

# Hazmat Support Summary

Train Derailment  
East Palestine, Ohio Feb 3 2023  
Fred McMullen  
Warning Coordination Meteorologist  
National Weather Service Pittsburgh, PA



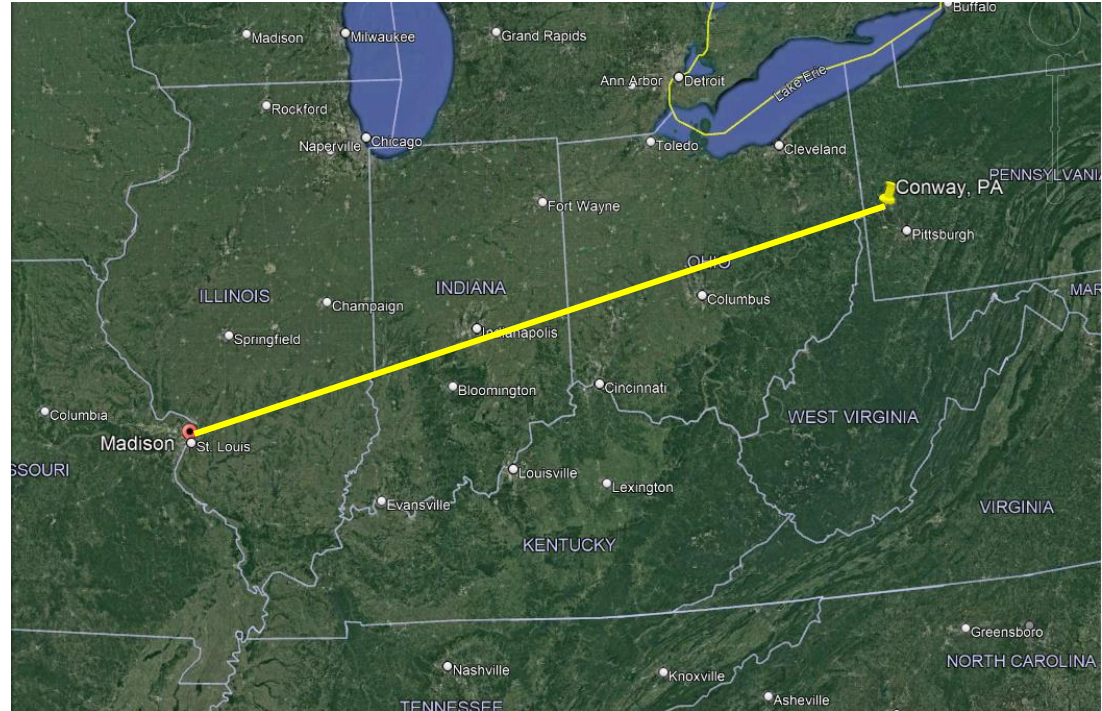
# Background:

