

The logo of the Feather River Air Quality Management District is a circular emblem. It features a central yellow sun with rays, a blue feather, and a stylized blue river. The text "FEATHER RIVER" is arched across the top, and "AIR QUALITY MANAGEMENT DISTRICT" is arched across the bottom.

SB 656

Particulate Matter Reduction Implementation Schedule

Public Workshop

**Feather River
Air Quality Management District
July 27, 2005**

Serving Sutter and Yuba Counties

Senate Bill 656 (SB 656, Sher)

- **Approved by Governor Gray Davis (Oct 8, 2003)**
- **Requires CARB to identify, develop and adopt a list of most readily available, feasible, and cost-effective control measures to reduce PM.**
- **Proposed control measures are to be based on rules, regulations, and program existing in California as of January 1, 2004.**
- **Measures should address both directly emitted PM and precursor gases (NO_x, Sox, VOCs, & ammonia).**
- **By July 31, 2005 the District is required to adopt implementation schedules for appropriate measures.**

What is Particulate Matter (PM)?

- **PM is a mixture of solid particles and liquid droplets found in the air. PM may be produced by natural causes (e.g., pollen, ocean spray, and soil erosion) and by human activities (e.g., rock crushing, cement production, agricultural operations, fuel combustion, wood burning, and motor vehicle emissions.**
- **The CALEPA and USEPA regulate “respirable” particulates at the 10-micron level (PM10) and “fine” particles at the 2.5 micron level (PM2.5)**

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Environmental & Health Effect of PM

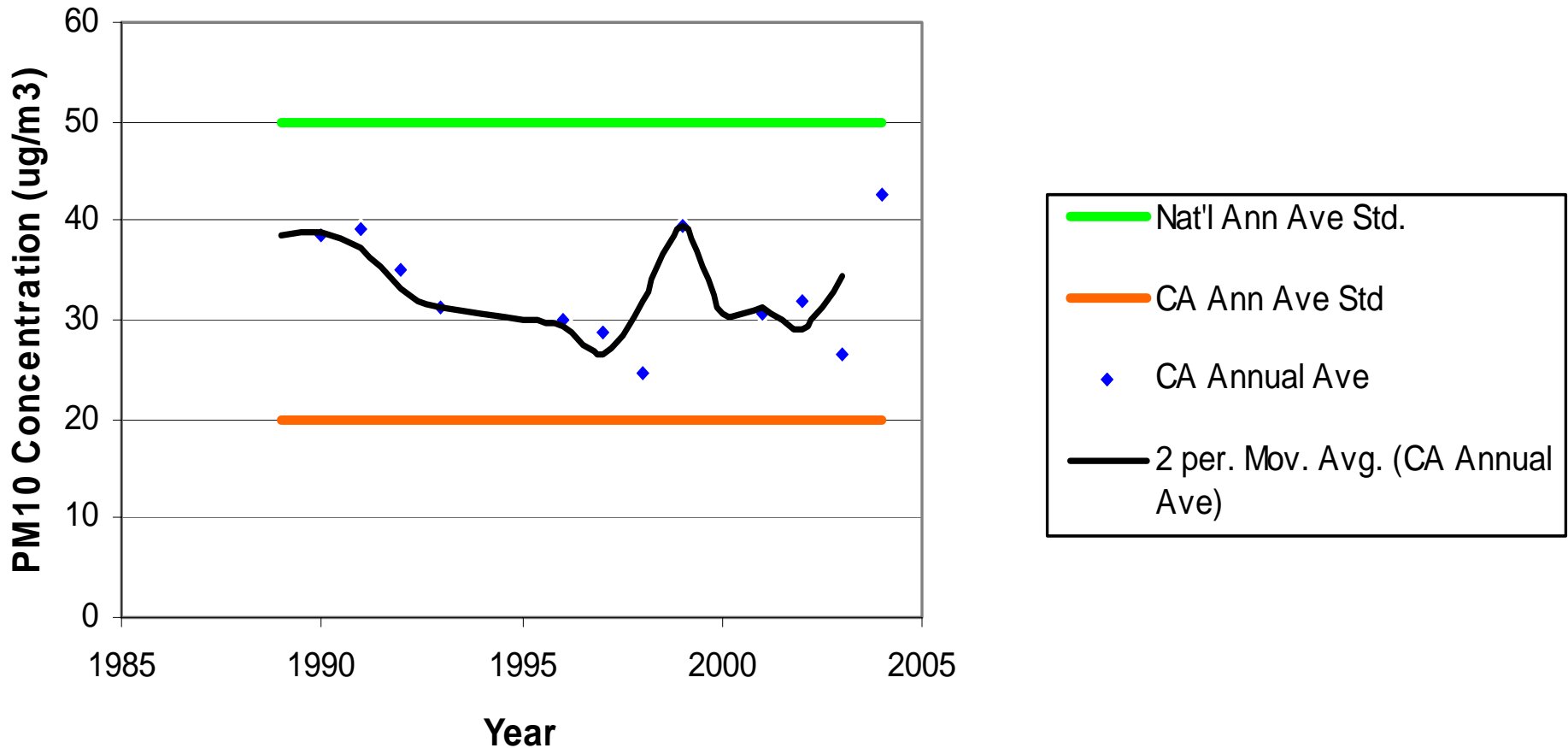
- *PM can penetrate into the sensitive regions of the respiratory tract:*
 - **Coughing**
 - **Premature death**
 - **Chronic bronchitis**
 - **Aggravated asthma**
 - **Decreased lung function**
 - **Difficult or painful breathing**
- *PM can be carried over long distances:*
 - **Depleting nutrients in soil**
 - **Making lakes and streams acidic**
 - **Affecting the diversity of ecosystem**
 - **Damaging sensitive forests and farm crops**
 - **Changing the nutrient balance in water bodies**
- *Aesthetic damage*

