

Summary of Kandid Coalition Bucket Brigade Test Results

June 30, 2003 Sample

A sample was taken on June 30, 2003 across from Eastman Kodak's Kings Landing Water Treatment Facility and Building 95 hazardous waste incinerator at 10:45am. That sample was taken when odors were minimal. Methylene chloride was detected at $15 \mu\text{g}/\text{m}^3$, or 7 times above the DEC ambient air annual guideline concentration of $2.1 \mu\text{g}/\text{m}^3$ (New York State Department of Environmental Conservation, DAR-1 AGC/SGC Tables, Division of Air Resources). Methylene Chloride is also 3 times above the EPA Region 6 screening level of $4.09 \mu\text{g}/\text{m}^3$ (according to Region 6 of the US EPA, no health effects are thought to occur below this level.) Methylene chloride is classified as a potential carcinogen by the federal EPA and a workplace carcinogen by the federal Occupation Safety and Health Administration. N-Decane was detected at $40 \mu\text{g}/\text{m}^3$ or 4,000 times above the DEC ambient air annual guideline concentration of $.01 \mu\text{g}/\text{m}^3$ (New York State Department of Environmental Conservation, DAR-1 AGC/SGC Tables, Division of Air Resources). Sulfur dioxide was detected above the Texas Short-Term Screening Level of $4.09 \mu\text{g}/\text{m}^3$ (according to the Texas Natural Resource Conservation Commission, no health effects are thought to occur below this level.) A total of eleven chemicals were detected in the sample.

Chemical	Level	Short-Term Guideline Concentration (NYSDEC)	Annual Guideline Concentration (NYSDEC)	Kodak's Reported 2001 Total Air Emissions
Methylene Chloride	$15 \mu\text{g}/\text{m}^3$	$14000.0 \mu\text{g}/\text{m}^3$	$2.1 \mu\text{g}/\text{m}^3$	855,000 pounds
Toluene	$12 \mu\text{g}/\text{m}^3$	$37000.0 \mu\text{g}/\text{m}^3$	$400.0 \mu\text{g}/\text{m}^3$	39,500 pounds
Ethanol	$14 \mu\text{g}/\text{m}^3$	---	$45000.0 \mu\text{g}/\text{m}^3$	---
Isopropyl Alcohol	$36 \mu\text{g}/\text{m}^3$	$120000.0 \mu\text{g}/\text{m}^3$	$7000.0 \mu\text{g}/\text{m}^3$	---
d-Limonene	$9.7 \mu\text{g}/\text{m}^3$	No DEC guidelines listed		---

Tentatively Identified Compounds:

n-Decane	$40 \mu\text{g}/\text{m}^3$	---	$.01 \mu\text{g}/\text{m}^3$	---
Sulfur Dioxide	$10 \mu\text{g}/\text{m}^3$	$910.0 \mu\text{g}/\text{m}^3$	$80.0 \mu\text{g}/\text{m}^3$	---
n-Octane	$30 \mu\text{g}/\text{m}^3$	---	$3300.0 \mu\text{g}/\text{m}^3$	---
2-Ethyl-1-hexanol	$10 \mu\text{g}/\text{m}^3$	No DEC guidelines listed		---
n-Dodecane	$20 \mu\text{g}/\text{m}^3$	No DEC guidelines listed		---
Longifolene	$20 \mu\text{g}/\text{m}^3$	No DEC guidelines listed		---

September 28, 2003 Sample

A sample was taken on September 28, 2003 at 12:30 am at West Ridge Plaza, adjacent to Kodak Park, when Kodak was discharging large amounts of chemicals into the air. Samplers noticed extremely strong odors while the sample was being taken, and experienced headaches during or after the sample was complete. Methylene chloride was detected at $22 \mu\text{g}/\text{m}^3$, or 10 times above the DEC ambient air annual guideline concentration of $2.1 \mu\text{g}/\text{m}^3$ (New York State Department of Environmental Conservation, DAR-1 AGC/SGC Tables, Division of Air Resources). Methylene Chloride was also detected 5 times above the EPA Region 6 screening level of $4.09 \mu\text{g}/\text{m}^3$ (according to Region 6 of the US EPA, no health effects are thought to occur below this level). A total of twelve chemicals were detected in the sample.