100 rail cars

20 hazardous

Most hazardous cars contained  
vinyl chloride

Madison, IL → Conway, PA



# Where Was This?

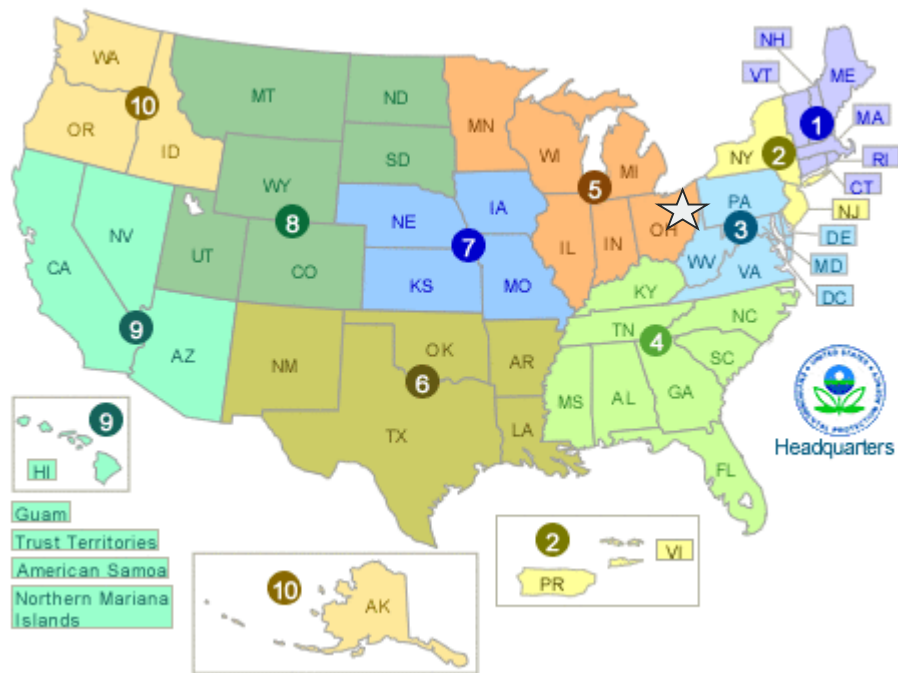
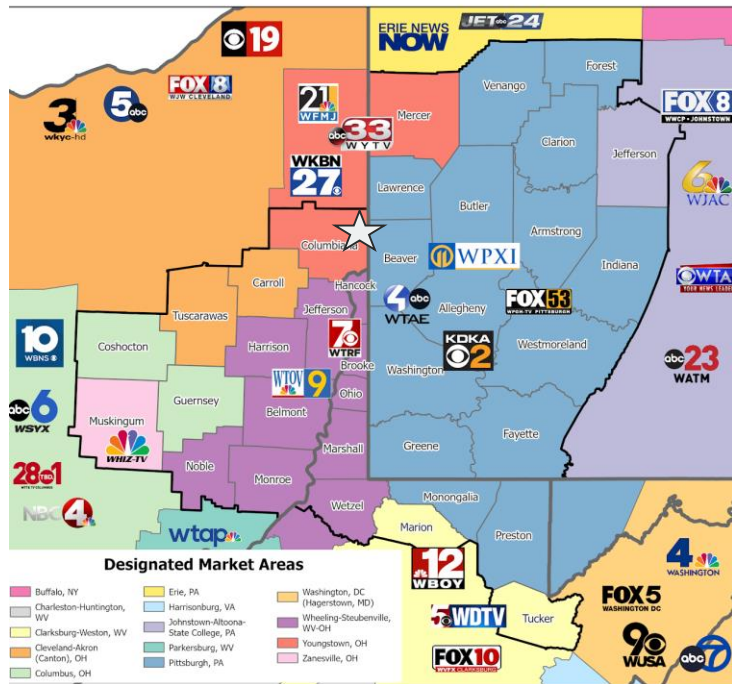


East Palestine was founded in 1828 and was once known as Mechanicsburg but was changed to East Palestine as part of a religious nomenclature in that area.

The population of E. Palestine is about 4,761 with a median income of about \$44,498

