



# Air Pollution Control Permitting in Wisconsin

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## Topics

- Clean Air Act
- Air permitting
- Permit requirements for Foxconn
- Public process for permits
- Ozone



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## Clean Air Act

- Set National Ambient Air Quality Standards
- Requires ambient air monitoring
- Requires states to submit plans:
  - For areas attaining standards – plan to maintain attainment
  - For areas not attaining standards – plan to get area into attainment
- Set technology-based standards to reduce emissions of criteria pollutants and hazardous air pollutants
- Requires air permitting



## Air Permitting

- Clean Air Act permitting in attainment areas:
  - Prevention of Significant Deterioration (PSD)
    - Best available control technology (BACT)
    - Effects on air quality analyzed
      - Air dispersion modeling analyses
      - For pollutants with regional effects such as ozone, qualitative assessment of the impact of precursor pollutants on potential concentrations of ozone

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## Permit Requirements for Foxconn

- Four separate applications are being reviewed and four separate permits have been drafted
- These projects are all considered a single major source of air pollution
- PSD requirements apply
  - BACT level controls are required
  - Detailed air quality analysis is required



## Permit Process

- Clean Air Act provides for public participation and opportunity for review of all air pollution control permits

[http://dnr.wi.gov/cias/am/amexternal/public\\_notices.aspx](http://dnr.wi.gov/cias/am/amexternal/public_notices.aspx)

- Available for public review until April 16, 2018
  - Applications
  - Draft air permits
  - Analysis documents

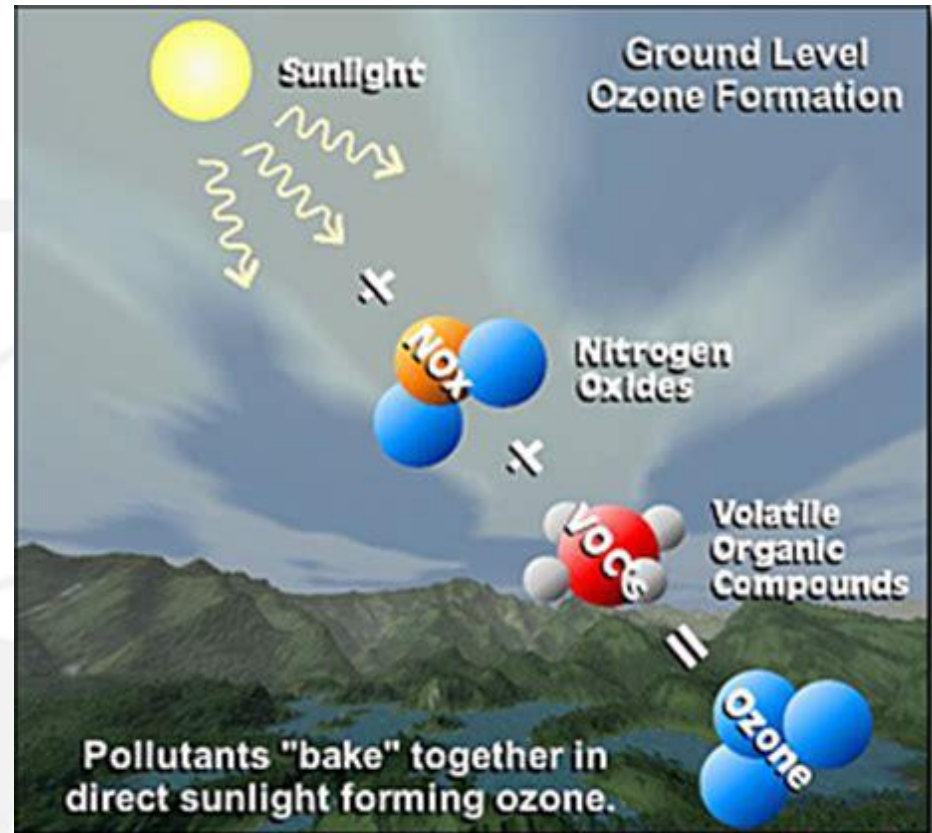


## Permit Process

- The DNR *must* issue a permit if the source, considering the draft permit requirements, meets the criteria for permit approval
- Public comments:
  - Adequacy of technical review
  - Accuracy of emission calculations
  - Appropriateness of controls
  - Adequacy of compliance requirements

