



Road Dust in Old Harbor

Presented by: Bobbi Anne Barnowsky
2017 National Tribal Air Forum

Introduction

- 70 Air miles from Kodiak
- Alutiiq heritage – 76% of Population
- Population of 219
- Economy based on fishing and tourism
- 97 Residences , 10 Businesses



Road Dust in Old Harbor



- Within 24 hours of rain, we get dry dusty roads.
- Vehicles rarely adhere to 15mph speed limits.
- Road dust tend to be a problem in over our culvert and into our downtown area.
- Road dust is a year round problem with peaks in the summer months.

Health Concerns

- Road dust is made up of small particles that can irritate respiratory system
- Damages lung tissues
- 16% of our community has a respiratory issue
- Increase in visits to the clinic on dry days due to lung related issues
- Community members often raise concerns about dusty homes and dust layering their smoke houses

Challenges in Old Harbor

- **Why is solving this problem challenging in Old Harbor?**
 - Funding for solutions
 - Enforcement of speed limits
 - ATV racing
 - Being an island community
 - Lack of knowledge



Addressing the Issue

- Old Harbor was awarded an ANTHC air quality mini-grant to address road dust
- Technician Education
- Project included air monitoring in 5 locations within the community based on proximity to people.
- Gathered baseline data on particulate matter for 3 months.



Results



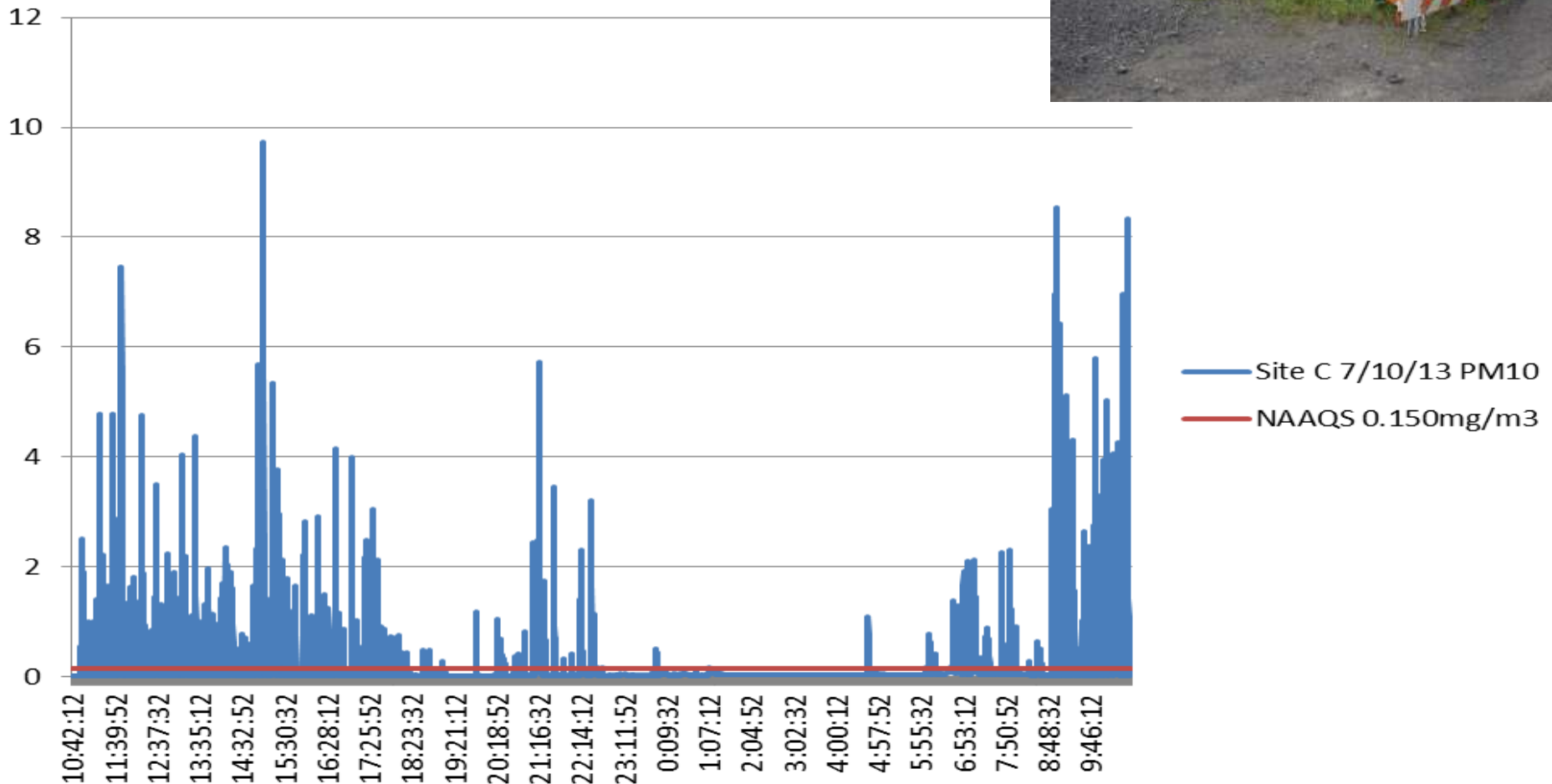
Test Site	A 10 Tests	B 12 Tests	C 11 Tests	D 7 Tests	E 7 Tests
Minimum	0.000	0.000	0.000	0.000	0.000
Maximum	1.600	3.900	9.720	6.790	1.930
Average	0.009	0.015	0.044	0.013	0.076

These are the results consisted of the data we have gathered. The average, is the overall data gathered from each individual sites.