Chemical	Level	Short-Term Guideline Concentration (NYSDEC)	Annual Guideline Concentration (NYSDEC)	Kodak's Reported 2001 Total Air Emissions
Methylene Chloride	$22 \mu\text{g}/\text{m}^3$	$14000.0 \mu\text{g}/\text{m}^3$	$2.1 \mu\text{g}/\text{m}^3$	855,000 pounds
Toluene	$9.5 \mu\text{g}/\text{m}^3$	$37000.0 \mu\text{g}/\text{m}^3$	$400.0 \mu\text{g}/\text{m}^3$	39,500 pounds
2-Butanone (MEK)	$27 \mu\text{g}/\text{m}^3$	$59000.0 \mu\text{g}/\text{m}^3$	$1000.0 \mu\text{g}/\text{m}^3$	32,400 pounds
M,p – Xylenes	$17 \mu\text{g}/\text{m}^3$	$4300.0 \mu\text{g}/\text{m}^3$	$700.0 \mu\text{g}/\text{m}^3$	7,840 pounds
Ethanol	$25 \mu\text{g}/\text{m}^3$	---	$45000.0 \mu\text{g}/\text{m}^3$	---
Isopropyl Alcohol	$10 \mu\text{g}/\text{m}^3$	$120000.0 \mu\text{g}/\text{m}^3$	$7000.0 \mu\text{g}/\text{m}^3$	---
Ethylbenzene	$6.2 \mu\text{g}/\text{m}^3$	$54000.0 \mu\text{g}/\text{m}^3$	$1000.0 \mu\text{g}/\text{m}^3$	---
d-Limonene	$11 \mu\text{g}/\text{m}^3$	No DEC guidelines listed		---

Tentatively Identified Compounds:

2-Methylhexane	$50 \mu\text{g}/\text{m}^3$	No DEC guidelines listed		---
2,3-Dimethylpentane	$20 \mu\text{g}/\text{m}^3$	No DEC guidelines listed		---
3-Methylhexane	$80 \mu\text{g}/\text{m}^3$	No DEC guidelines listed		---
n-Heptane	$80 \mu\text{g}/\text{m}^3$	$210000.0 \mu\text{g}/\text{m}^3$	$3900.0 \mu\text{g}/\text{m}^3$	---

November 9, 2003 Sample

A sample was taken on November 9, 2003 at 12:20am at West Ridge Plaza, adjacent to Kodak Park when Kodak was discharging large amounts of chemicals into the air. Samplers noticed a plastic like odor in the air. Acrylonitrile was detected at $15 \mu\text{g}/\text{m}^3$, or 1,000 times above the DEC ambient air annual guideline concentration of $0.015 \mu\text{g}/\text{m}^3$ (New York State Department of Environmental Conservation, DAR-1 AGC/SGC Tables, Division of Air Resources). Acrylonitrile was also detected 535 times above the EPA Region 6 level of $.028 \mu\text{g}/\text{m}^3$ (according to Region 6 of the US EPA, no health effects are thought to occur below this level), 3 times above the Texas Long-Term Screening level of $4.3 \mu\text{g}/\text{m}^3$ (according to the Texas Natural Resource Conservation Commission, no health effects are thought to occur below this level), 13 times above the Louisiana 24-hour ambient air standard of $1.47 \mu\text{g}/\text{m}^3$ (concentrations above this level are illegal in Louisiana), and 100 times above the North Carolina Annual Ambient Air Standard of $.15 \mu\text{g}/\text{m}^3$ (concentrations above this level are illegal in North Carolina). Acrylonitrile is classified by the EPA as a probable human carcinogen. Methylene chloride was detected at $6.6 \mu\text{g}/\text{m}^3$ or three times above the DEC ambient air annual guideline concentration of $2.1 \mu\text{g}/\text{m}^3$ (New York State Department of Environmental Conservation, DAR-1 AGC/SGC Tables, Division of Air Resources). Methylene Chloride was also detected 1.5 times above the EPA Region 6 level of $4.09 \mu\text{g}/\text{m}^3$ (according to Region 6 of the US EPA, no health effects are thought to occur below this level.) N-Decane was detected at $50 \mu\text{g}/\text{m}^3$ or 5,000 times above the DEC ambient air annual guideline concentration of $.01 \mu\text{g}/\text{m}^3$ (New York State Department of Environmental Conservation, DAR-1 AGC/SGC Tables, Division of Air Resources). Fifteen chemicals were detected in this sample.

