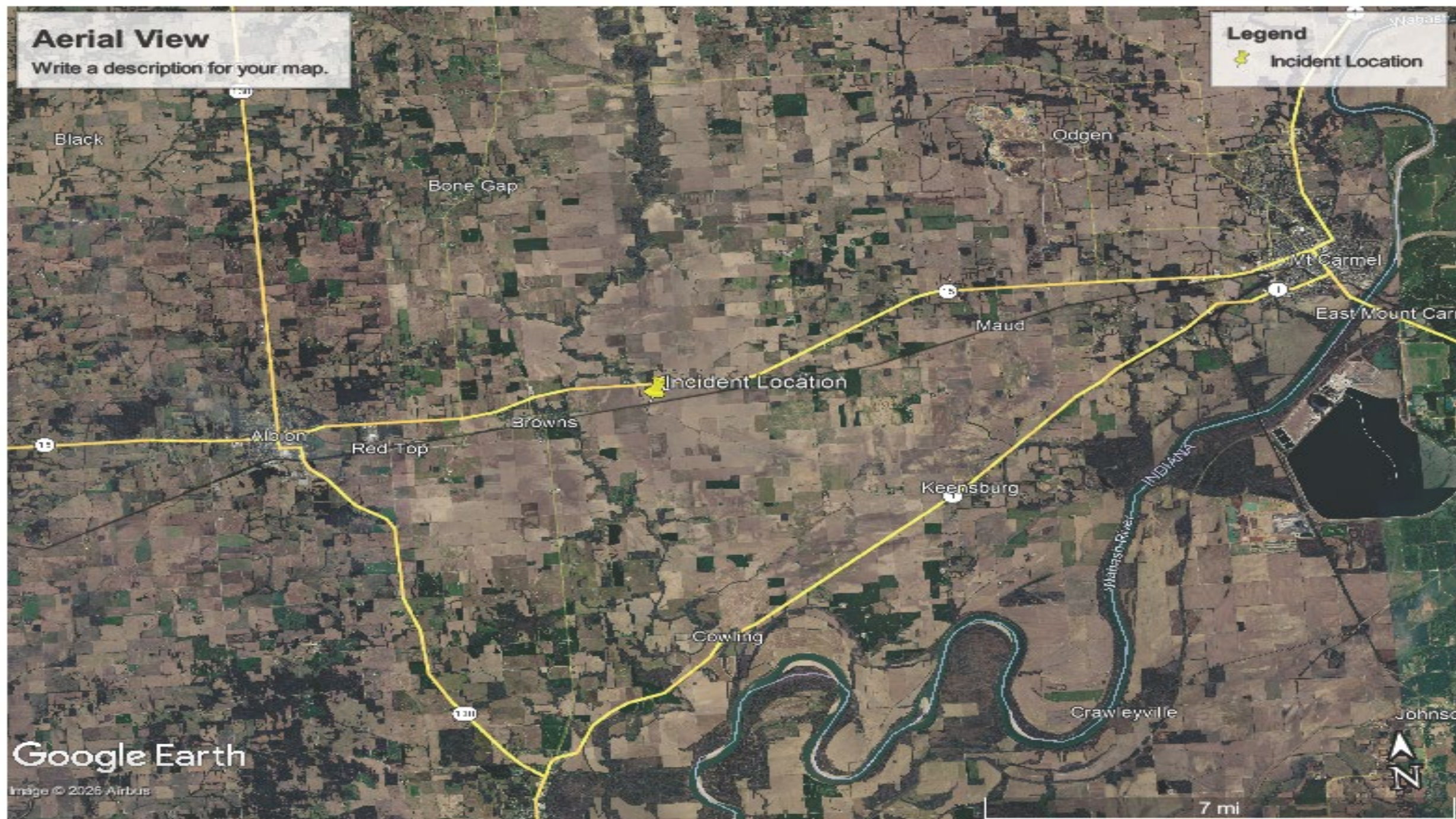


Aerial View

Write a description for your map.