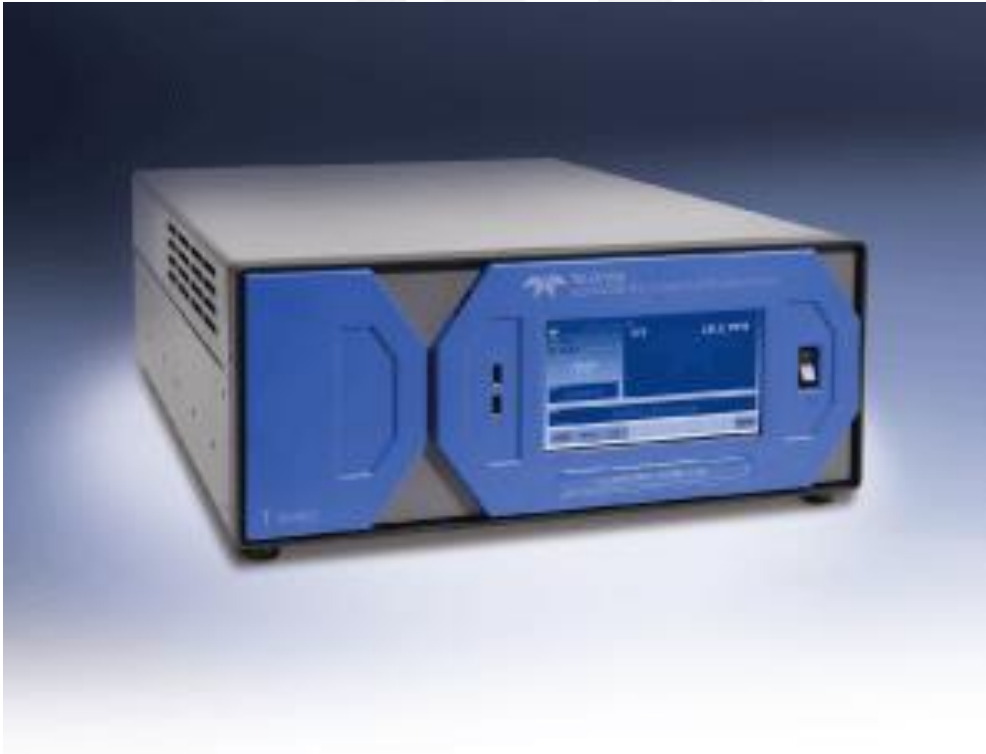
# Ozone

- Ground level ozone is formed when volatile organic compounds (VOC) and nitrogen oxides react in the presence of sunlight
- Precursor pollutants can travel long distances from their emission points before conditions will be right to form ozone