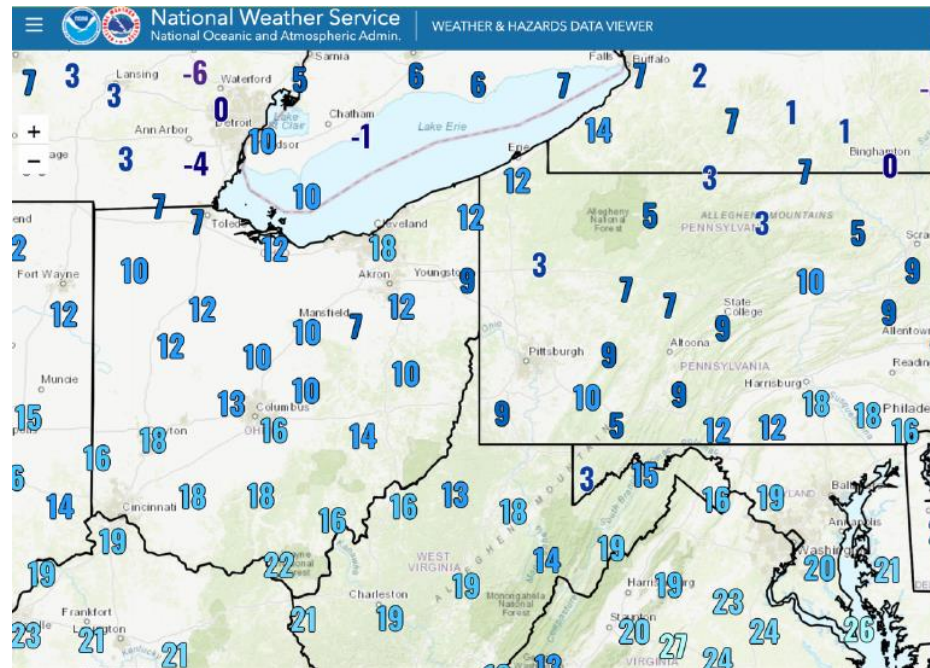
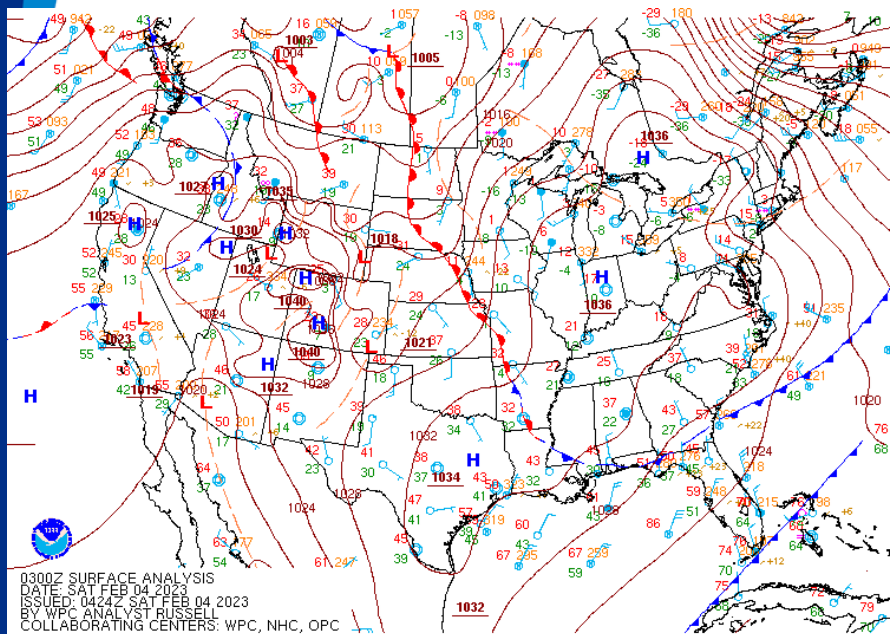
# Border of Three TV DMAs and Two EPA Regions

## WFO PBZ TV Markets





# Setting The Stage



Very cold air mass...but no big trouble, right?

