

US EPA ARCHIVE DOCUMENT

**Whitwell Elementary School
Ironton, OH**

Other Monitored Toxic Air Pollutants

Monitoring Results

| Key Pollutant | Sample Screening Level | 7/30/2009 | 8/5/2009 | 8/8/2009 | 8/11/2009 | 8/17/2009 | 8/23/2009 | 8/29/2009 | 9/4/2009 | 9/10/2009 | 9/16/2009 | 9/22/2009 | 9/28/2009 | 1/20/2010 | 1/26/2010 | 2/1/2010 | 2/7/2010 | 2/13/2010 | 2/19/2010 | 2/25/2010 | 3/3/2010 | 3/9/2010 | 3/15/2010 | 3/21/2010 | 3/27/2010 | 4/2/2010 |
|--|------------------------|-----------|----------|----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|----------|-----------|-----------|-----------|----------|----------|-----------|-----------|-----------|----------|
| 1,1,2,2-Tetrachloroethane (Micrograms/cubic meter) | 120 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | ND | -- | ND | ND | ND | ND | ND | ND | ND | ND | -- | ND | -- |
| 1,1,2-Trichloroethane (Micrograms/cubic meter) | 440 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | ND | -- | ND | ND | ND | ND | ND | ND | ND | ND | -- | ND | -- |
| 1,1-Dichloroethane (Micrograms/cubic meter) | 4400 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | ND | -- | ND | ND | ND | ND | ND | ND | ND | ND | -- | ND | -- |
| 1,1-Dichloroethylene (Micrograms/cubic meter) | 80 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | ND | -- | ND | ND | ND | ND | ND | ND | ND | ND | -- | ND | -- |
| 1,2,4-Trichlorobenzene (Micrograms/cubic meter) | 2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | ND | -- | ND | ND | ND | ND | ND | ND | ND | ND | -- | ND | -- |
| 1,2-Dichloropropane (Micrograms/cubic meter) | 200 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | ND | -- | ND | ND | ND | ND | ND | ND | ND | ND | -- | ND | -- |
| 1,3-Butadiene (Micrograms/cubic meter) | 20 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | ND | -- | 0.288 | 0.044 | 0.044 | 0.091 | 0.024 | 0.073 | 0.18 | 0.044 | -- | 0.11 | -- |
| 1,4-Dichlorobenzene (Micrograms/cubic meter) | 10000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | ND | -- | 0.06 | ND | ND | ND | ND | ND | 0.084 | ND | -- | 0.04 | -- |
| Acetonitrile (Micrograms/cubic meter) | 600 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1.58 | -- | ND | 0.084 | 0.084 | 0.15 | 0.077 | 0.262 | 0.237 | 0.15 | -- | 0.14 | -- |
| Acrylonitrile (Micrograms/cubic meter) | 200 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | ND | -- | ND | ND | ND | ND | ND | ND | ND | ND | -- | ND | -- |
| Antimony (Nanograms/cubic meter) | 2000 | 0.8 | 2.63 | 3.11 | 0.68 | 2.22 | 1.28 | 2.06 | 9.78 | 0.78 | 2.34 | 1.05 | 0.32 | | | | | | | | | | | | | |
| Benzo[a]anthracene (Micrograms/cubic meter) | 64 | 0.00016 | 0.00106 | 0.00037 | 0.0001 | 0.00028 | 0.00008 | 0.00009 | 0.00022 | 0.00004 | 0.00018 | 0.00241 | 0.00003 | | | | | | | | | | | | | |
| Benzo[b]fluoranthene (Micrograms/cubic meter) | 64 | 0.00026 | 0.0015 | 0.00073 | 0.00019 | 0.00046 | 0.00016 | 0.00018 | 0.00061 | 0.00011 | 0.00046 | 0.00383 | 0.00007 | | | | | | | | | | | | | |
| Benzo[k]fluoranthene (Micrograms/cubic meter) | 64 | 0.00007 | 0.0004 | 0.0002 | 0.00005 | 0.00014 | 0.00004 | 0.00006 | 0.00015 | 0.00004 | 0.00013 | 0.00106 | ND | | | | | | | | | | | | | |
| Benzyl chloride (Micrograms/cubic meter) | 140 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | ND | -- | ND | ND | ND | ND | ND | ND | ND | ND | -- | ND | -- |
| Beryllium (Nanograms/cubic meter) | 20 | ND | 0.02 | 0.03 | 0.02 | 0.00009 | ND | 0.008 | 0.06 | ND | ND | ND | ND | | | | | | | | | | | | | |

