

PRELIMINARY Analytical Results for Air Samples  
 East Palestine Derailment Emergency Response Site  
 East Palestine, Columbiana County, Ohio

Analyte	CAS Number	EPA RSL - Resident Air	Units	Sample ID:		Sample ID:	
				EPD-SR01-230204	EPD-MUNICIPALOFFICE-02042023	EPD-SR01-020623	EPD-DW-B01-020623
1,1,1-Trichloroethane	71-55-6	5200	µg/m <sup>3</sup>	0.031 U	0.031 U	0.033 U	0.055 U
1,1,2,2-Tetrachloroethane	79-34-5	0.048	µg/m <sup>3</sup>	0.031 U	0.031 U	0.033 U	0.055 U
1,1,2-Trichloroethane	79-00-5	0.18	µg/m <sup>3</sup>	0.12 U	0.12 U	0.13 U	0.22 U
1,1,2-Trichlorotrifluoroethane	76-13-1	5200	µg/m <sup>3</sup>	0.47	0.44	0.46	0.43
1,1-Dichloroethane	75-34-3	1.8	µg/m <sup>3</sup>	0.031 U	0.031 U	0.033 U	0.055 U
1,1-Dichloroethene	75-35-4	210	µg/m <sup>3</sup>	0.031 U	0.031 U	0.033 U	0.055 U
1,2,4-Trichlorobenzene	120-82-1	2.1	µg/m <sup>3</sup>	0.062 U	0.062 U	0.066 U	0.11 U
1,2,4-Trimethylbenzene	95-63-6	63	µg/m <sup>3</sup>	0.15	0.25	0.082 J	0.074 J
1,2-Dibromo 3-Chloropropane	96-12-8	0.00017	µg/m <sup>3</sup>	0.12 U	0.12 U	0.13 U	0.22 U
1,2-Dibromoethane	106-93-4	0.0047	µg/m <sup>3</sup>	0.031 U	0.031 U	0.033 U	0.055 U
1,2-Dichlorobenzene	95-50-1	210	µg/m <sup>3</sup>	0.031 U	0.031 U	0.033 U	0.055 U
1,2-Dichloroethane	107-06-2	0.11	µg/m <sup>3</sup>	0.53	0.087	0.063	0.058
1,2-Dichloropropane	78-87-5	0.76	µg/m <sup>3</sup>	0.018 J	0.016 J	0.015 J	0.014 J
1,3,5-Trimethylbenzene	108-67-8	63	µg/m <sup>3</sup>	0.045 J	0.071 J	0.02 J	0.22 U
1,3-Butadiene	106-99-0	0.094	µg/m <sup>3</sup>	0.051 J	0.084	0.066 U	0.11 U
1,3-Dichlorobenzene	541-73-1	NE	µg/m <sup>3</sup>	0.031 U	0.031 U	0.033 U	0.055 U
1,4-Dichlorobenzene	106-46-7	0.26	µg/m <sup>3</sup>	0.031 U	0.031 U	0.033 U	0.055 U
1,4-Dioxane	123-91-1	0.56	µg/m <sup>3</sup>	0.12 U	0.12 U	0.025 J	0.22 U
Acetone	67-64-1		µg/m <sup>3</sup>	3.4	2 J	4.4 T	8.1 T
Acrolein	107-02-8	0.021	µg/m <sup>3</sup>	0.18 J	0.13 J	0.12 J	0.14 J
Benzene	71-43-2	0.36	µg/m <sup>3</sup>	0.78	0.98	0.54	0.46
