

# Update on Health Assessment of VOC Monitoring Results for Portland – South Portland

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Maine CDC

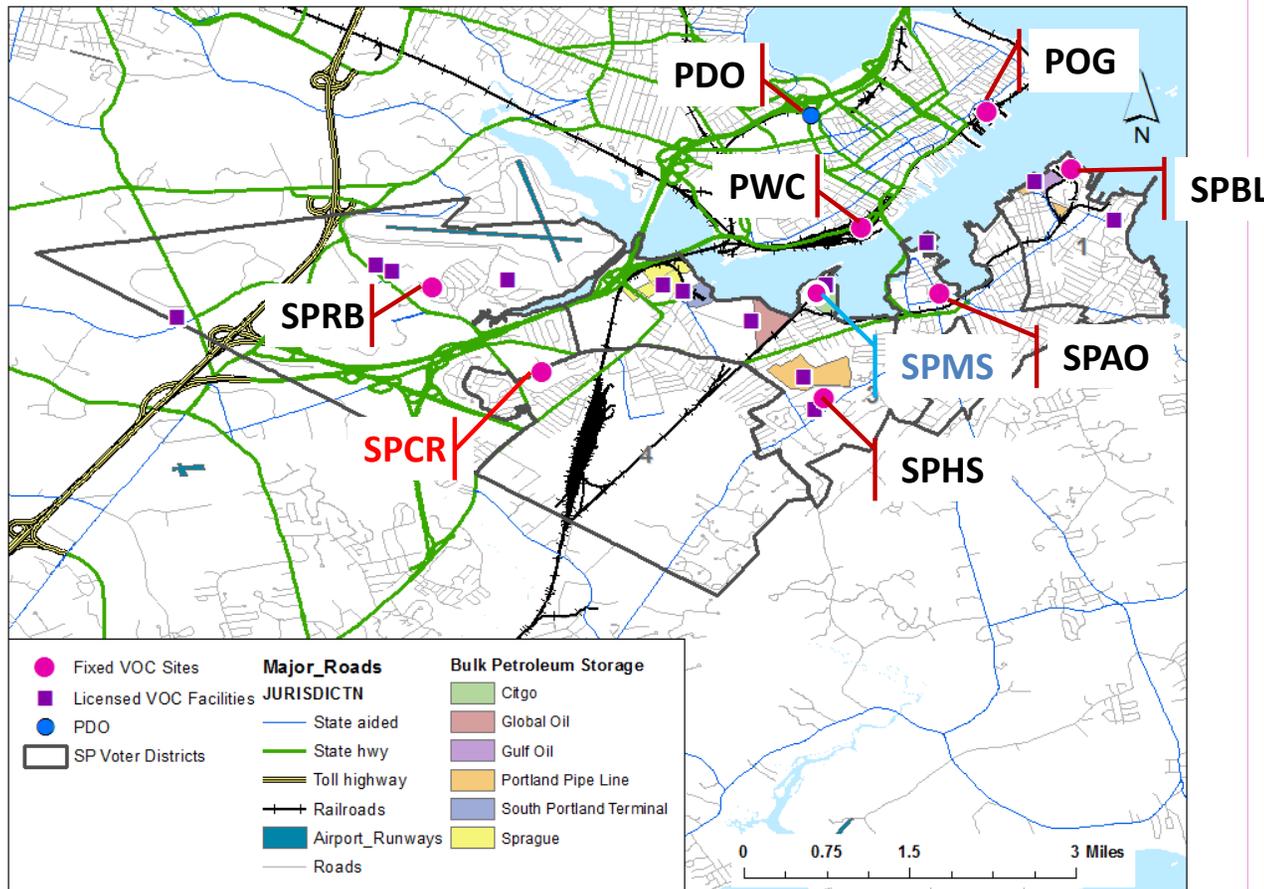
April 14, 2022



# Topics

- Brief refresher on VOC data
- Update on Acute Health Risk Assessment
- Update on Chronic Health Risk Assessment
- Comparison of Year-1 vs Year-2 monitoring data
- Mechanic Street station overview