Chemical	Level	Short-Term Guideline Concentration (NYSDEC)	Annual Guideline Concentration (NYSDEC)	Kodak's Reported 2001 Total Air Emissions
Acrylonitrile	$15 \mu\text{g}/\text{m}^3$	---	$.015 \mu\text{g}/\text{m}^3$	---
Methylene Chloride	$6.6 \mu\text{g}/\text{m}^3$	$14000.0 \mu\text{g}/\text{m}^3$	$2.1 \mu\text{g}/\text{m}^3$	855,000 pounds
Toluene	$13 \mu\text{g}/\text{m}^3$	$37000.0 \mu\text{g}/\text{m}^3$	$400.0 \mu\text{g}/\text{m}^3$	39,500 pounds
Ethanol	$14 \mu\text{g}/\text{m}^3$	---	$45000.0 \mu\text{g}/\text{m}^3$	---
Isopropyl Alcohol	$13 \mu\text{g}/\text{m}^3$	$120000.0 \mu\text{g}/\text{m}^3$	$7000.0 \mu\text{g}/\text{m}^3$	---
d-Limonene	$7.4 \mu\text{g}/\text{m}^3$	No DEC guidelines listed	---	---
Tentatively Identified Compounds:				
n-Decane	$50 \mu\text{g}/\text{m}^3$	---	$.01 \mu\text{g}/\text{m}^3$	---
2,3,4-Trimethylpentane	$30 \mu\text{g}/\text{m}^3$	No DEC guidelines listed	---	---
2,3,3-Trimethylpentane	$60 \mu\text{g}/\text{m}^3$	No DEC guidelines listed	---	---
C ₈ H ₁₈ Branched Alkane	$20 \mu\text{g}/\text{m}^3$	No DEC guidelines listed	---	---
C ₉ H ₂₀ Branched Alkane (detected 3 times) at $20 \mu\text{g}/\text{m}^3$, $20 \mu\text{g}/\text{m}^3$, and $40 \mu\text{g}/\text{m}^3$		No DEC guidelines listed	---	---
n-Octane	$40 \mu\text{g}/\text{m}^3$	---	$3300.0 \mu\text{g}/\text{m}^3$	---
C ₁₀ H ₂₂ Branched Alkane	$20 \mu\text{g}/\text{m}^3$	No DEC guidelines listed	---	---
2-Ethyl-1-hexanol	$10 \mu\text{g}/\text{m}^3$	No DEC guidelines listed	---	---
n-Dodecane	$10 \mu\text{g}/\text{m}^3$	No DEC guidelines listed	---	---