Areas of Interests

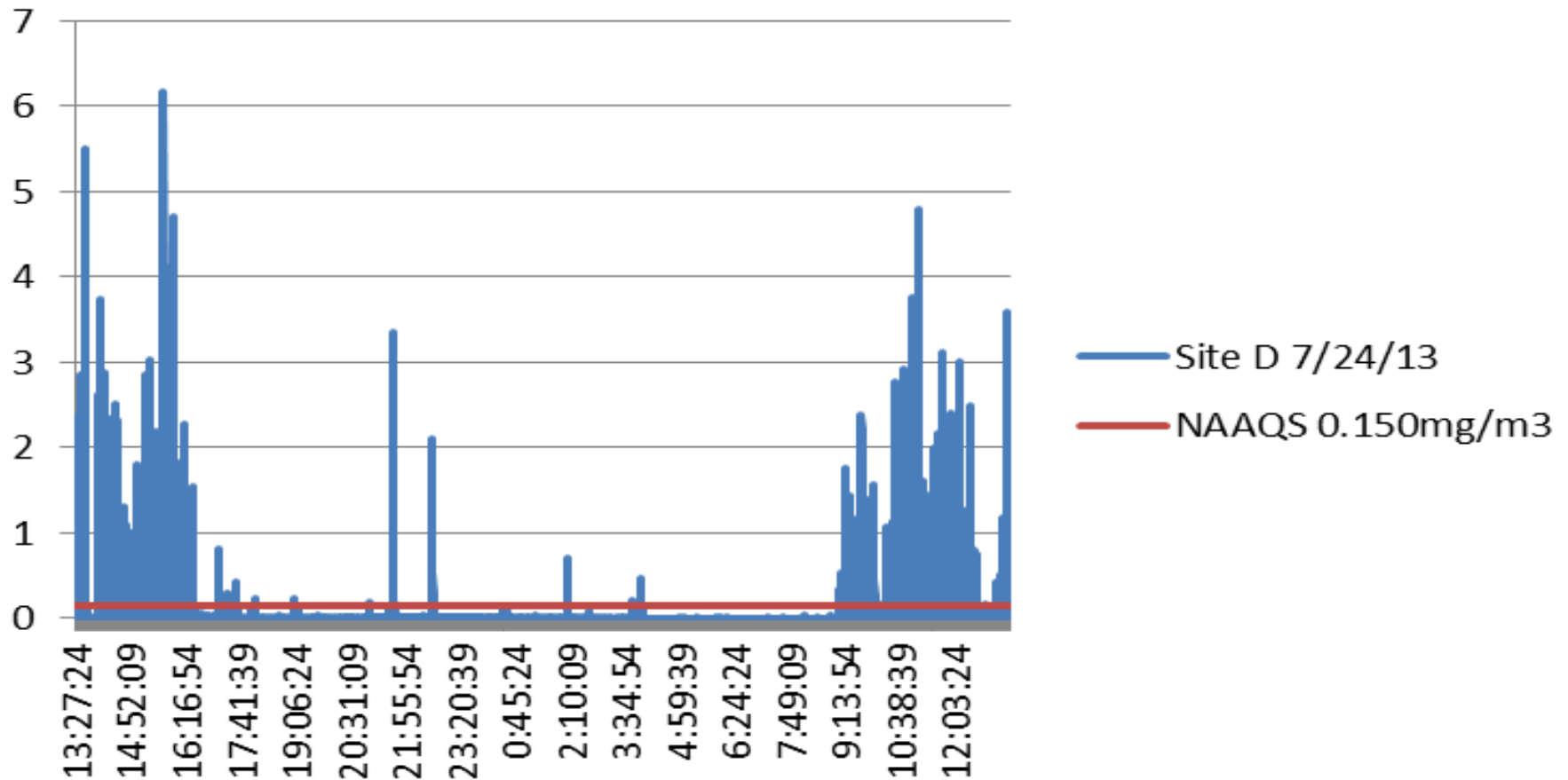


Site C Nuniaq Food Market 7/10/13



Areas of Interest

Site D Glacier View Park 7/24/13



Solutions



- *Speed limits - Speed bumps*
- *Watering roads*
- *Graveling roads*
- *Palliatives - Calcium Chloride or Molex*
- *Driver's Safety Courses*
- *Bumper sticker/signage program*
- *Community Education and Promotion*
- *Bike to work/school program*

Engaging the Community

- Advisory Committee
- Youth Activities
- Equipment Display
- Visual Results
- Microfiber towels
- Digital Stories/PSA
- Outreach Materials
- Education



Next Steps

- Watering of Roads
- Collaboration with Roads to test palliatives given our rainy weather
- Collaboration with Equipment Operators
- Community Education - Digital Story Telling with Teens
- Bike to Work/School Program



Lessons Learned

- **People like to explore equipment**
- **Airport data may need to be include**
- **Planning with alternate plans is essential**
- **Data Analysis should be done weekly**
- **Support is an essential component of the project.**

Questions???

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Thank You!

This program was not possible without the support of:

- ANTHC Collaboration Mini-Grant
- Patrick Bloecher - ANTHC Environmental Health Specialist
- Chris Fish - ANTHC
- Erin Mader - EPA Tribal Air
- Mary Anne Porter - EPA
- Alutiiq Tribe of Old Harbor