



# Air Monitoring Overview

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# Most Recent Data

## Asbestos

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- EPA has collected 442 ambient air samples for asbestos from 16 stations, 27 were above AHERA standard (6%).
- EPA and OSHA collected 177 bulk samples, 48 were >1% asbestos (27%)
- IUOE has collected inside cab TEM samples and has documented levels above AHERA in roughly one-third
- One sample was a 0.7 s/cc concentration but all small fibers.



# Dioxin

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- EPA collected 4 stations for dioxin on Sept. 16<sup>th</sup>
- Levels were at or just above the EPA standard for action (30 year exposure)



# Metals

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- OSHA has taken 53 samples of metals including lead, iron oxide, zinc oxide, copper and beryllium
- All were below the OSHA PELs
- IUOE has documented lead in the dust around 120 ppm and airborne below 5ug/m<sup>3</sup>
- IUOE <LOD for cadmium, cobalt, chromium, magnesium, nickel, zinc, and iron oxide



# VOCs

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- Four OSHA samples exceeded PEL for benzene at 0.5 ppm
- Sample on 9-22 had a level of 3.2ppm
- EPA found 30 ppm at ground level in smoke
- IUOE found benzene in cabs but in ppb levels
- IUOE collected four TO15 EPA samples for broad scan of VOCs (60 cmpds) and found nearly all <LOD except acetone



# Carbon monoxide

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- OSHA took 9 personal samples 1-15 ppm, well below the OSHA PEL
- NIOSH reported grab samples for users of gas powered equipment approaching the IDLH level.



# Silica

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- OSHA collected 40 samples. Most <LOD highest was 50% of PEL
- OSHA collected several on Operating Engineers



# Freon

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- Freon has been picked up by several organizations
- IUOE found it in every cab sampled but in ppb levels.