# Forecasters Notice Activity on Social Media Friday night 2/3/23

Source: WKBN



Source: WFMJ





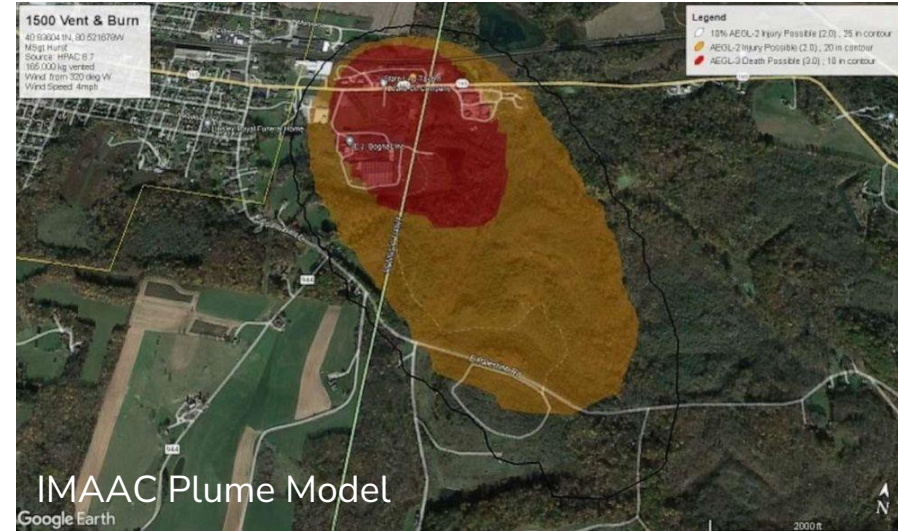
# Saturday 2/4/23 - Midday



# Controlled Explosion - Monday Afternoon 2/6/23

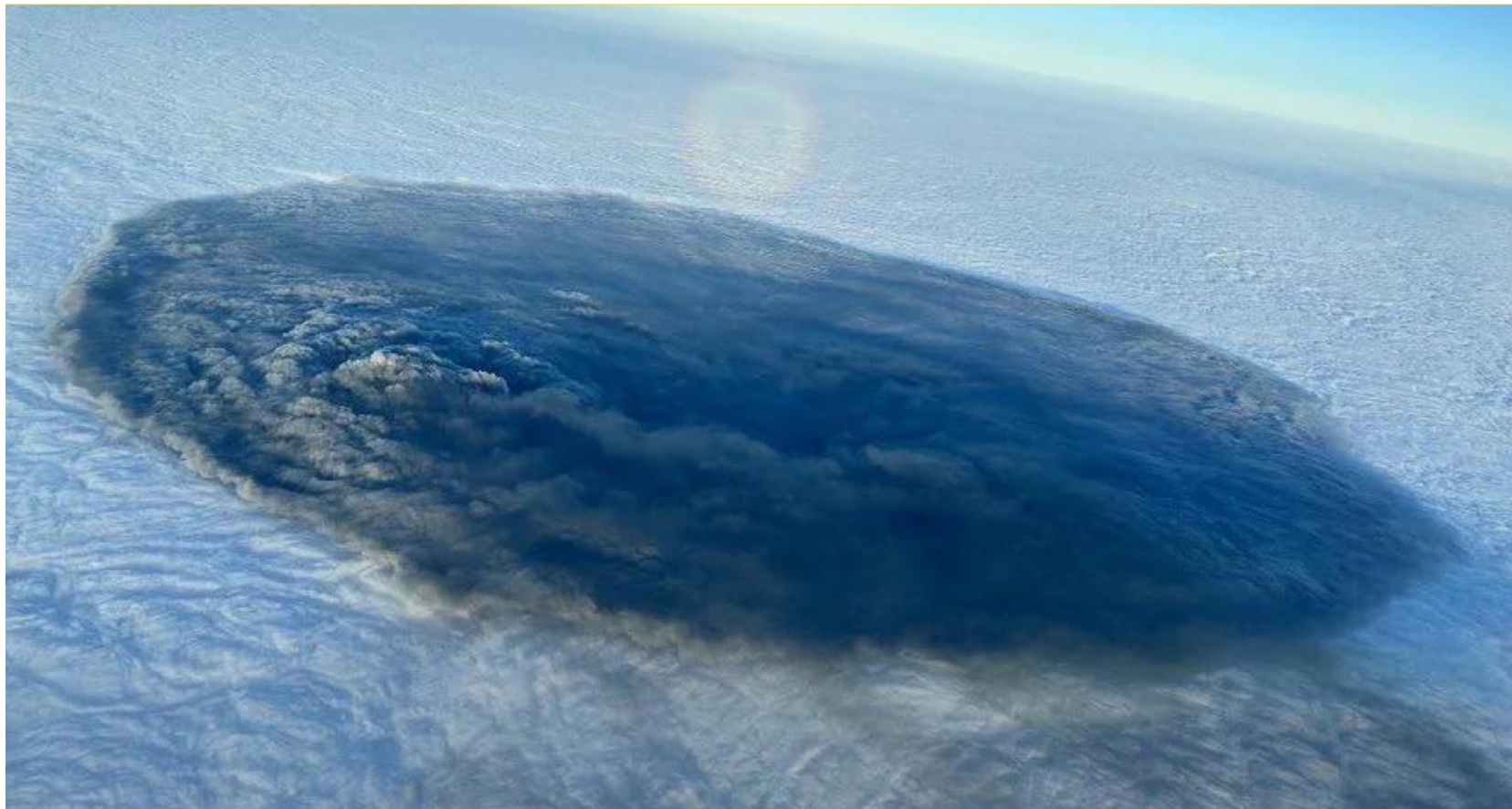


Source: Gene J. Puskar | Credit: AP





# Satellite View



# Cleanup



Source: NTSB



Source: EPA





# National Weather Service

Pittsburgh, Pennsylvania

## Forecast for East Palestine, OH supporting Columbiana County Emergency Management

February 3, 2023

**Summary - Clear, cold conditions are expected overnight into early Saturday morning; wind chill values near zero. Wind gusts will not be as high as Thursday afternoon, however it could range between 15-20mph. Winds will shift from the south as high pressure builds over Ohio early Saturday morning. Temperatures will climb to near freezing late Saturday night.**

**Watch/Warning/Advisories in Effect: None**

[Click for Most current 7-Day Forecast for East Palestine, OH](#)  
[Click for Most current Hourly Forecast for East Palestine, OH](#)



National Weather Service Pittsburgh, PA  
 Weather Impact Matrix for East Palestine Forecast  
 Valid: 02/03/2023 10 PM 02/04/2023 11 PM EST  
 Call 1-412-262-1882 for additional weather support



	Fri 02/03 10 PM	Sat 02/04 1 AM	Sat 02/04 4 AM	Sat 02/04 7 AM	Sat 02/04 10 AM	Sat 02/04 1 PM	Sat 02/04 4 PM	Sat 02/04 7 PM	Sat 02/04 10 PM
