



Wood Smoke Program

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of Compliance and Enforcement**

December 3, 2014

Meeting of the Board of Directors



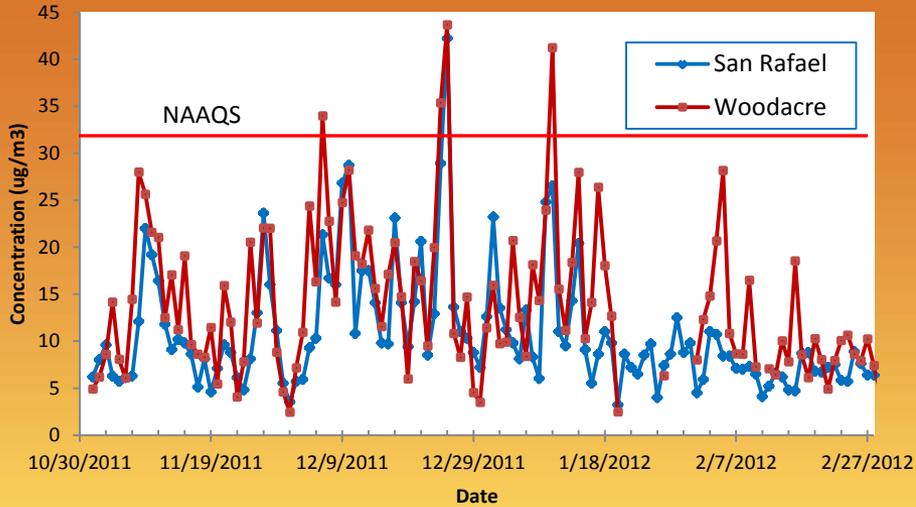
Presentation Outline

- **Local Wood Smoke Impacts**
- **Rule-Making Authority**
- **Rule Development**



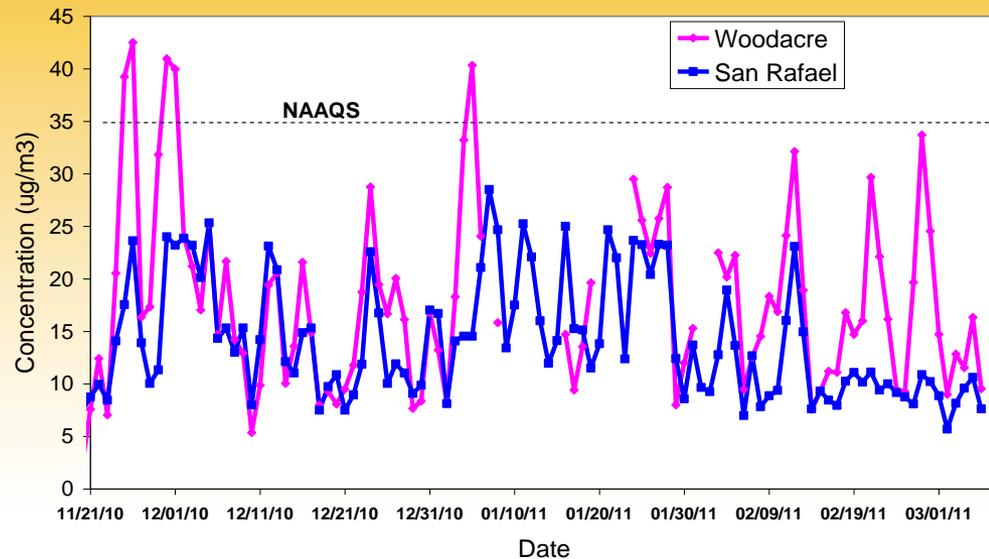


Localized Impacts



Comparison of Daily PM_{2.5} in Woodacre and San Rafael in winter 2010/2011 and 2011/2012

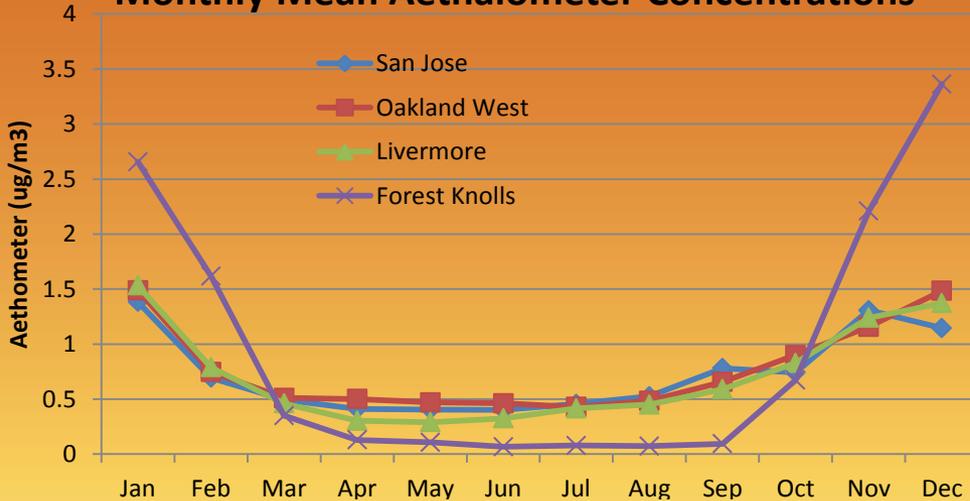
Measurements taken by Sonoma Technology Inc. (STI) in Woodacre and compared with comparable regulatory PM_{2.5} monitoring at the San Rafael Station