Legend

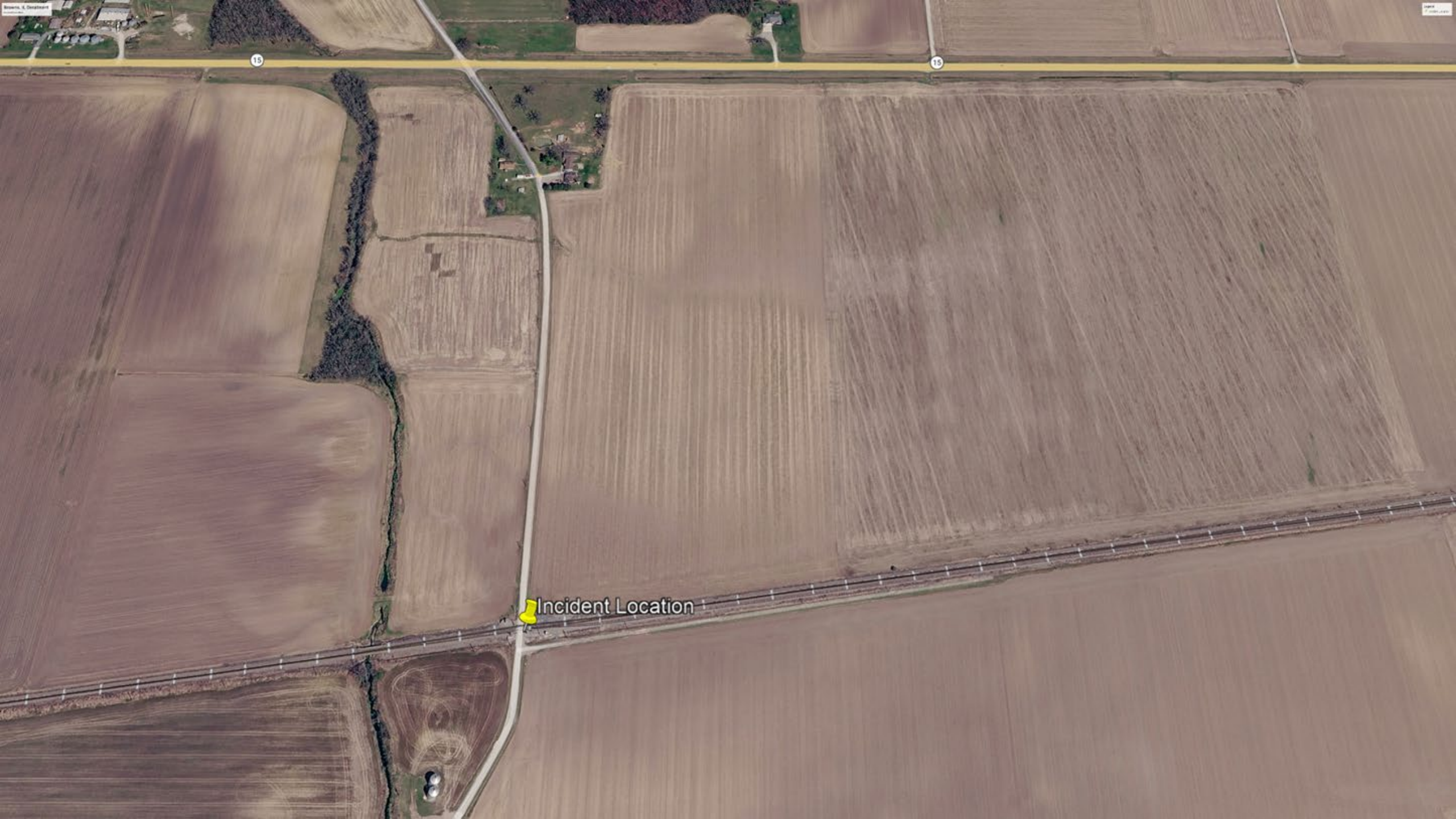
 Incident Location



Google Earth

Image © 2025 Airbus

7 mi



Incident Location

Scene Size Up



Train collided with the lead locomotive of a train on the adjacent siding track, causing the eastbound train on the mainline to derail



Four molten sulfur cars derailed. Two began leaking molten sulfur and caught on fire.



Six cars carrying powdered lime, and one car containing plastic pellets derailed releasing the cars contents to the rail ballast, adjacent agricultural ditches, and farm fields.