Bromodichloromethane	75-27-4	0.076	µg/m <sup>3</sup>	0.031 U	0.031 U	0.033 U	0.055 U
Bromomethane	74-83-9	5.2	µg/m <sup>3</sup>	0.028 J	0.026 J	0.028 J	0.029 J
Carbon Tetrachloride	56-23-5	0.47	µg/m <sup>3</sup>	0.45	0.43	0.46	0.41
Chlorobenzene	108-90-7	52	µg/m <sup>3</sup>	0.12 U	0.12 U	0.13 U	0.22 U
Chloroethane	75-00-3	4200	µg/m <sup>3</sup>	0.011 J	0.031 U	0.033 U	0.055 U
Chloroform	67-66-3	0.12	µg/m <sup>3</sup>	0.074 J	0.064 J	0.064 J	0.06 J
Chloromethane	74-87-3	94	µg/m <sup>3</sup>	0.25	0.23	0.26	0.26
cis-1,2-Dichloroethene	156-59-2	42	µg/m <sup>3</sup>	0.031 U	0.031 U	0.033 U	0.055 U
cis-1,3-Dichloropropene	10061-01-5	NE	µg/m <sup>3</sup>	0.062 U	0.062 U	0.066 U	0.11 U
Dibromochloromethane	124-48-1		µg/m <sup>3</sup>	0.031 U	0.031 U	0.033 U	0.055 U
Dichlorodifluoromethane (CFC 1	75-71-8	100	µg/m <sup>3</sup>	2.6	2.5	2.9	3.2
Dichloromethane (Methylene Ch	75-09-2	100	µg/m <sup>3</sup>	0.47	0.29	0.27	0.26
Ethylbenzene	100-41-4	1.1	µg/m <sup>3</sup>	23 T	2.5 T	0.08 J	0.084 J
Hexachlorobutadiene	87-68-3	0.13	µg/m <sup>3</sup>	0.12 U	0.12 U	0.13 U	0.22 U
m,p-Xylenes	179601-23-1	NE	µg/m <sup>3</sup>	76 T	9.1 T	0.27	0.35
Methyl tert-Butyl Ether	1634-04-4	11	µg/m <sup>3</sup>	0.031 U	0.031 U	0.033 U	0.055 U
Naphthalene	91-20-3	0.083	µg/m <sup>3</sup>	0.049 J	0.097 J	0.033 J	0.068 J
o-Xylene	95-47-6	100	µg/m <sup>3</sup>	17 T	2.3 T	0.085 J	0.087 J
Styrene	100-42-5	1000	µg/m <sup>3</sup>	0.07 J	0.064 J	0.026 J	0.046 J
Tetrachloroethene	127-18-4	11	µg/m <sup>3</sup>	0.087	0.047	0.048	0.048 J
Toluene	108-88-3	5200	µg/m <sup>3</sup>	1.3	1.4	0.78	0.94
trans-1,2-Dichloroethene	156-60-5	42	µg/m <sup>3</sup>	0.031 U	0.031 U	0.033 U	0.055 U
trans-1,3-Dichloropropene	10061-02-6	NE	µg/m <sup>3</sup>	0.062 U	0.062 U	0.066 U	0.11 U
Trichloroethene	79-01-6	0.48	µg/m <sup>3</sup>	0.011 J	0.01 J	0.033 U	0.055 U
Trichlorofluoromethane	75-69-4		µg/m <sup>3</sup>	1.3	1.2	4.5 T	10 T
Vinyl Chloride	75-01-4	0.17	µg/m <sup>3</sup>	0.031 U	0.031 U	0.033 U	0.055 U

