

# Summary of Conclusions Regarding Virginia Paving

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## Issues to Discuss

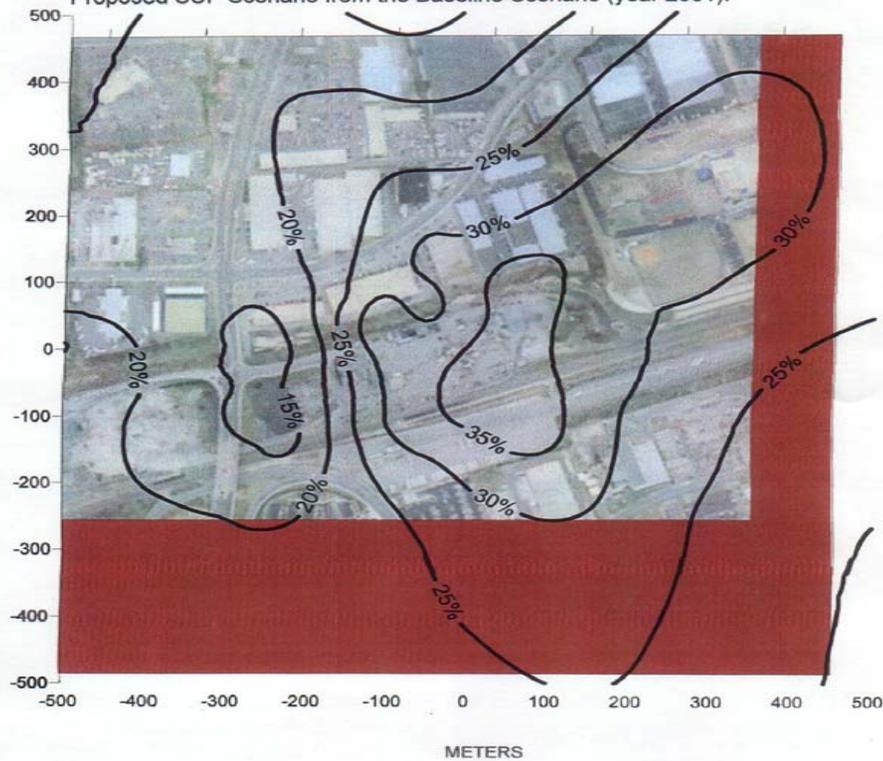
- Adequacy of modeling conducted by Virginia Paving
- Baseline review results
- Air quality monitoring
- Meteorological monitoring
- Nuisance issues may require dialogue

# Adequacy of Modeling Conducted by Virginia Paving

- **Detailed** review by consultant to Alexandria and by Sullivan Environmental
- Standard procedures, 5 years of hour-by-hour meteorological data,
- Modeling consistent with EPA Methods
- Differences in approaches identified for fugitive emissions

# Percent Reductions PM<sub>10</sub> Annual

Figure 3-28.  
Percent reduction in facility's contribution to PM<sub>10</sub> annual impacts for the Proposed SUP Scenario from the Baseline Scenario (year 2001).



# Baseline Review Results

- Measured concentrations high August 2004 special study
- Concern that fugitive emissions may have been understated
- More detailed review revealed generally higher concentrations on days measured in August 2004
- Found to be in plausible range

## Conclusions Stated March 2006

- Modeling based on acceptable methods
- Concern regarding conflict with 2004 monitoring was resolved - - (high regional particulate impacts)

## Conclusions Stated March 2006

- Standard pollutants, such as particulate matter, and toxic air pollutants are controlled to within standards and guidance levels at locations of public exposure
- Nuisance issues / odors not addressed - - ongoing dialogue VA Paving / community recommended