November 25, 2003 Sample

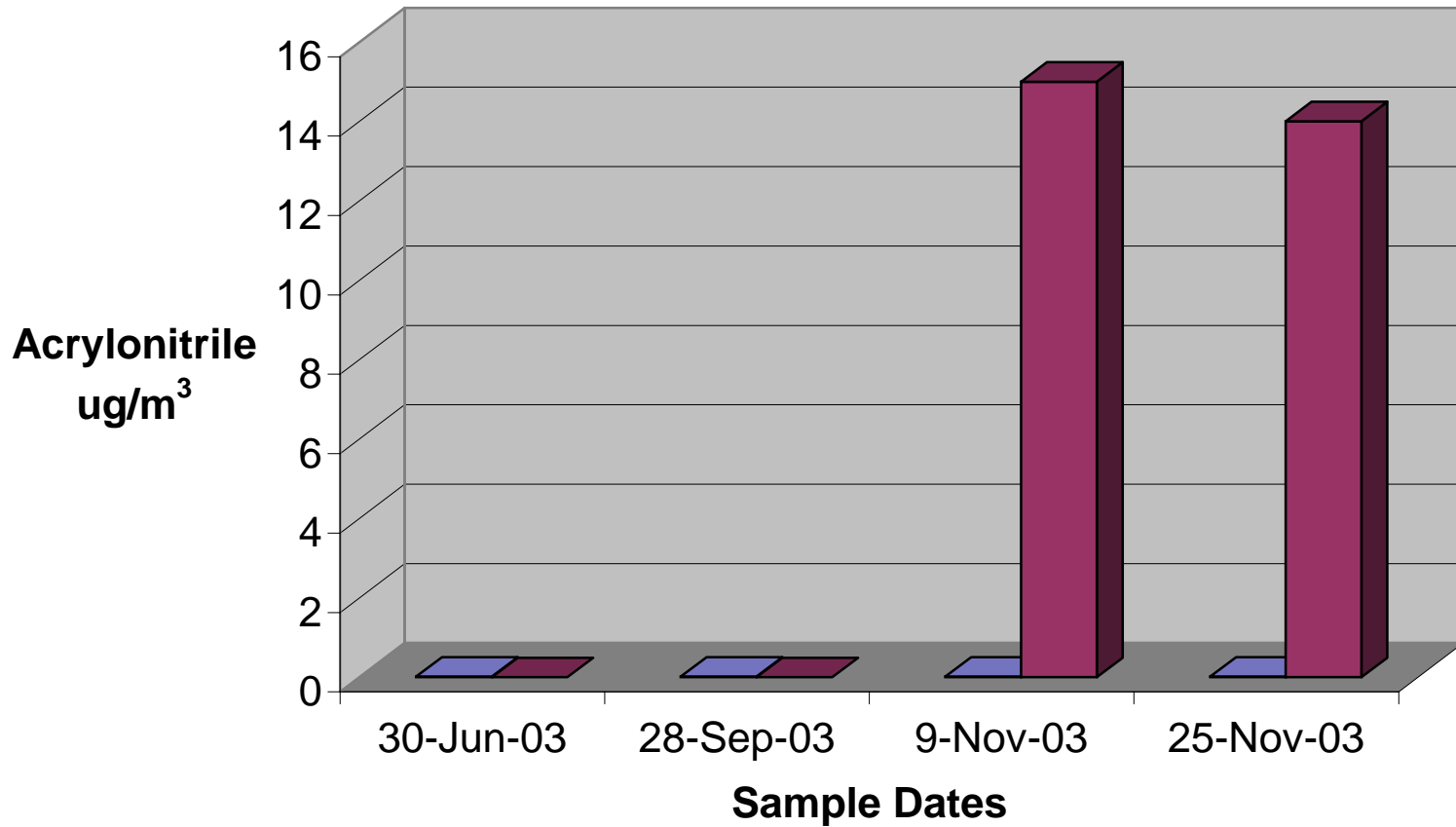
A sample was taken on November 25, 2003 at 9:52am outside of 123 Merrill Street, bordering Kodak Park. The nearby resident who collected the sample noticed a very strong chemical odor coming from Kodak. Despite a delay beyond the 3-day holding time due to the Thanksgiving holiday, the sample detected fourteen chemicals including acrylonitrile at $14 \mu\text{g}/\text{m}^3$, which is 933.33 times above the DEC ambient air annual guideline concentration of $0.015 \mu\text{g}/\text{m}^3$ (New York State Department of Environmental Conservation, DAR-1 AGC/SGC Tables, Division of Air Resources). Acrylonitrile was also detected 500 times above the EPA Region 6 level of $.028 \mu\text{g}/\text{m}^3$ (according to Region 6 of the US EPA, no health effects are thought to occur below this level), 3 times above the Texas Long-Term Screening level of $4.3 \mu\text{g}/\text{m}^3$ (according to the Texas Natural Resource Conservation Commission, no health effects are thought to occur below this level.), 9 times above the Louisiana 24-hour ambient air standard of $1.47 \mu\text{g}/\text{m}^3$ (concentrations above this level are illegal in Louisiana), and 93 times above the North Carolina Annual Ambient Air Standard of $.15 \mu\text{g}/\text{m}^3$ (concentrations above this level are illegal in North Carolina). N-Decane was detected at $50 \mu\text{g}/\text{m}^3$ or 5,000 times above the DEC ambient air annual guideline concentration of $.01 \mu\text{g}/\text{m}^3$ (New York State Department of Environmental Conservation, DAR-1 AGC/SGC Tables, Division of Air Resources).