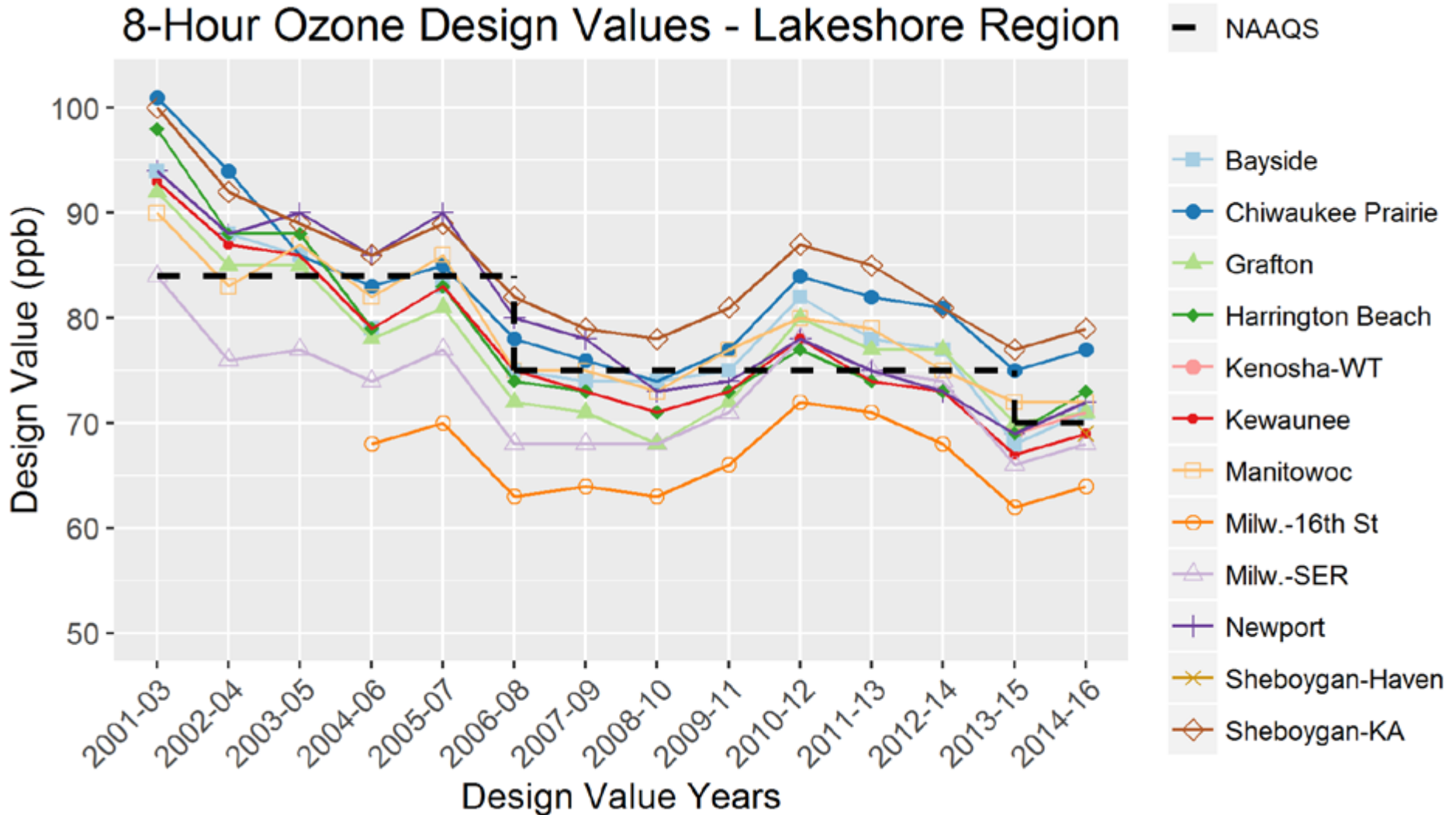
# Ozone Monitoring



- UV light is passed through the sample cell, where it is absorbed proportionally to the amount of ozone present
- Switching valve alternates measurement between the sample stream and a sample that has been scrubbed of ozone

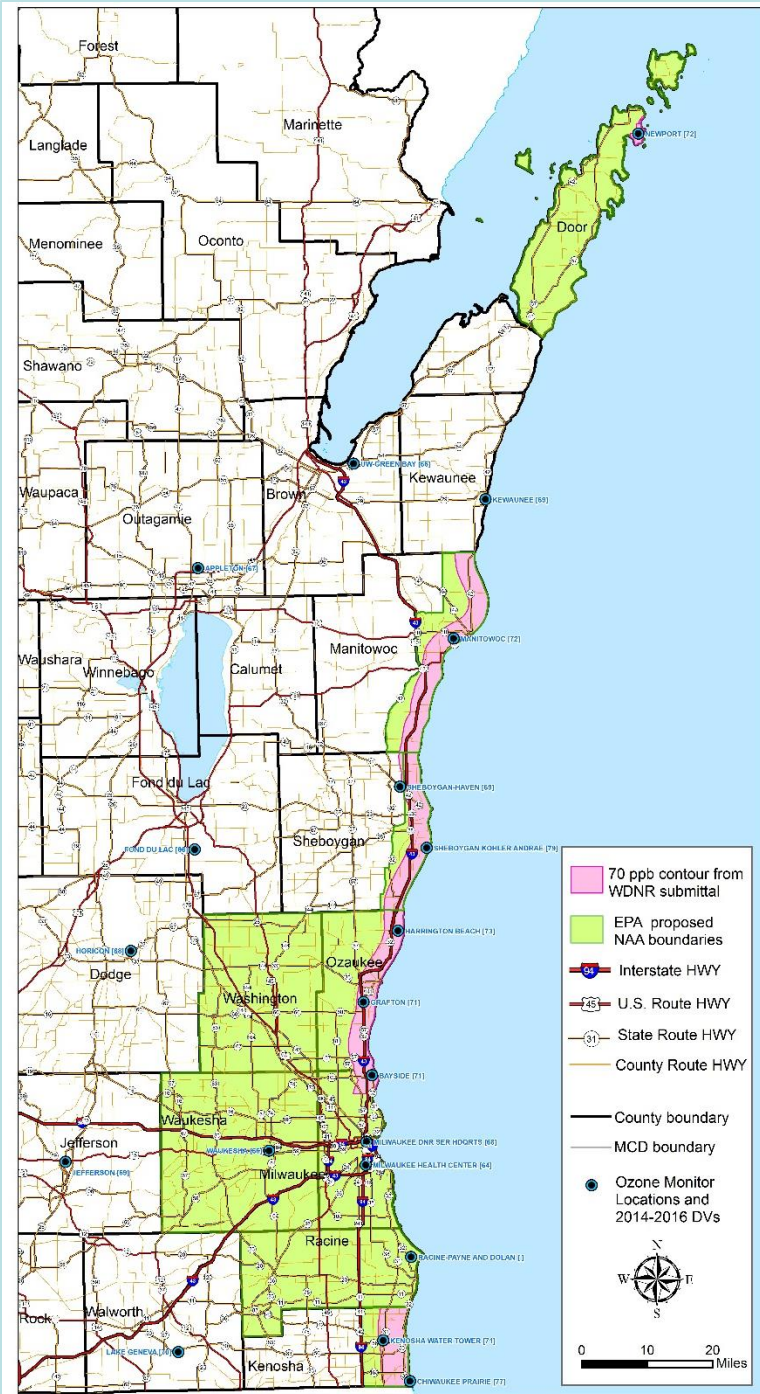


# 8-Hour Ozone Design Values - Lakeshore Region



# EPA's Intended 2015 Ozone NAAQS Nonattainment Area Designations

All areas of Wisconsin



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Data from EPA's 120-day letter of 12/20/17 and DNR submittal to EPA of 4/20/17



## Permitting impact of Non-Attainment

- Clean Air Act permitting in nonattainment areas:
  - Nonattainment area new source review (NNSR)
    - Lower Major Source Threshold
    - Application of Lowest achievable emission rate (LAER)
    - Offset emissions of VOCs and NO<sub>x</sub> by a ratio of 1:1.1

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# Thank you

Public comments can be submitted through  
April 16, 2018. Send comments to:

By email: [jonathan.wright@wisconsin.gov](mailto:jonathan.wright@wisconsin.gov)

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