A large, faint watermark of the EPA logo is centered in the background. It features a stylized flower with three leaves and a sun-like shape above it, surrounded by the text "UNITED STATES ENVIRONMENTAL PROTECTION AGENCY".

# Target List Revision(s)

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# Outline

- What is the target list?
- Why we revised the list
- Evaluation criteria for ranking compounds
- Ranking of existing compounds
- Considerations for adding compounds
- New target list

## What is the Target List?

- The target list is the recommended list of specific VOC compounds which PAMS sites should measure
- The target list is not specified in the PAMS requirements, but is maintained through guidance
- Periodic revisions have been made to the target list over the years

### My Targets

1.....

2.....

3.....

4.....

5.....





## Why Did We Revise the Target List?

- Many of the existing compounds were believed to be of low importance to ozone formation
- By reducing the number of target compounds we hope to reduce the complexity and cost of collecting, validating, and reporting data

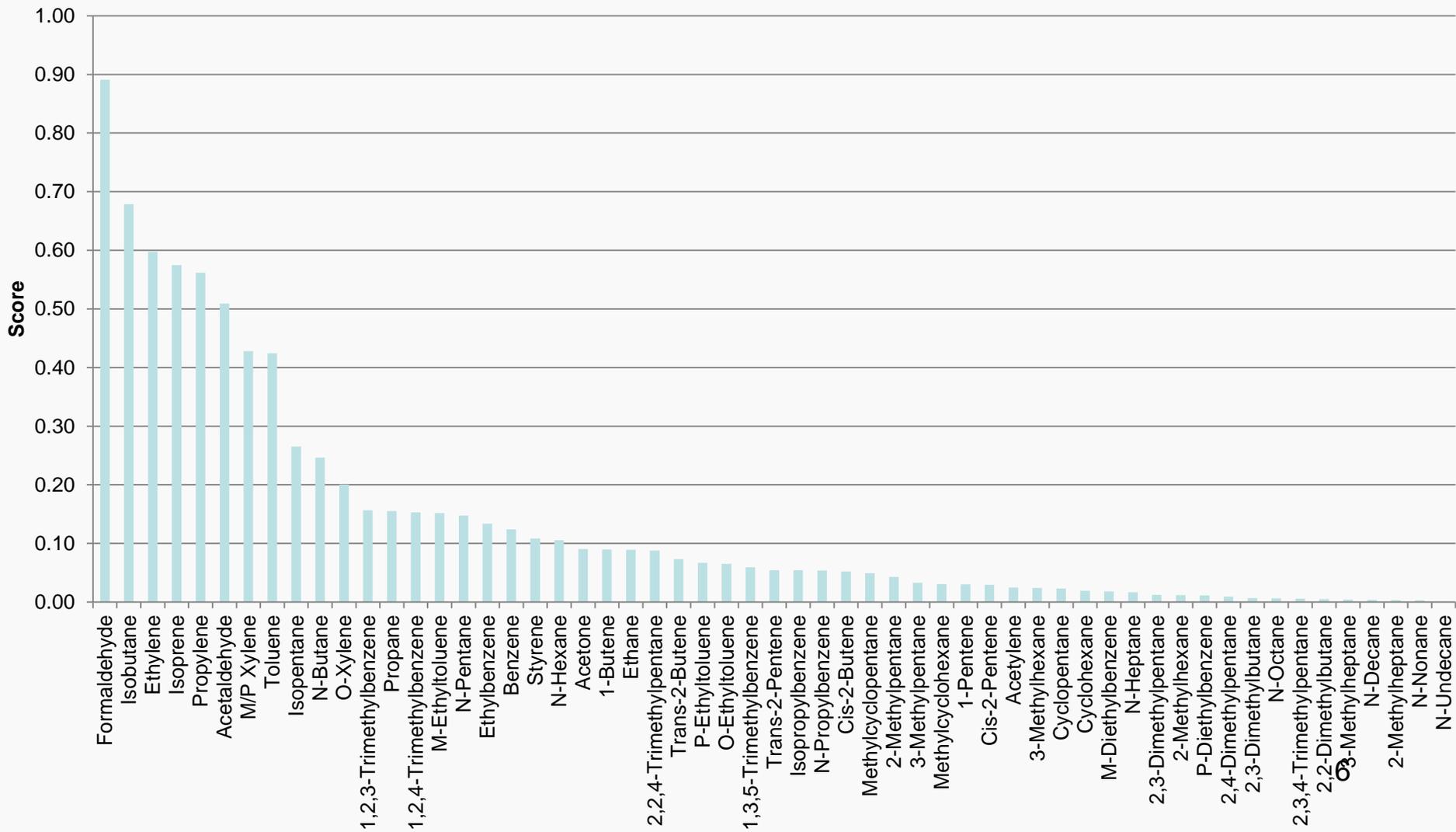


# Evaluation Criteria

- The existing target compounds were ranked using a decision matrix
- Each compound was evaluated based on a number of criteria
  - Overall reactivity adjusted concentration
  - Reactivity adjusted average concentration at 9am
  - Reactivity adjusted average concentration by geographic location (NE, SE, MW, SW, W)
  - If compound was a HAP
  - If compound was a secondary organic aerosol precursor
- Compounds were scored on each criteria and ranked based on their total score



# Total Score





## 27 High Priority Compounds

- Formaldehyde
- Isobutane
- Ethylene
- Isoprene
- Propylene
- Acetaldehyde
- M/P Xylene
- Toluene
- Isopentane
- N-Butane
- O-Xylene
- 1,2,3-Trimethylbenzene
- Propane
- 1,2,4-Trimethylbenzene
- M-Ethyltoluene
- N-Pentane
- Ethylbenzene
- Benzene
- Styrene
- N-Hexane
- Acetone
- 1-Butene
- Ethane
- 2,2,4-Trimethylpentane
- Trans-2-Butene
- P-Ethyltoluene
- O-Ethyltoluene



## 29 Optional Compounds

- 1,3,5-Trimethylbenzene
- 1-Pentene
- 2,2-Dimethylbutane
- 2,3,4-Trimethylpentane
- 2,3-Dimethylbutane
- 2,3-Dimethylpentane
- 2,4-Dimethylpentane
- 2-Methylheptane
- 2-Methylhexane
- 2-Methylpentane
- 3-Methylheptane
- 3-Methylhexane
- 3-Methylpentane
- Acetylene
- Cis-2-Pentene
- Cyclohexane
- Cyclopentane
- Isopropylbenzene
- M-Diethylbenzene
- Methylcyclohexane
- Methylcyclopentane
- N-Decane
- N-Heptane
- N-Nonane
- N-Octane
- N-Propylbenzene
- N-Undecane
- P-Diethylbenzene
- Trans-2-Pentene



## Potential Additions

- $\alpha/\beta$ -Pinene
- 1,3 Butadiene
- Benzaldehyde
- Carbon Tetrachloride
- Ethanol
- Tetrachloroethylene



# Timing

- Monitoring agencies are able to report just the priority compounds starting with the 2014 PAMS season
- We are still considering the addition of the potential target compounds, and monitoring agencies are not being asked to begin reporting those compounds at this time
- Monitoring agencies are also encouraged to consider reporting additional compounds based on local needs and conditions