Temperature	9°F	8°F	7°F	11°F	19°F	29°F	31°F	28°F	30°F
Wind Chill	-2°F	2°F	-2°F	-1°F	4°F	16°F	20°F	17°F	19°F
Wind Speed	5 mph	3 mph	5 mph	8 mph	11 mph	13 mph	13 mph	12 mph	13 mph
Wind Direction	NW	W	S	S	S	S	S	S	SW
Wind Gust	12 mph	6 mph	9 mph	13 mph	17 mph	19 mph	20 mph	17 mph	20 mph
Chance of Precipitation	7%	1%	2%	2%	1%	1%	1%	0%	0%
Weather	None	None	None	None	None	None	None	None	None
Sky Cover	46%	45%	47%	42%	25%	15%	20%	53%	73%
Rainfall	0.0 in	0.0 in	0.0 in	0.0 in	0.0 in	0.0 in	0.0 in	0.0 in	0.0 in
Snow Accumulation	0.0 in	0.0 in	0.0 in	0.0 in	0.0 in	0.0 in	0.0 in	0.0 in	0.0 in

Issued: Friday February 03, 2023 11:12 PM EST

Threat Level	None	Limited	Elevated	Significant	Extreme
Temperature	≥32 °F	32 to 21 °F	20 to 11 °F	10 to 1 °F	≤0 °F
Wind Chill	≥0 °F	0 to -19 °F	-20 to -29 °F	-30 to -39 °F	≤-40 °F
Wind Speed	≤25 mph	25 to 29 mph	30 to 34 mph	35 to 39 mph	≥40 mph
Wind Gust	≤35 mph	35 to 44 mph	45 to 57 mph	58 to 73 mph	≥74 mph
Chance of Precipitation	≤15 %	15 to 24 %	25 to 54 %	55 to 74 %	≥75 %

## BULLETIN – EAS ACTIVATION REQUESTED

### Civil Emergency Message

OH Columbiana County Board of Commissioners

Relayed by National Weather Service Pittsburgh PA

1010 PM EST Sun Feb 5 2023

...Evacuation...

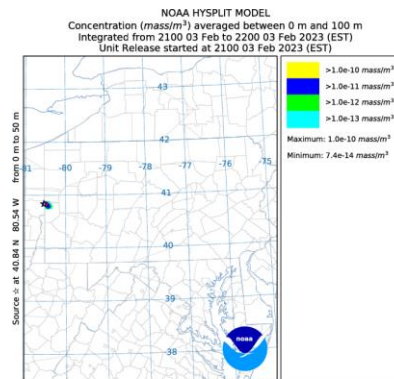
The following message is transmitted at the request of Columbiana County Board of Commissioners.