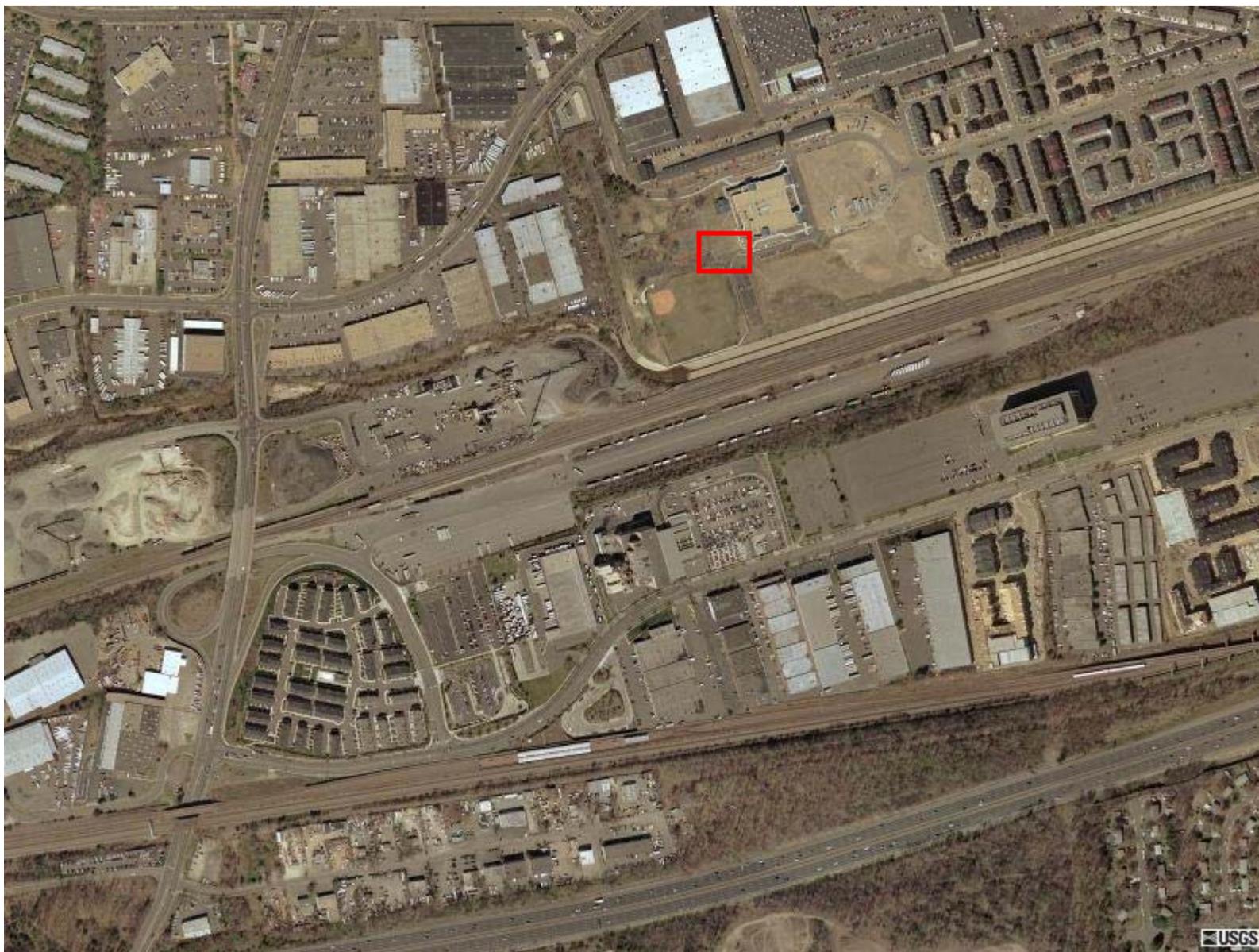
## Conclusions Stated March 2006 (Cont.)