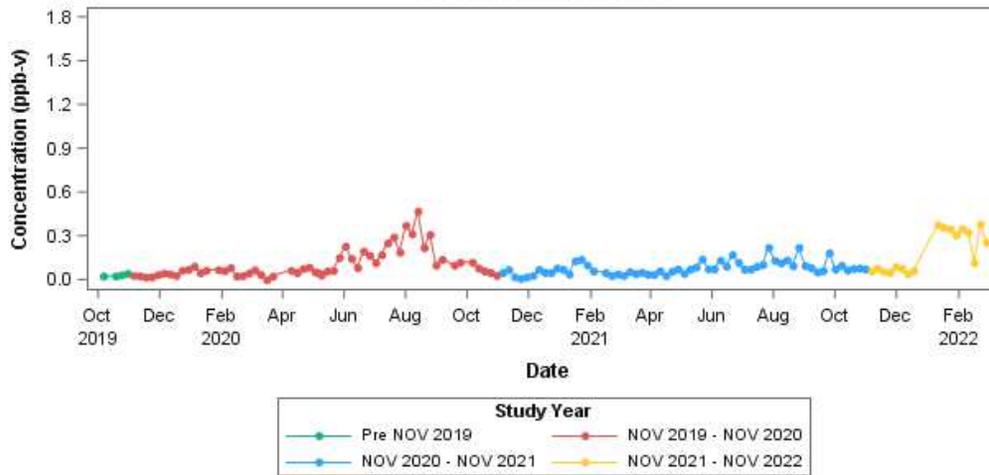
# Location of Monitoring Stations



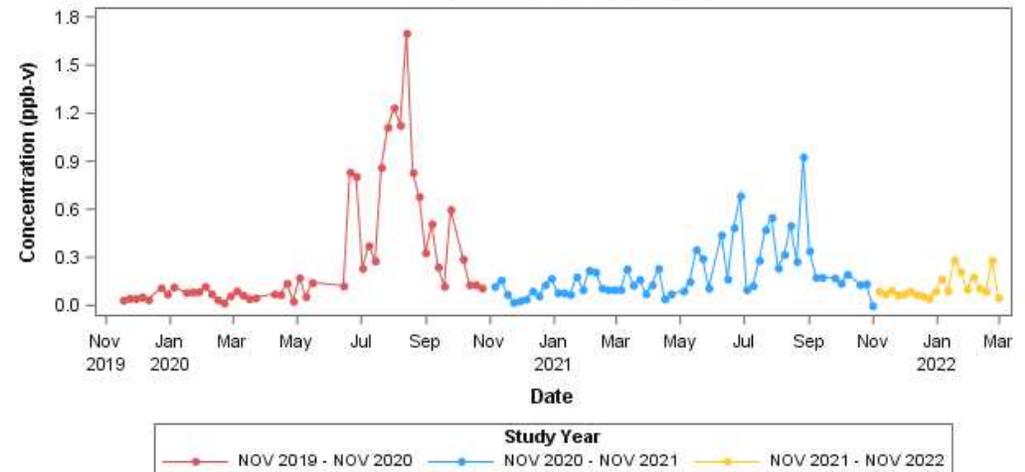
- **Central Receiving station (SPCR)** taken offline on March 17, 2021 and moved to new South Portland location on Mechanic Street
- **Mechanic Street station (SPMS)** began collecting 24-hour samples on March 23, 2021

# VOC Data

Annual Comparisons of 24 hour Naphthalene Concentrations by Station  
Sample Site=High School



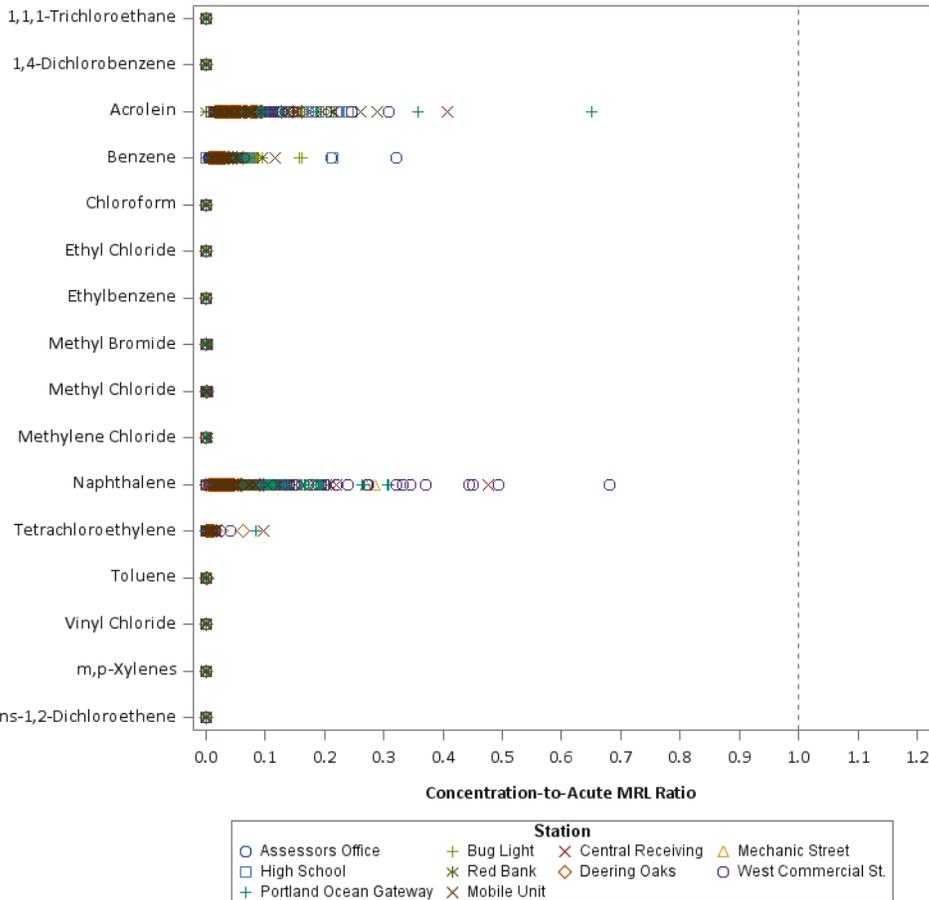
Annual Comparisons of 24 hour Naphthalene Concentrations by Station  
Sample Site=West Commercial St.



# Summary of Acute Health Risks

Acute Toxicity Value Comparisons

Individual 24hr Sample Results-to-Acute MRL Ratios for Chemicals with Acute MRLs (Feb 2022)