Chemical	Level	Short-term Guideline Concentration (NYSDEC)	Annual Guideline Concentration (NYSDEC)	Kodak's Reported 2001 Total Air Emissions
Acrylonitrile	$14 \mu\text{g}/\text{m}^3$	---	$.015 \mu\text{g}/\text{m}^3$	---
2-Butanone (MEK)	$7.3 \mu\text{g}/\text{m}^3$	$59000.0 \mu\text{g}/\text{m}^3$	$1000.0 \mu\text{g}/\text{m}^3$	32,400 pounds
Toluene	$33 \mu\text{g}/\text{m}^3$	$37000.0 \mu\text{g}/\text{m}^3$	$400.0 \mu\text{g}/\text{m}^3$	39,500 pounds
Ethanol	$65 \mu\text{g}/\text{m}^3$	---	$45000.0 \mu\text{g}/\text{m}^3$	---
Acetone	$33 \mu\text{g}/\text{m}^3$	$180000.0 \mu\text{g}/\text{m}^3$		---
Isopropyl Alcohol	$5.3 \mu\text{g}/\text{m}^3$	$120000.0 \mu\text{g}/\text{m}^3$	$7000.0 \mu\text{g}/\text{m}^3$	---

Tentatively Identified Compounds:

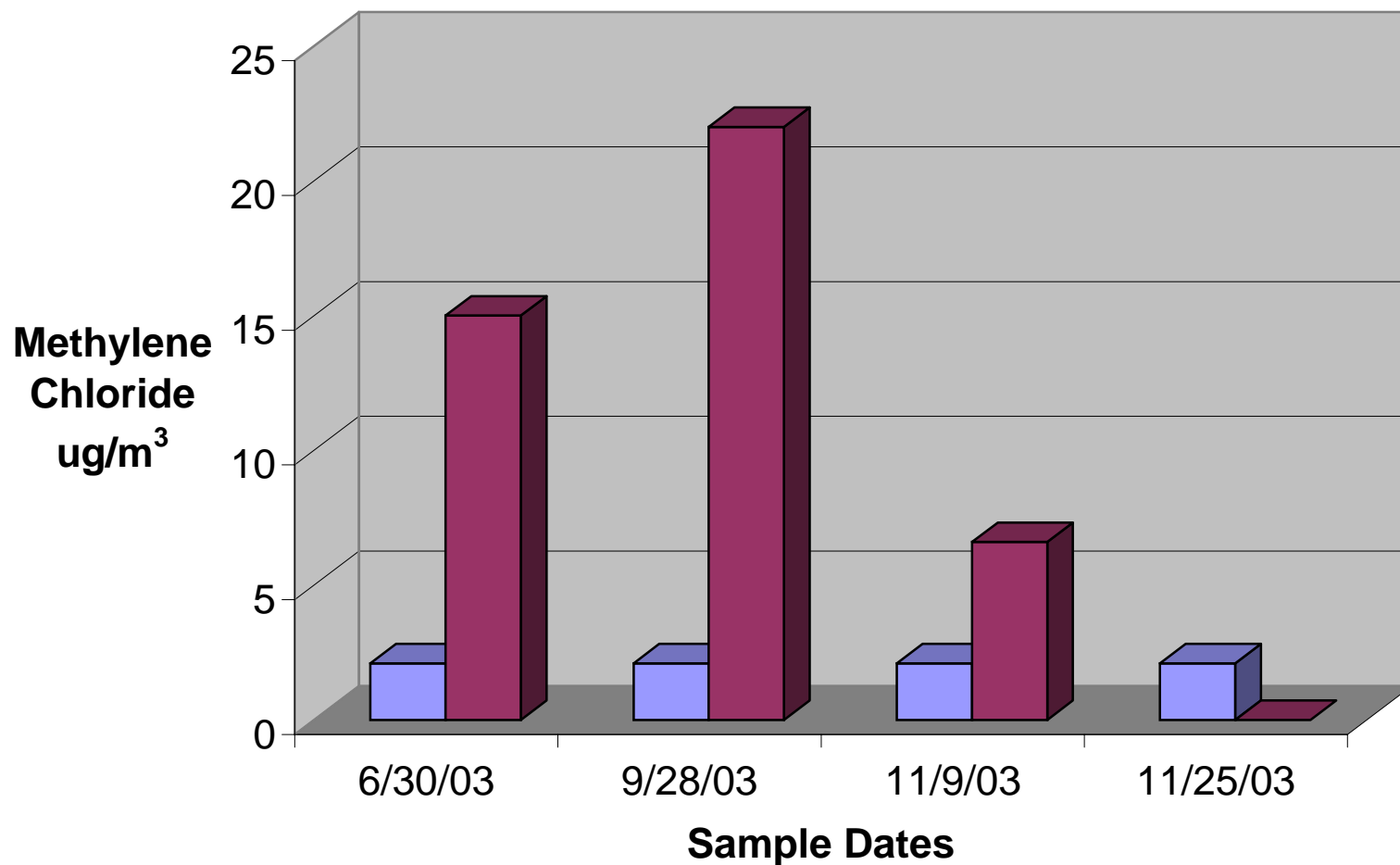