- Long Term particulate monitoring recommended
- Meteorological monitoring recommended, preferably at Tucker School
- Open space in park preferred

# Air Quality Monitoring

- Site identified that adequately represents exposures in neighborhood
- Initial recommended picnic shelter
- DEQ preferred roof at Tucker Elementary
- Compromise at ground-level closer to school

# Long-term Air Quality Monitoring Site



# Long-term Air Quality Monitoring Site (Cont)

Cameron Station and VA Paving



▲ = potential monitoring site 1 inch equals 229,157413 feet

# Meteorological Monitoring

- Interpretation of measured particulate data
- Interpretation of complaints
- Options:
  - At monitoring location - - prefer open space closer to Beltway - - - away from the school
  - At Virginia Paving (would be very difficult - - too sheltered)

Preferred Location to Measure Wind Speed and Wind Direction is in Open Location - - e.g. School Grounds



## Additional Recommendation

- Include evaluation of impacts at upper level floors of:
  - Tucker Elementary School
  - New 6 story structure proposed for development adjacent to the school
- Should be evaluated, but unlikely to pose violation (particulate impacts likely would be lower on upper floors)

## Nuisance issues may require dialogue

- Air toxics unlikely to pose significant risk
- National standards demonstrated

# Next Steps?

1. Follow-up Meeting Needed to Ensure All Questions are Answered?
2. Follow-up on odor management:
  - Nuisance odors / dust issues expected to be reduced through phase-in of 3 year planned reduction in emissions
  - Recommend dialogue between plant and neighborhood to ensure new system effective