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|--|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----|-------|----|-------|-------|-------|-------|-------|-------|-------|-------|----|-------|----|----|
| Bromoform (Micrograms/cubic meter) | 6400 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | ND | -- | ND | ND | ND | ND | ND | ND | ND | ND | -- | ND | -- | |
| Bromomethane (Micrograms/cubic meter) | 200 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | ND | -- | ND | 0.12 | 0.039 | ND | 0.03 | 0.03 | 0.043 | 0.039 | -- | 0.039 | -- | |
| Cadmium (Nanograms/cubic meter) | 30 | 0.4 | 0.27 | 0.54 | 0.11 | 0.42 | 0.11 | 0.11 | 0.26 | 0.11 | 0.49 | 0.18 | 0.12 | | | | | | | | | | | | | | | |
| Carbon disulfide (Micrograms/cubic meter) | 7000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.12 | -- | 0.062 | 0.19 | 0.093 | 0.05 | 0.031 | 0.065 | 0.065 | 0.034 | -- | 0.031 | -- | |
| Carbon tetrachloride (Micrograms/cubic meter) | 200 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.755 | -- | 0.692 | 0.755 | 0.818 | 0.736 | 0.711 | 0.837 | 0.692 | 0.881 | -- | 0.793 | -- | |
| Chlorobenzene (Micrograms/cubic meter) | 10000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | ND | -- | ND | ND | ND | ND | ND | ND | ND | ND | ND | -- | ND | -- |
| Chloroethane (Micrograms/cubic meter) | 40000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | ND | -- | ND | 0.026 | ND | ND | ND | ND | ND | ND | ND | -- | ND | -- |
| Chloroform (Micrograms/cubic meter) | 500 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.098 | -- | 0.098 | 0.049 | 0.049 | ND | 0.068 | 0.088 | 0.093 | 0.093 | -- | ND | -- | |
| Chloromethane (Micrograms/cubic meter) | 1000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1.12 | -- | 1.32 | 1.24 | 1.18 | 1.18 | 1.1 | 1.27 | 1.03 | 1.37 | -- | 1.3 | -- | |
| Chloroprene (Micrograms/cubic meter) | 200 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | ND | -- | ND | ND | ND | ND | ND | ND | ND | ND | ND | -- | ND | -- |
| Chrysene (Micrograms/cubic meter) | 640 | 0.00035 | 0.00135 | 0.00077 | 0.00032 | 0.00041 | 0.00021 | 0.00025 | 0.00048 | 0.00018 | 0.00017 | 0.00343 | 0.00009 | | | | | | | | | | | | | | | |
| Cobalt (Nanograms/cubic meter) | 100 | 0.04 | 0.06 | 0.21 | 0.08 | 0.14 | ND | 0.12 | 0.12 | 0.07 | 0.08 | 0.1 | 0.05 | | | | | | | | | | | | | | | |
| Dichloromethane (Micrograms/cubic meter) | 2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.31 | -- | 5 | 0.24 | 0.31 | 0.375 | 0.33 | 0.452 | 0.577 | 0.34 | -- | 0.368 | -- | |
| Ethyl acrylate (Micrograms/cubic meter) | 7000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | ND | -- | ND | ND | ND | ND | ND | ND | ND | ND | ND | -- | ND | -- |
| Ethylbenzene (Micrograms/cubic meter) | 40000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.17 | -- | 0.434 | 0.087 | 0.13 | 0.22 | 0.087 | 0.16 | 0.38 | 0.11 | -- | 0.22 | -- | |
| Ethylene dibromide (Micrograms/cubic meter) | 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | ND | -- | ND | ND | ND | ND | ND | ND | ND | ND | ND | -- | ND | -- |
| Ethylene dichloride (Micrograms/cubic meter) | 270 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | ND | -- | ND | 0.081 | ND | ND | ND | 0.081 | 0.081 | 0.077 | -- | ND | -- | |
| Hexachlorobutadiene (Micrograms/cubic meter) | 320 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | ND | -- | ND | ND | ND | ND | ND | ND | ND | ND | ND | -- | ND | -- |
| Mercury (Nanograms/cubic meter) | 3000 | 0.05 | 0.04 | 0.05 | 0.03 | 0.004 | 0.00004 | 0.007 | 0.02 | ND | ND | ND | ND | | | | | | | | | | | | | | | |
| Methyl chloroform (Micrograms/cubic meter) | 10000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.055 | -- | ND | 0.055 | 0.055 | 0.071 | ND | 0.066 | 0.066 | 0.071 | -- | 0.06 | -- | |