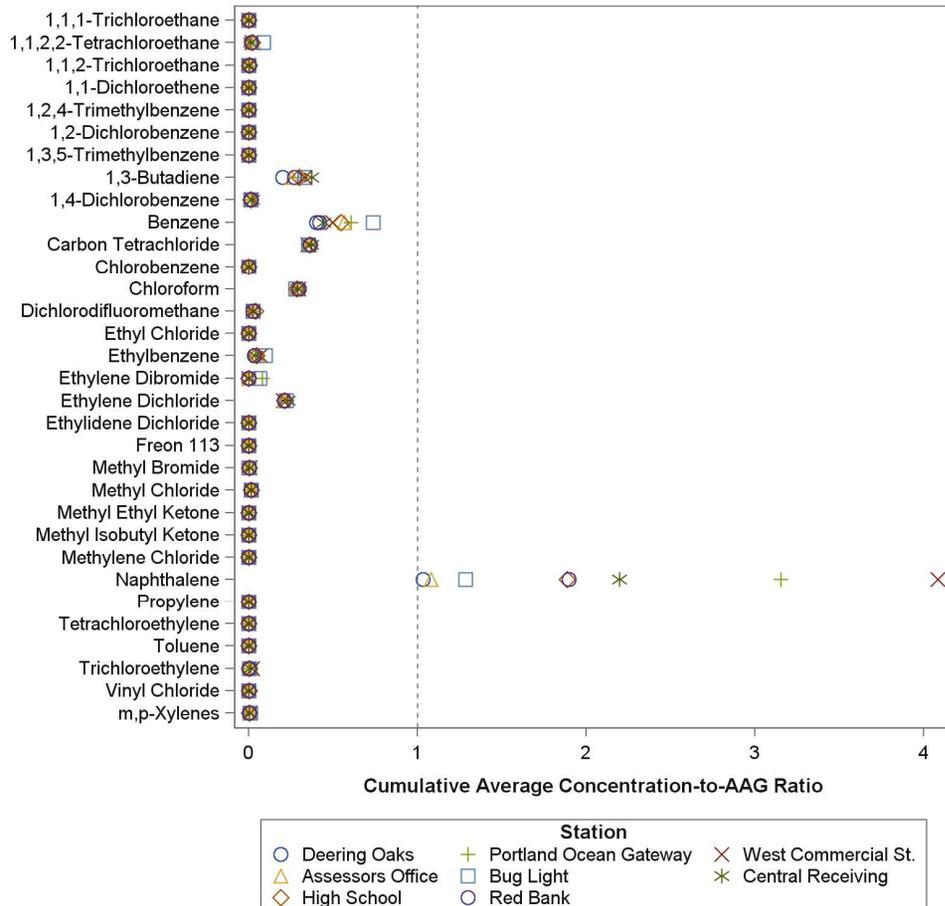


For the 16 chemicals with acute MRLs, none of the individual 24-hour sample results exceeded acute toxicity values

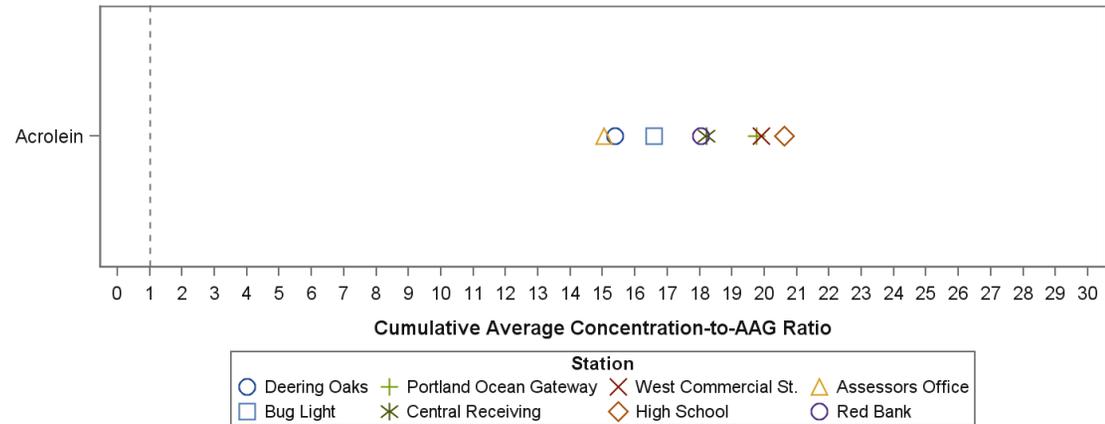
Data current through Feb. 2022

# Comparing cumulative average concentrations to AAGs

Cumulative Average-to-AAG Ratios for Individual Chemicals with AAGs (Feb 2022)



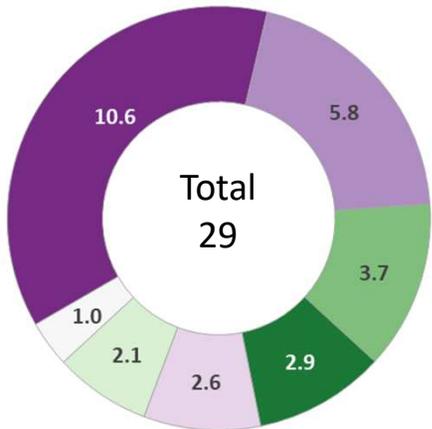
Cumulative Average-to-AAG Ratio for Acrolein (Feb 2022)