n-Decane	$50 \mu\text{g}/\text{m}^3$	---	$.01 \mu\text{g}/\text{m}^3$	---
2,3,4-Trimethylpentane	$20 \mu\text{g}/\text{m}^3$	No DEC guidelines listed		---
C ₉ H ₂₀ Branched Alkane	$20 \mu\text{g}/\text{m}^3$	No DEC guidelines listed		---
n-Octane	$20 \mu\text{g}/\text{m}^3$	---	$3300.0 \mu\text{g}/\text{m}^3$	---
C ₁₀ H ₂₂ Branched Alkane	$10 \mu\text{g}/\text{m}^3$	No DEC guidelines listed		---
n-Dodecane	$50 \mu\text{g}/\text{m}^3$	No DEC guidelines listed		---
C ₁₃ H ₂₈ Branched Alkane	$10 \mu\text{g}/\text{m}^3$	No DEC guidelines listed		---
C ₁₄ H ₃₀ Branched Alkane	$10 \mu\text{g}/\text{m}^3$	No DEC guidelines listed		---

Bucket Brigade Acrylonitrile Test Results



■ DEC Annual Ambient Air Guideline ■ Bucket Brigade Air Sample

Bucket Brigade Methylene Chloride Test Results



■ DEC Annual Ambient Air Guideline ■ Bucket Brigade Air Sample