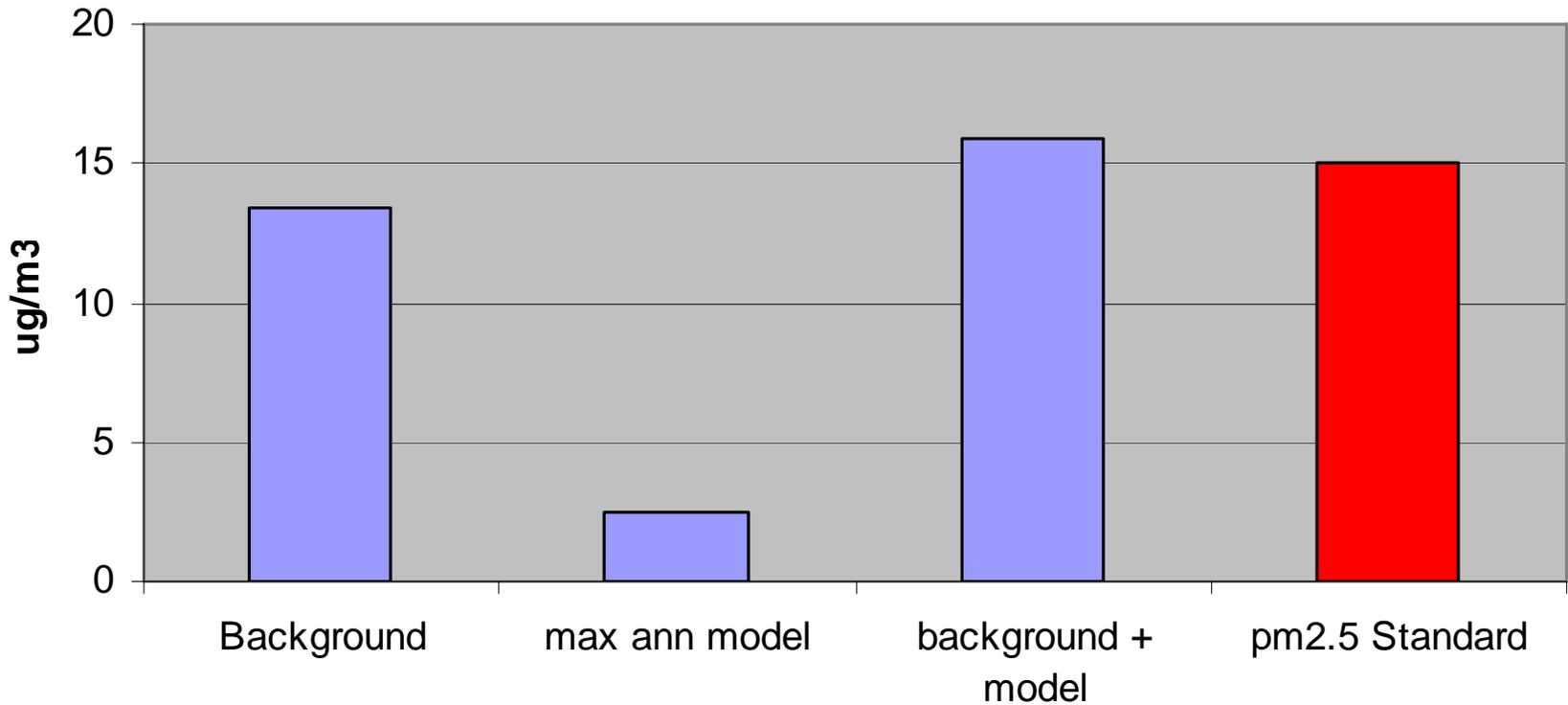
End

*Note: Follow-up Meetings will involve either David Sullivan (CCM) or Dennis Hlinka (CCM) from Sullivan Environmental*

# PM<sub>2.5</sub> Issues

# Fenceline Analysis of PM<sub>2.5</sub>

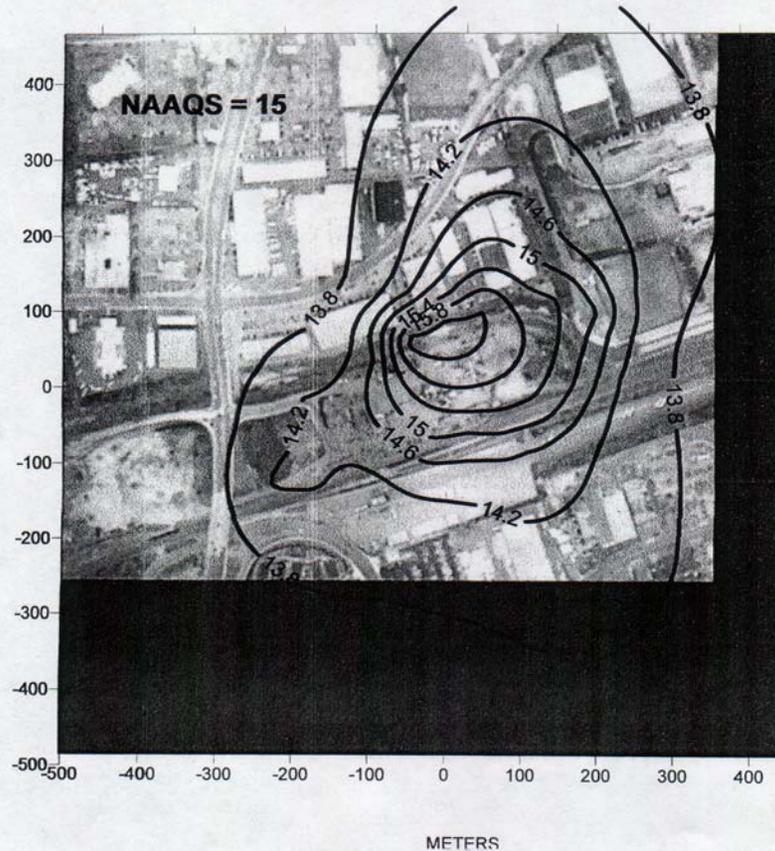
**PM<sub>2.5</sub> Concentration at Fenceline**