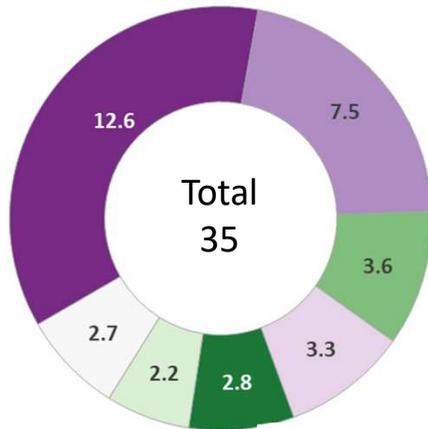
Data current through Feb. 2022

# Cumulative Lifetime Cancer Risk (# per million)

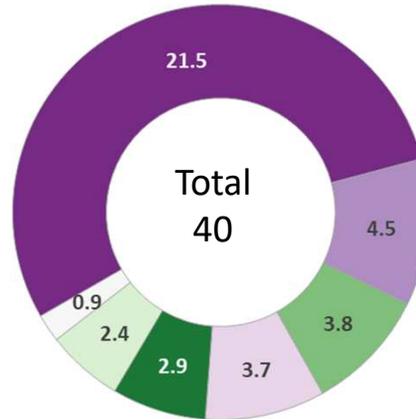
Assessors Office



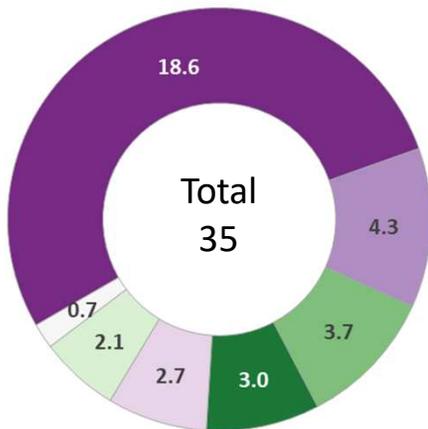
Bug Light



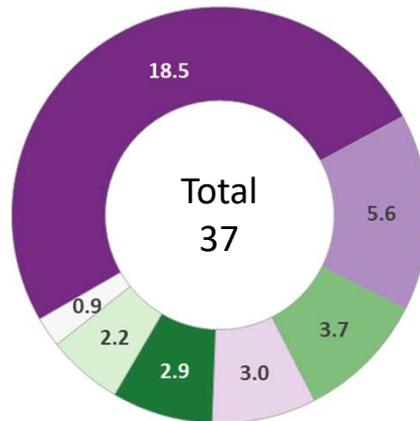
Central Receiving



Red Bank



High School

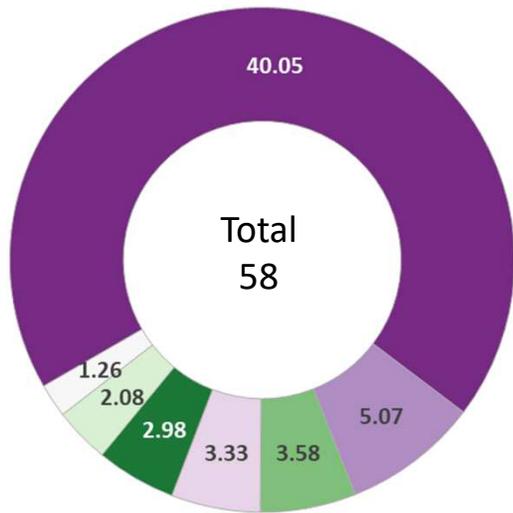


- Naphthalene
- Benzene
- Carbon Tetrachloride
- Chloroform
- 1,3-Butadiene
- Ethylene Dichloride
- Other