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|---|-------|-------|-------|-------|-------|--------|-------|--------|--------|--------|-------|-------|--------|-------|----|-------|-------|-------|------|-------|-------|-------|-------|----|-------|----|
| Methyl isobutyl ketone (Micrograms/cubic meter) | 30000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.29 | -- | ND | 0.082 | 0.082 | 0.21 | 0.094 | 0.18 | 0.098 | 0.17 | -- | 0.25 | -- |
| Methyl methacrylate (Micrograms/cubic meter) | 7000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | ND | -- | ND | ND | ND | ND | ND | ND | ND | ND | -- | ND | -- |
| Methyl tert-butyl ether (Micrograms/cubic meter) | 7000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | ND | -- | ND | ND | ND | ND | ND | ND | ND | ND | -- | ND | -- |
| Naphthalene (Micrograms/cubic meter) | 30 | 0.137 | 0.241 | 0.171 | 0.105 | 0.0803 | 0.053 | 0.0587 | 0.0945 | 0.0472 | 0.125 | 0.297 | 0.0308 | | | | | | | | | | | | | |
| Nickel (Nanograms/cubic meter) | 200 | 0.42 | 0.4 | 2.09 | 0.38 | 1.21 | ND | 1.22 | 0.45 | 0.57 | 0.61 | 1.31 | 0.19 | | | | | | | | | | | | | |
| Selenium (Nanograms/cubic meter) | 20000 | 1.25 | 1.22 | 2.2 | 1.33 | 1.48 | 0.39 | 1.13 | 1.44 | 0.87 | 1.79 | 1.52 | 1.03 | | | | | | | | | | | | | |
| Styrene (Micrograms/cubic meter) | 9000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.852 | -- | 0.38 | 0.043 | 0.085 | 0.18 | 0.077 | 0.452 | 0.25 | 0.12 | -- | 0.29 | -- |
| Tetrachloroethylene (Micrograms/cubic meter) | 1400 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | ND | -- | 0.14 | ND | ND | ND | ND | 0.068 | 0.23 | ND | -- | 0.075 | -- |
| Toluene (Micrograms/cubic meter) | 4000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1.02 | -- | 2 | 0.377 | 0.528 | 1.08 | 0.31 | 0.728 | 1.84 | 0.464 | -- | 1.05 | -- |
| Trichloroethylene (Micrograms/cubic meter) | 10000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | ND | -- | ND | ND | ND | ND | ND | ND | ND | ND | -- | ND | -- |
| Vinyl chloride (Micrograms/cubic meter) | 1000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | ND | -- | ND | 0.026 | ND | ND | ND | ND | ND | ND | -- | ND | -- |
| o-Xylene (Micrograms/cubic meter) | 9000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.22 | -- | 0.521 | 0.087 | 0.13 | 0.25 | 0.07 | 0.15 | 0.37 | 0.1 | -- | 0.25 | -- |

ND = Pollutant Not Detected
 -- = Sample not taken or invalid

The sample screening level is a level of pollution in the air that is below what we expect to cause health problems from short-term exposures

(Results are for metals in air samples of particulate matter 10 micrograms in diameter and smaller (PM10) collected over a 24-hour period to obtain an average concentration during that day.)

[NOTE: Additional volatile organic compound samples are being collected at this site. Previous samples have been invalidated due to a sampler contamination issue. Please click here for more information.](#)