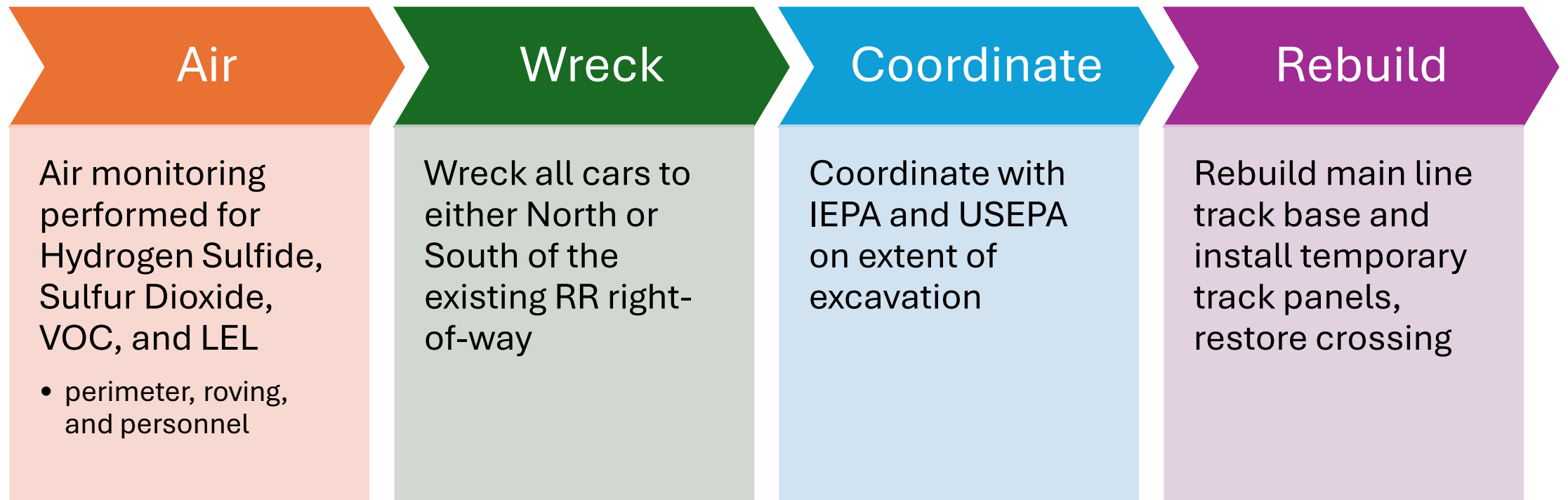


4 cars containing ethanol derailed, 1 car had a small breach of the dome lid.





Initial Response and Wrecking















Legend

-  Approximate Release Area
-  Lime Rail Car
-  Sulfur Rail Car
-  Residential Non-Hazardous Rail Car
-  Ethanol Rail Car

NORFOLK SOUTHERN
BROWNS, ILLINOIS

Incident Detail

 **ARCADIS**

FIGURE
2





BEGIN
TEST MILE

1
4
0



Railcar Remediation



- Sulfur was removed via excavator and sheer
 - Top of car was sheered off to allow venting/cooling
 - Continuous SO₂ monitoring
 - Turned to powder and loaded into lined roll-offs
 - Contingency plan developed and in place
- Ethanol removed via vacuum
 - Captured leaking ethanol in poly lined trough
 - 1 car was loaded into frac tank
 - 3 cars were transloaded into over-the-road tankers
 - Transfer plan developed and in place















Ethanol Car Planning and Execution



TRANSFER PLAN

Project: Browns, IL Derailment

Date: 7/23/25

Prepared by: Adam Bottila

1. Objective

Safely transfer ethanol from a damaged rail tank car to a DOT-approved transport truck using a chemical transfer pump while minimizing environmental risk and ensuring personnel safety.

2. Site Assessment

- Confirm ethanol quantity and condition of the damaged tank car (e.g., leaks, compromised valves, structural integrity).
- Identify safe staging area for pump equipment and transport truck.
- Confirm accessibility and stability of the ground near the tank car and truck.

3. Personnel

- **Site Supervisor:** Responsible for oversight and coordination
- **Hazmat Technicians:** Trained in flammable liquid transfer
- **Safety Officer:** Monitors' compliance with safety protocols
- **Pump Operator:** Manages transfer equipment

4. Equipment & Materials

- Air-operated or explosion-proof electric ethanol-compatible pump
- 2" or 3" chemical transfer hoses (ethanol-rated)
- Bonding and grounding cables
- Spill containment materials (drip pans, absorbent booms/pads)
- Fire extinguishers (Class B)
- SCBA or vapor protection PPE (if required by atmospheric monitoring)
- Intrinsically safe gas monitor (LEL/O₂/CO/H₂S)
- DOT-approved ethanol transport truck (properly placarded)

5. Pre-Transfer Procedures

108 Coulter Road, East Carondelet, IL 62240 | 636.333.3336 | www.environmentalworks.com





Land Remediation



- Work plan developed and approved by IEPA
 - Tracks and ballast was scraped of solidified sulfur
 - Rail ditch line was scraped up to 6 inches
 - Southern field was excavated and tilled – 1 foot
 - Northern field was excavated – 1 foot
 - Soils were sent for disposal and fields were backfilled
 - Waste was containerized and characterized by railcar
 - Runoff due to rain was captured via booms and then skimmed for plastic pellets









The End