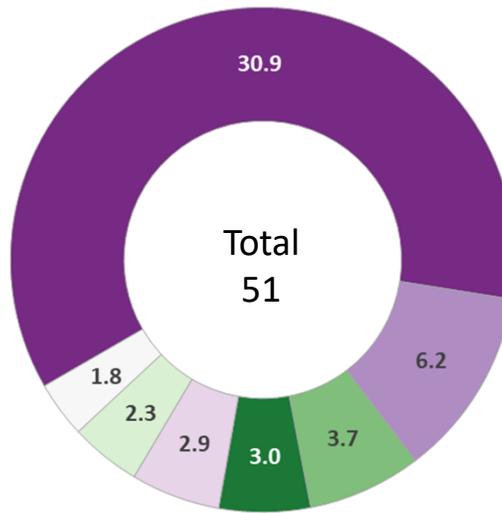
Data current through Feb. 2022

# Cumulative Lifetime Cancer Risk (# per million)

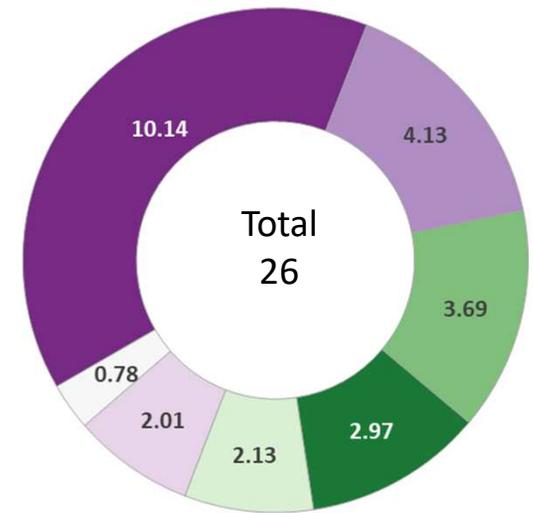
West Commercial Street



Portland Ocean Gateway



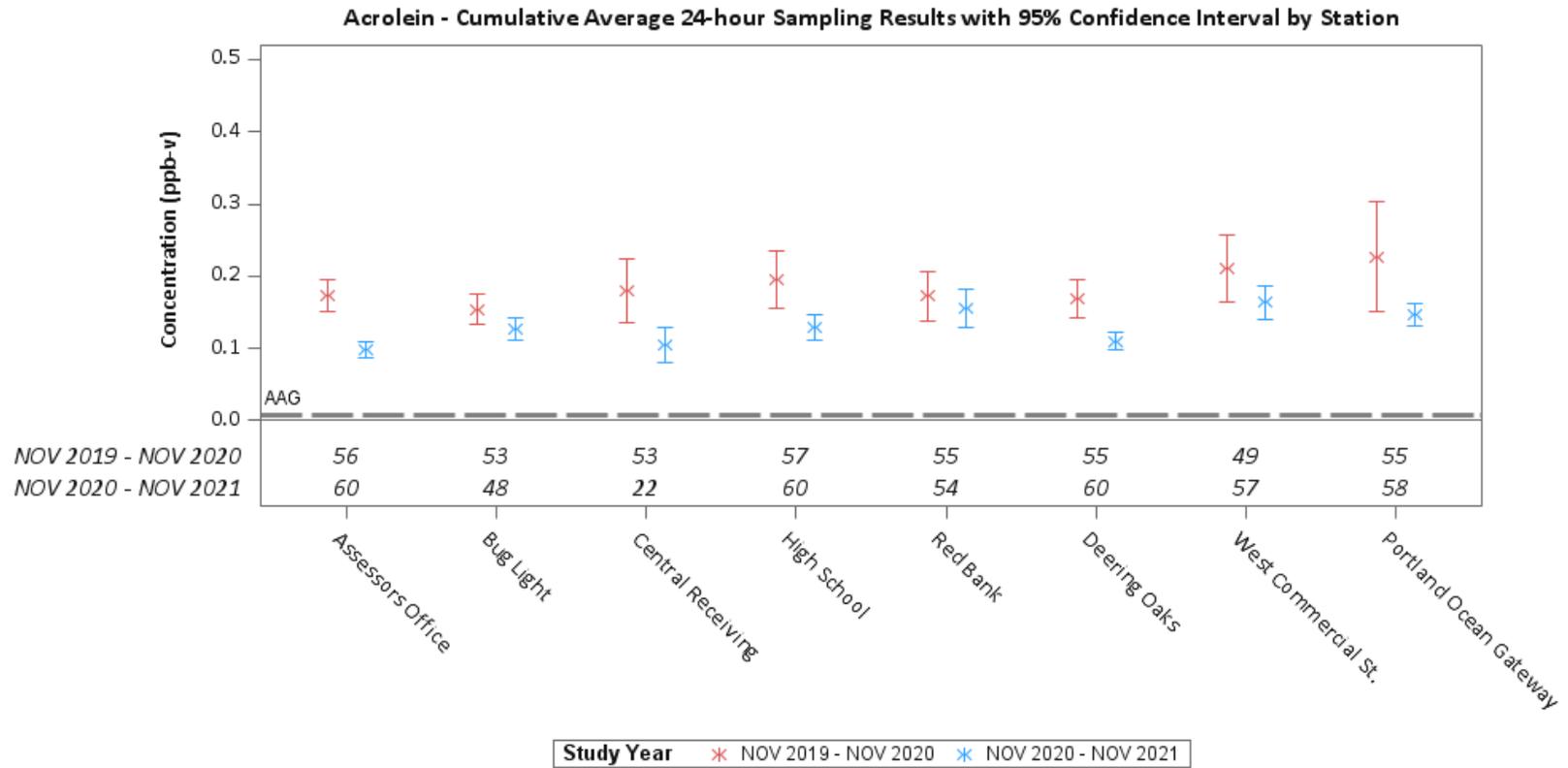
Deering Oaks



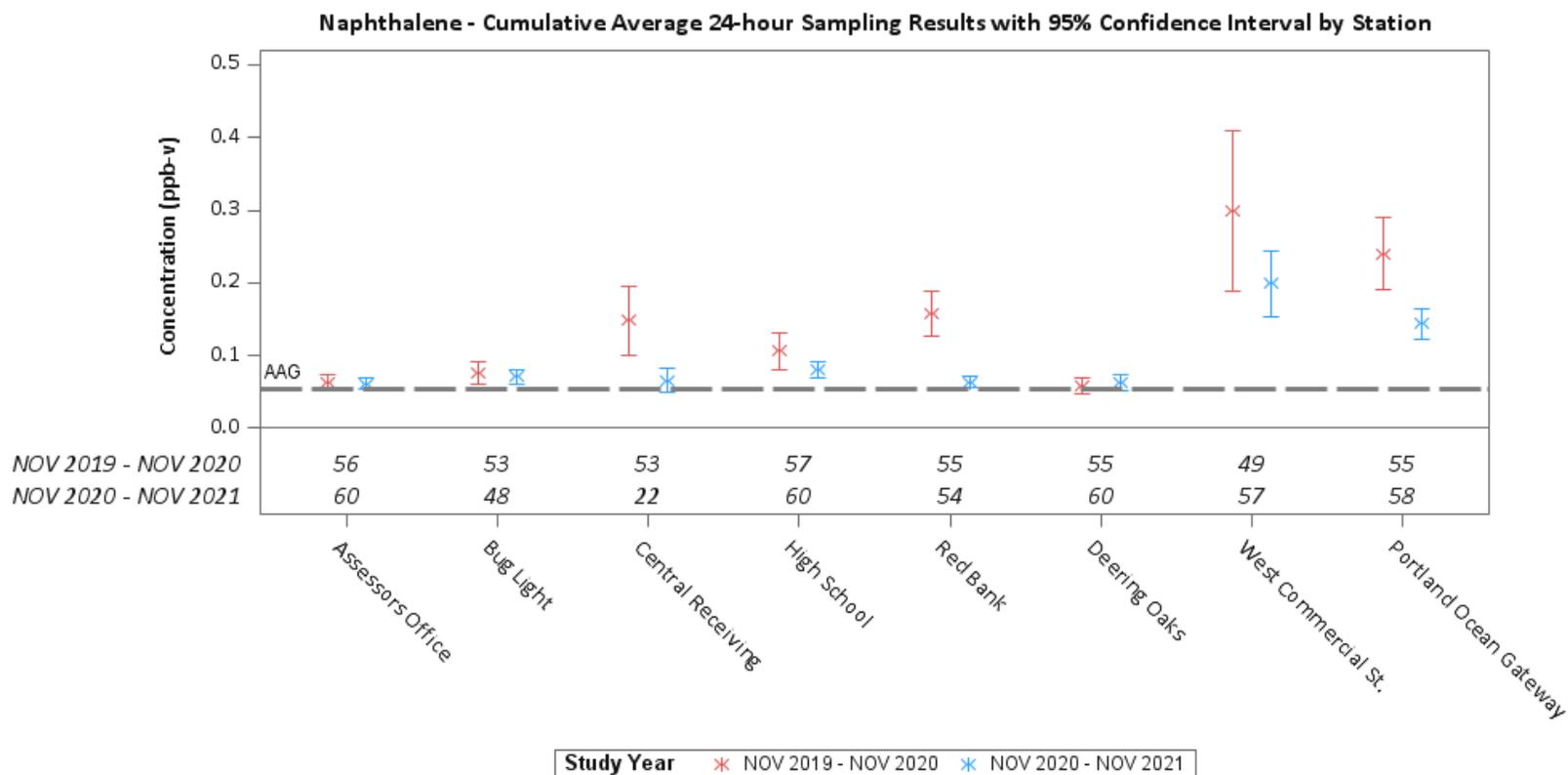
■ Naphthalene 
 ■ Benzene 
 ■ Carbon Tetrachloride 
 ■ 1,3-Butadiene 
 ■ Chloroform 
 ■ Ethylene Dichloride 
 ■ Other