State and Federal PM Ambient Standards & FRAQMD's PM Attainment Status

Pollutant	Averaging Time	California Standards		Federal Standards		
		Concentration	Method	Primary	Secondary	Method
Respirable Particulate Matter (PM10)	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as primary standard	Inertial separation and gravimetric analysis
	Annual Arithmetic Mean	20 µg/m³		50 µg/m ³		
Fine Particulate Matter (PM2.5)	24 Hour	No separate state standard		65 µg/m ³	Same as primary standard	Inertial separation and gravimetric analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	15 µg/m ³		

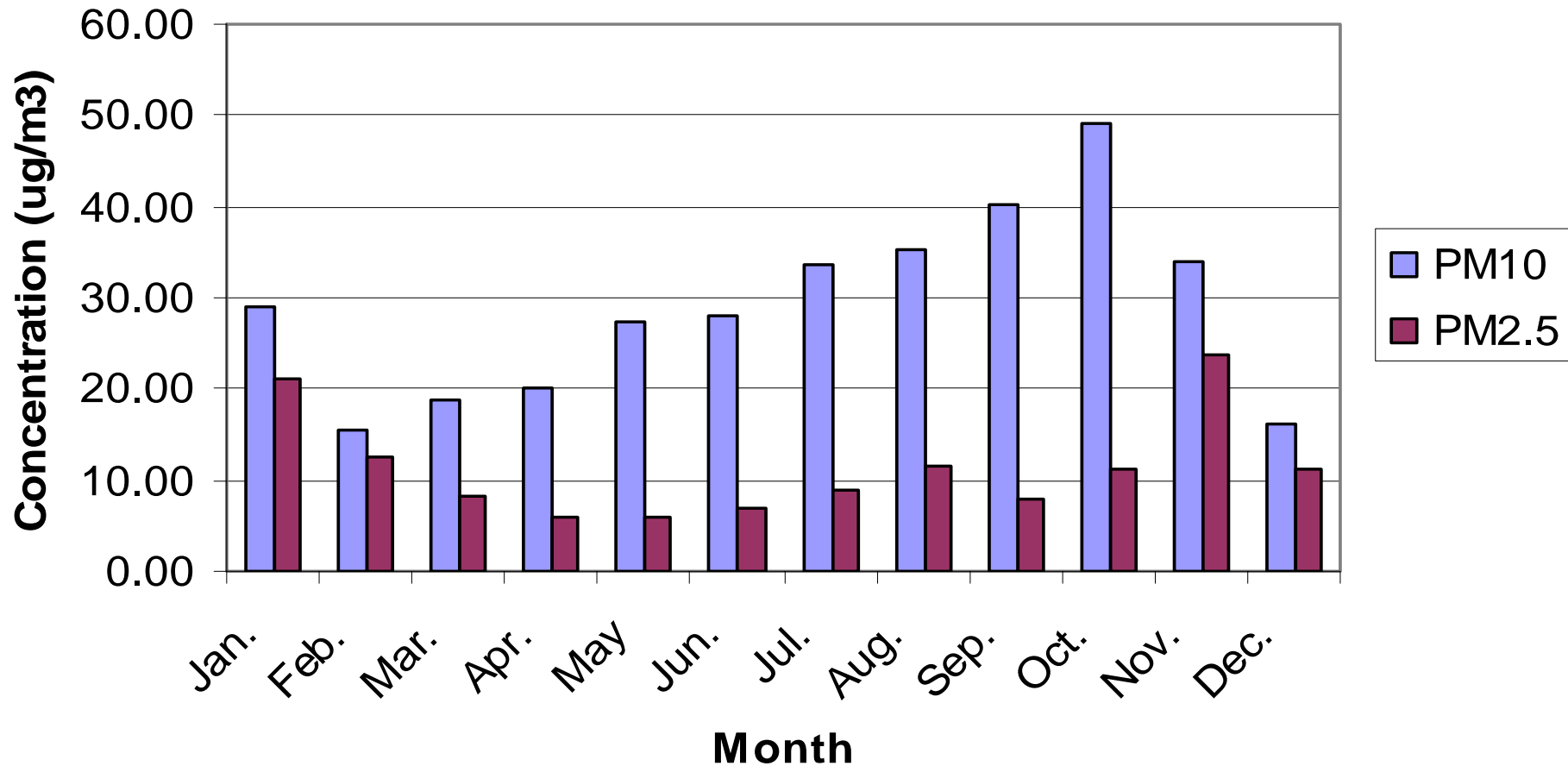
FRAQMD Ambient PM10 Concentration Trend

Yuba City PM10 Measured Annual Average Concentration
(1990-2004) (Source: CARB)