The evacuation zone is 1 mile from derailment located at 1020 E. Taggart in East Palestine Ohio.

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WENS\_IPAWS\_CONNECT202315221036/WENS IPAWS

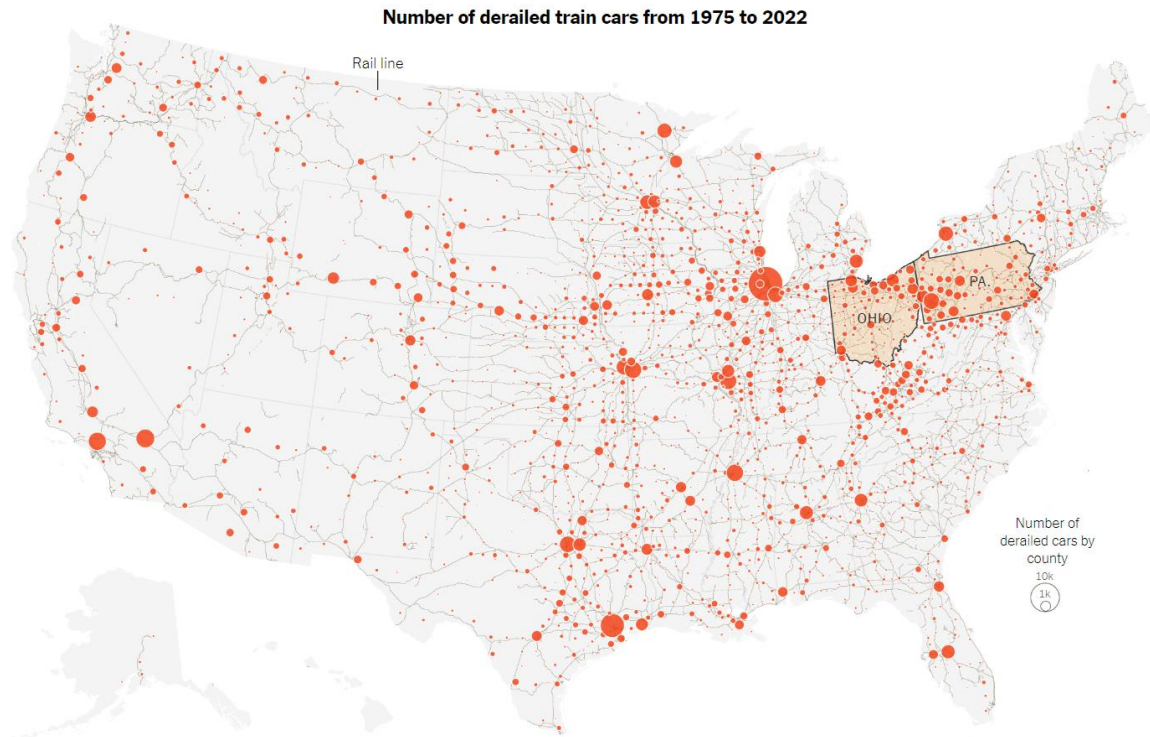


Job ID: 25255 Job Start: Sat Feb 4 03:12:00 UTC 2023  
 Release: lat: 40.836152 lon: -80.537252 Hgt: 0 to 50 m  
 Pollutant: Unit: Hazmat\_Transportation  
 Release Quantity: 1 mass Start: 23 02 04 02 00 Duration: 0 hrs, 10 min  
 Pollutant Averaging/Integration Period: 1 hrs and 0 min  
 Dry Deposition rate: 0 cm/s Wet Removal: None #Part: 10000  
 Meteorology: 01002 4 Feb 2023 - HRRR  
 Event: Real\_Event - Hazmat\_Transportation  
 Produced by user: shannon.k.heffernan - WFO: PA: Pittsburgh: 412-262-1485





# Train Derailment History



Source: U.S. Department of Transportation

# Collaboration



# Questions