Data current through Feb. 2022

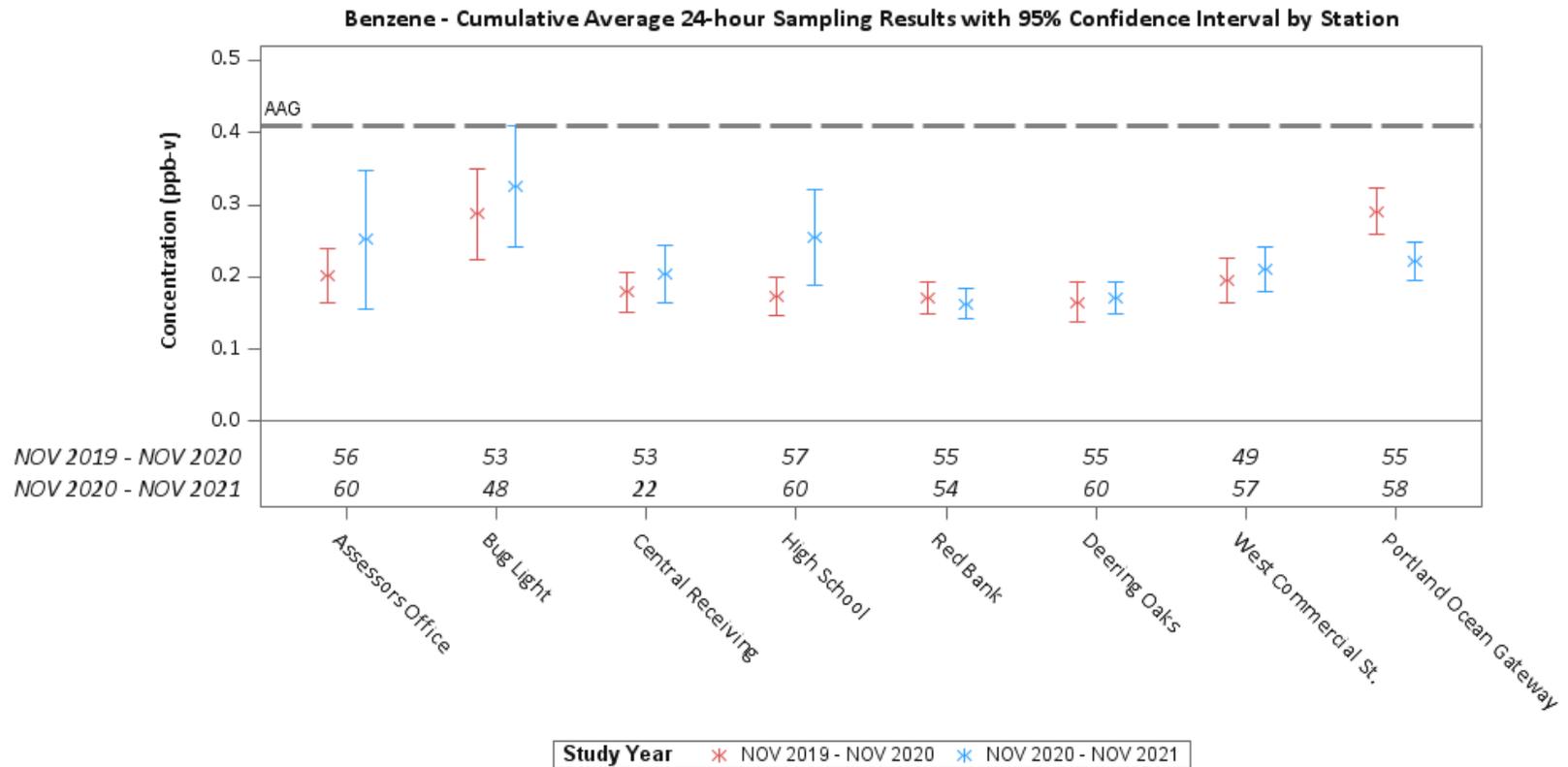
# Year 1 vs. Year 2 - Acrolein