# No Residential Exposures on Chronic Basis

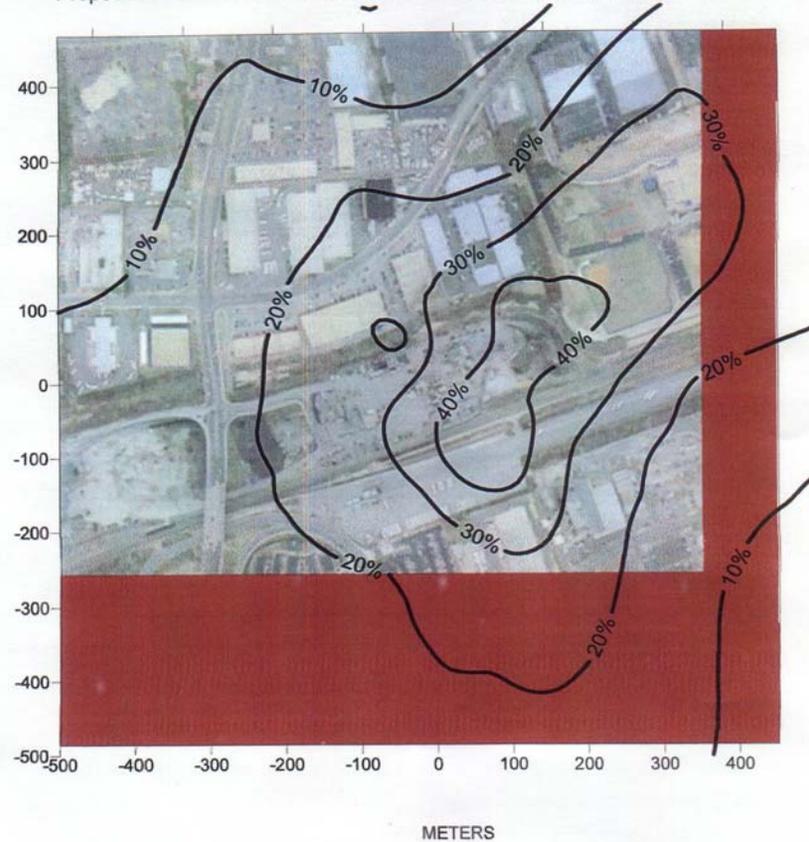
*pm2.5*

Figure 3-10.  
Total PM2.5 annual impacts including background (micrograms per cubic meter)  
for the Proposed SUP Scenario (year 2001).



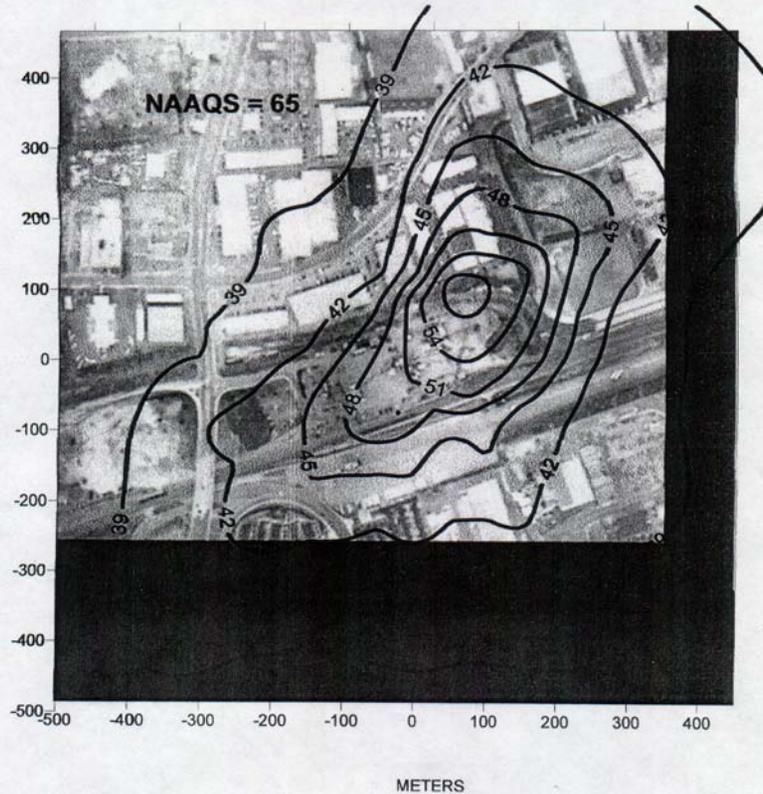
# Percent Change in Annual Average PM<sub>2.5</sub>

Figure 3-26.  
Percent reduction in facility's contribution to PM<sub>2.5</sub> annual impacts for the Proposed SUP Scenario from the Baseline Scenario (year 2001).



# Short-Term (24-Hr) Standard Met for PM<sub>2.5</sub>

Figure 3-9.  
Total PM<sub>2.5</sub> short-term impacts including background (micrograms per cubic meter)  
for the Proposed SUP Scenario (year 2004).



Formaldehyde

# Comparison of Fenceline Modeling with Ambient Formaldehyde Data