See notes on last page.

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Notes:

 = result greater than the EPA RSL - Resident Air

**Result Qualifiers:** All qualifiers are laboratory qualifiers. Results/qualifiers **have not** been validated and should be considered preliminary.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

U = Analyte was not detected

T = Analyte is a tentatively identified compound, result is estimated.

-- = Not Analyzed

ug/m<sup>3</sup> = micrograms per cubic meter

EPA = U. S. Environmental Protection Agency

HQ = Hazard Quotient

MDL = Method Detection Limit

MRL = Method Reporting Limit

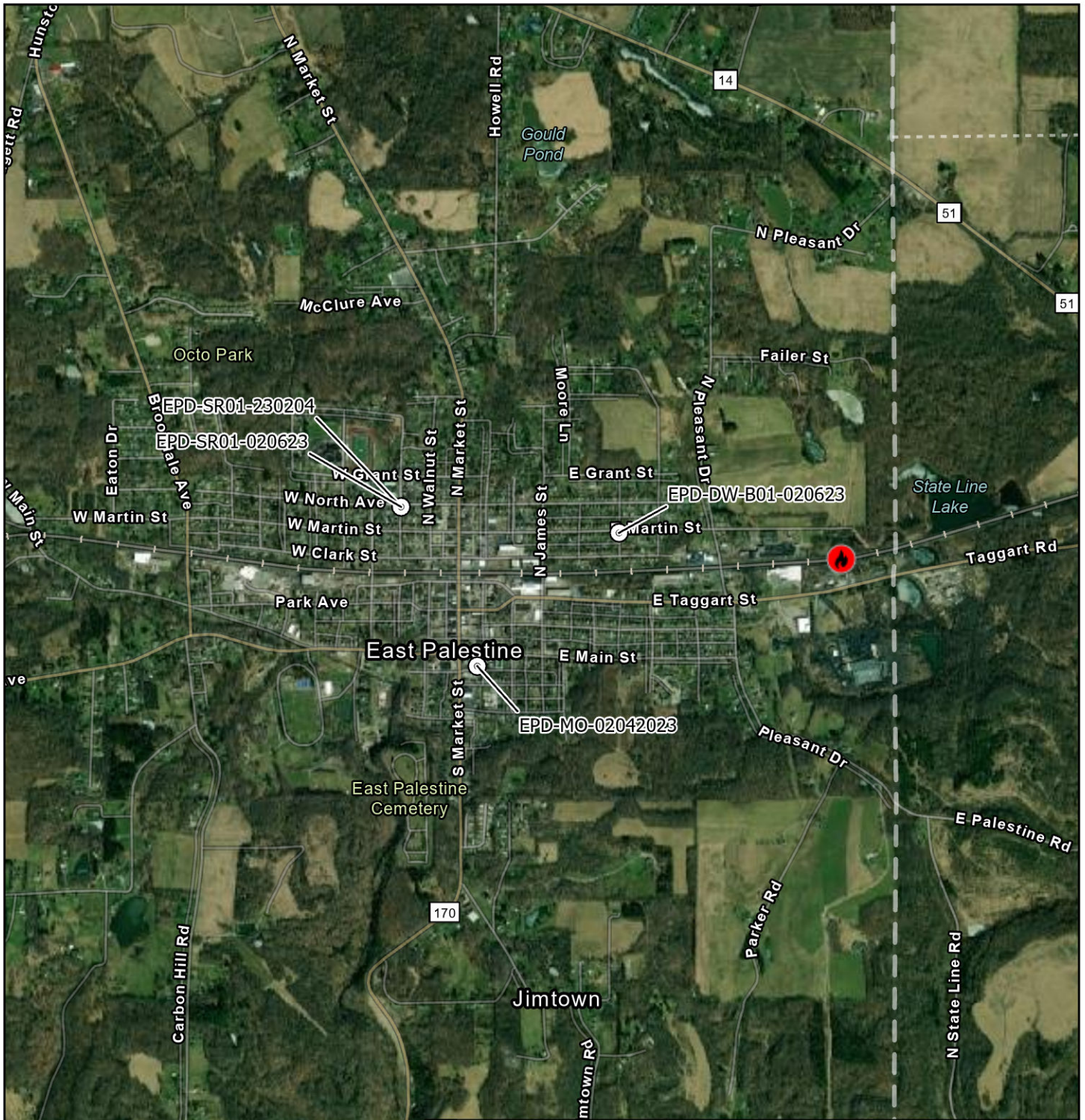
NE = Not Established

RSL = Regional Screening Level

TCR = Target Cancer Risk

EPA Regional Screening Levels (RSLs) TCR 1E-06 and HQ 1.0 Generic Tables as of November 2022:

<https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables>



**Legend**

- Air Sample Locations
- 🔥 Derailment Location

East Palestine Derailment ER Site  
 75 E Main St  
 East Palestine, Columbiana County, OH 44413

**Figure 1**  
**Air Sample Locations**



Prepared For: EPA | Prepared By: Tetra Tech Inc.