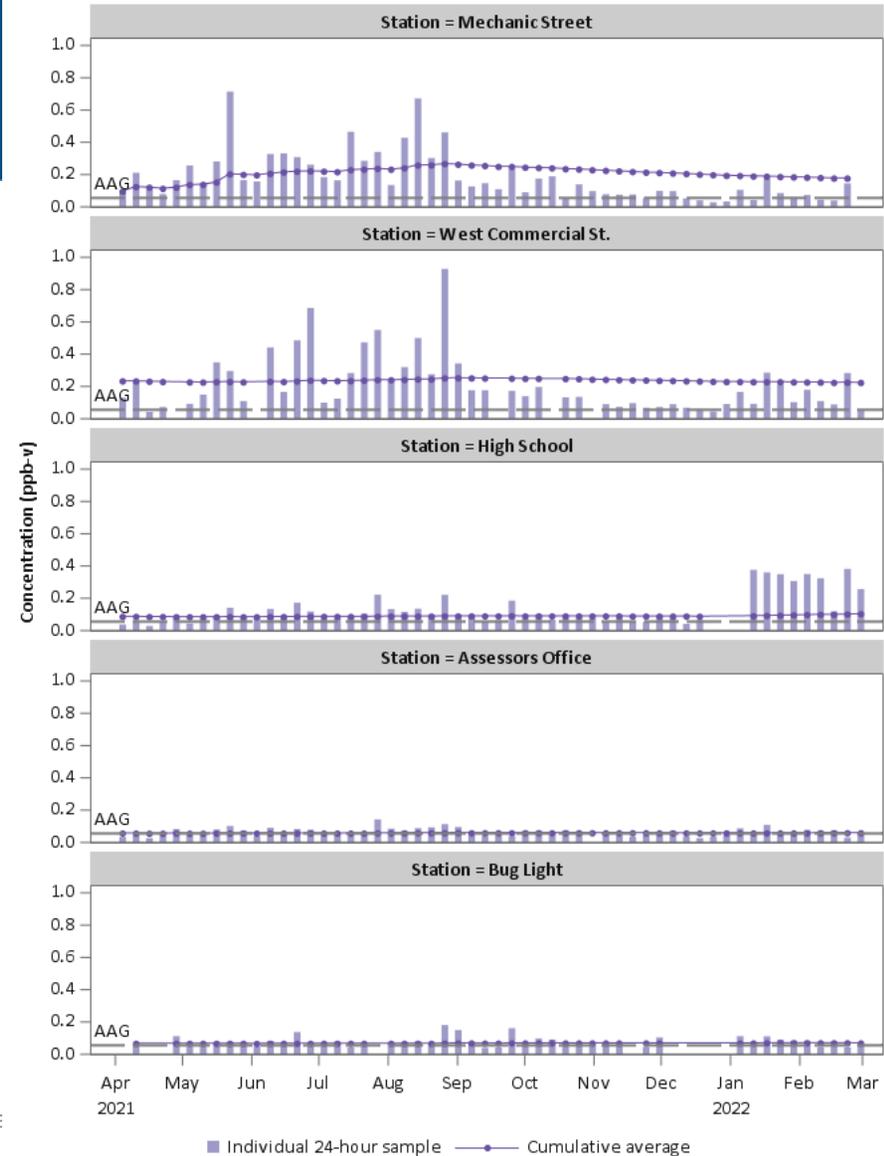
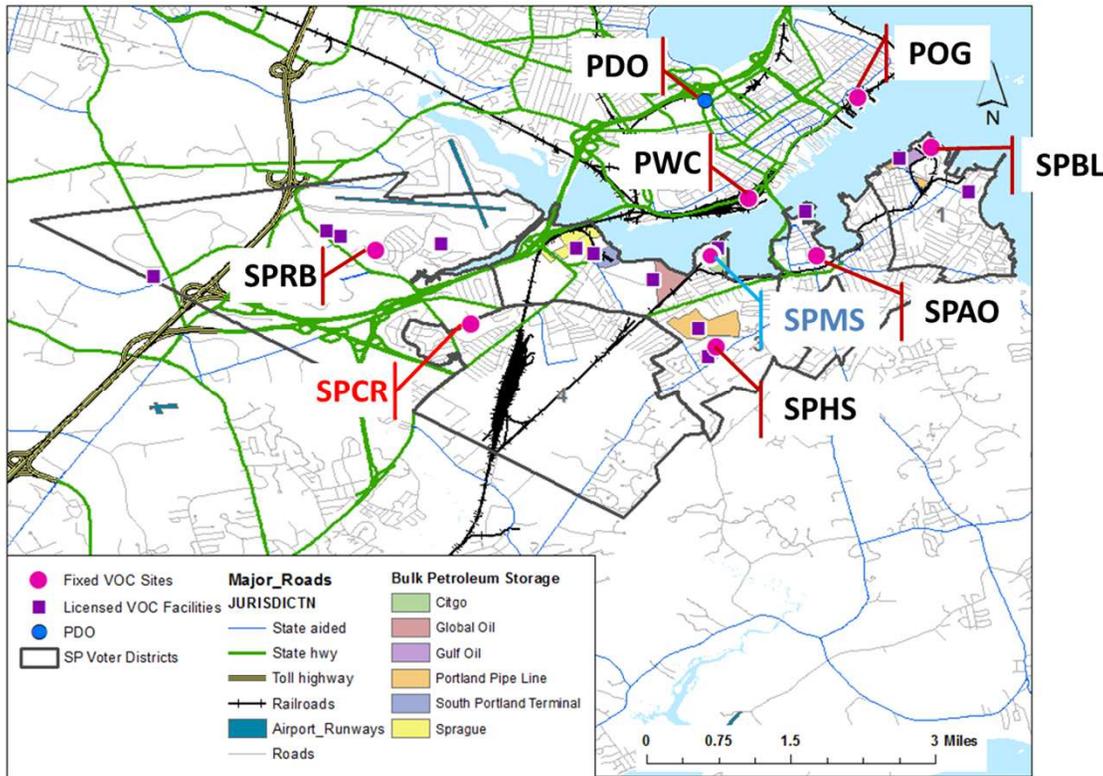
# Year 1 vs. Year 2 - Naphthalene