Wood Smoke in San Geronimo Valley

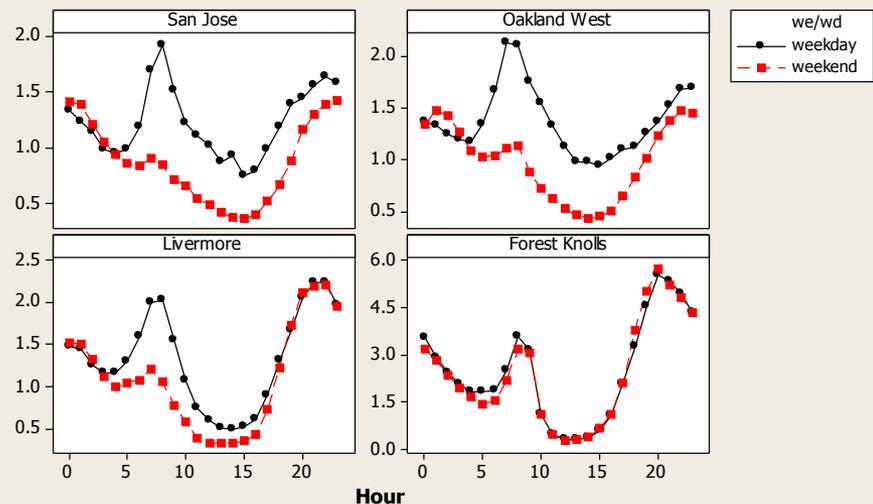
Monthly Mean Aethalometer Concentrations



This graph shows PM concentrations occur during cold months in San Geronimo Valley compared to other locations

Figure 2 graphs so the contributions associated with vehicle emissions are greater in locations other than San Geronimo Valley

Fig 2. Winter Aethalometer Means by Hour - Weekend vs. Weekday





Survey Data Results

Site	Households within 1 mile of measurement site	% Using wood for fuel	% Burning per winter night	Average hours burned	Wood burning hours/night
San Jose	9,787	0.2%	3.1%	0.8	226
Livermore	6,593	1.3%	12.4%	1.9	1,524
Oakland West	13,414	0.6%	2.9%	0.8	291
Forest Knolls	786	18.6%	30.0%	5.2	1,233

A much higher percentage of Forest Knolls residents burn on a given winter night and they tend to burn much longer, again because they are generally burning to heat rather than for ambiance.



Air District Authority

- Air District Board has no emergency or expedited rule-making authority
- No general police powers (California Constitution, Article IX, Section 7)
- Only rule-making authority granted by the legislature is for “notice and comment” rule-making
- Could adopt moratorium through notice and comment rule-making



Air District Rule Development

- Minimum requirements for rule-making include:
 - At least 30 days' notice and opportunity for public comment
 - Public Hearing
 - Board must make findings of necessity, authority, clarity, consistency, non-duplication and reference
 - Board must consider socioeconomic analysis prepared for the adoption of the rule
 - Must comply with the California Environmental Quality Act



Wood Smoke Rule Development

- Regulation 6, Rule 3: Wood-Burning Devices
 - Rule Adopted July 9, 2008
 - Other Air Quality Districts have adopted rules
 - Clarify Provisions
 - Improve Enforceability



Wood Smoke Model Ordinance

- Developed as Guidance for Cities and Counties
- Key Provisions
 - Newly Installed Wood-burning Device Must be EPA Certified
 - Voluntary Winter Spare the Air Alert Burning Prohibited at the Local Level
 - Non Certified Wood-burning Devices must be removed during remodel or sale



Rule Development Schedule

- Currently exploring possible rule amendments
- Public Workshops will be scheduled in all 9 counties targeted for February 2015
- Rule amendments to the Board of Directors for adoption targeted for end of Summer 2015

Winter PM_{2.5} Seasons

Year	Days > 35 $\mu\text{g}/\text{m}^3$	Winter Spare the Air Alerts
2011/2012	11	15
2012/2013	1	10
2013/2014	15	30
2014/2015	0	4

- Spare the Air Alert Called for: 11/9, 11/25, 11/26, 11/27
- Days > 35 $\mu\text{g}/\text{m}^3$ 24-hr NAAQS: None