# Year 1 vs. Year 2 - Benzene



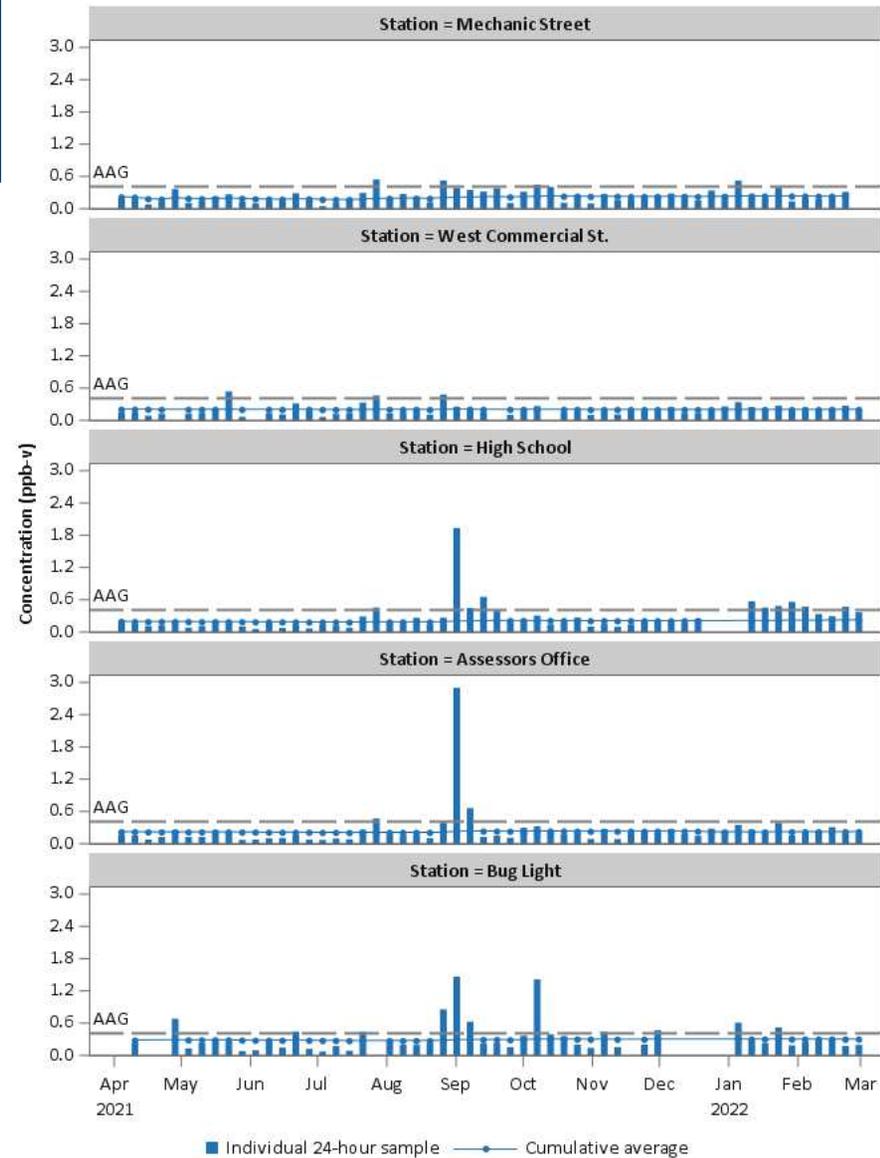
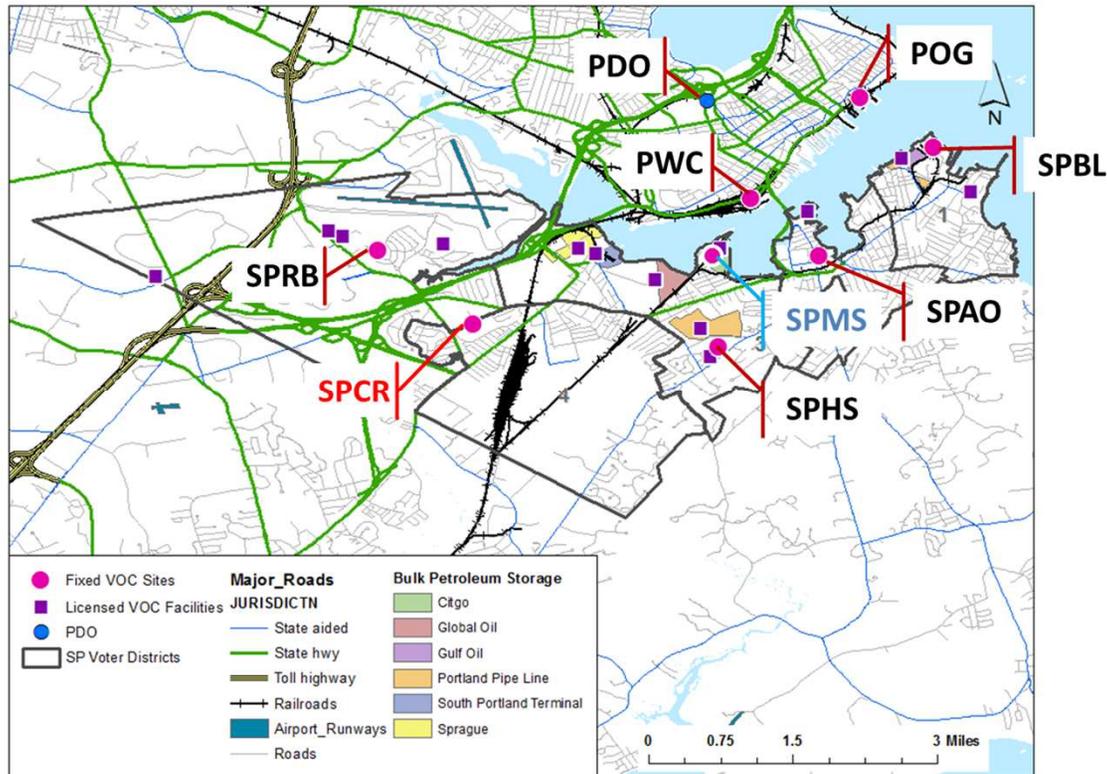
# Mechanic Street Station - Naphthalene



Data current through Feb. 2022

Maine Department of Health and Human Services

# Mechanic Street Station - Benzene



Data current through Feb. 2022

## For More Information

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