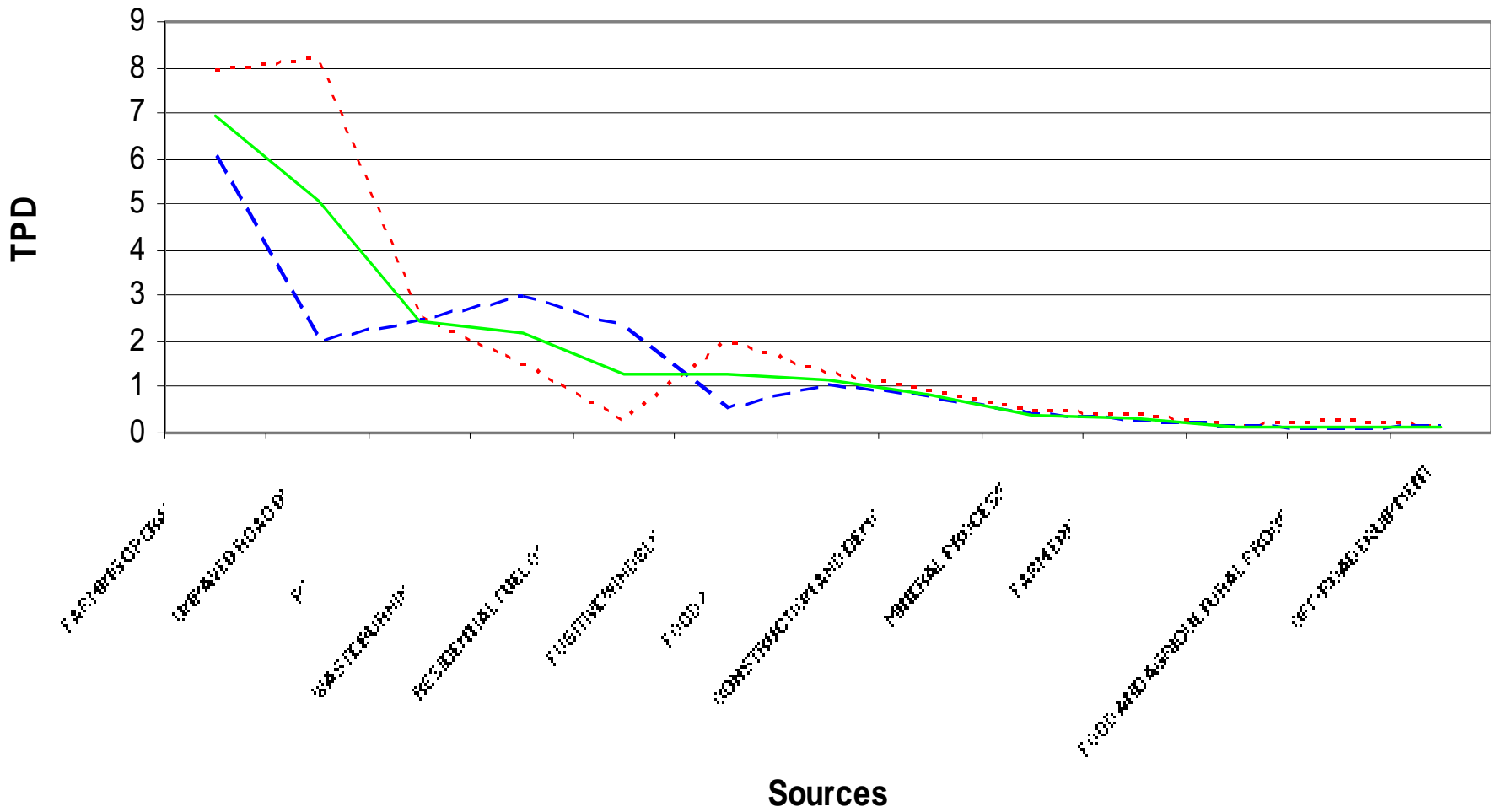


PM Profile in Urban Area of FRAQMD

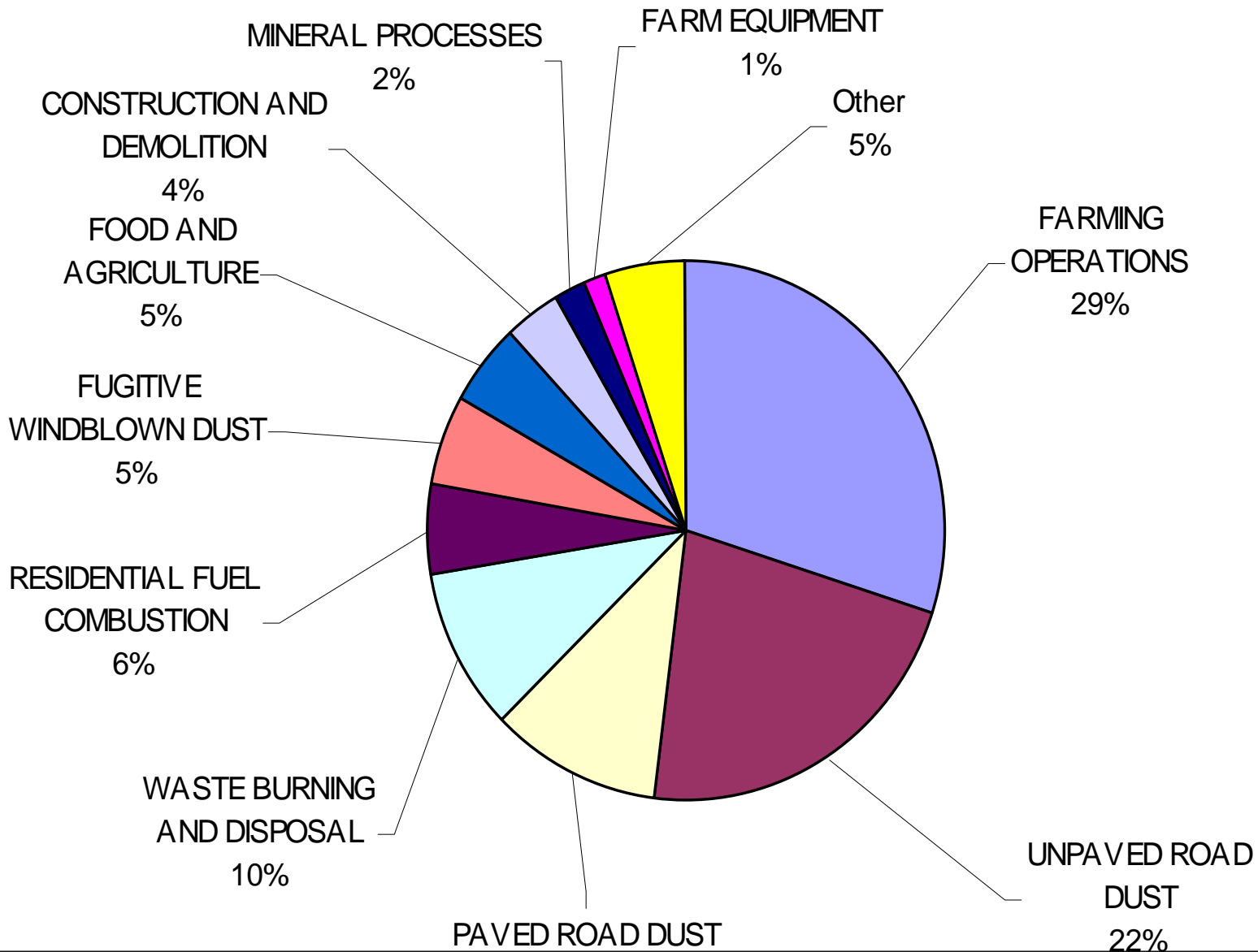
2001~2003 Measured PM Monthly Average Concentration in Yuba City
(Source: CARB)



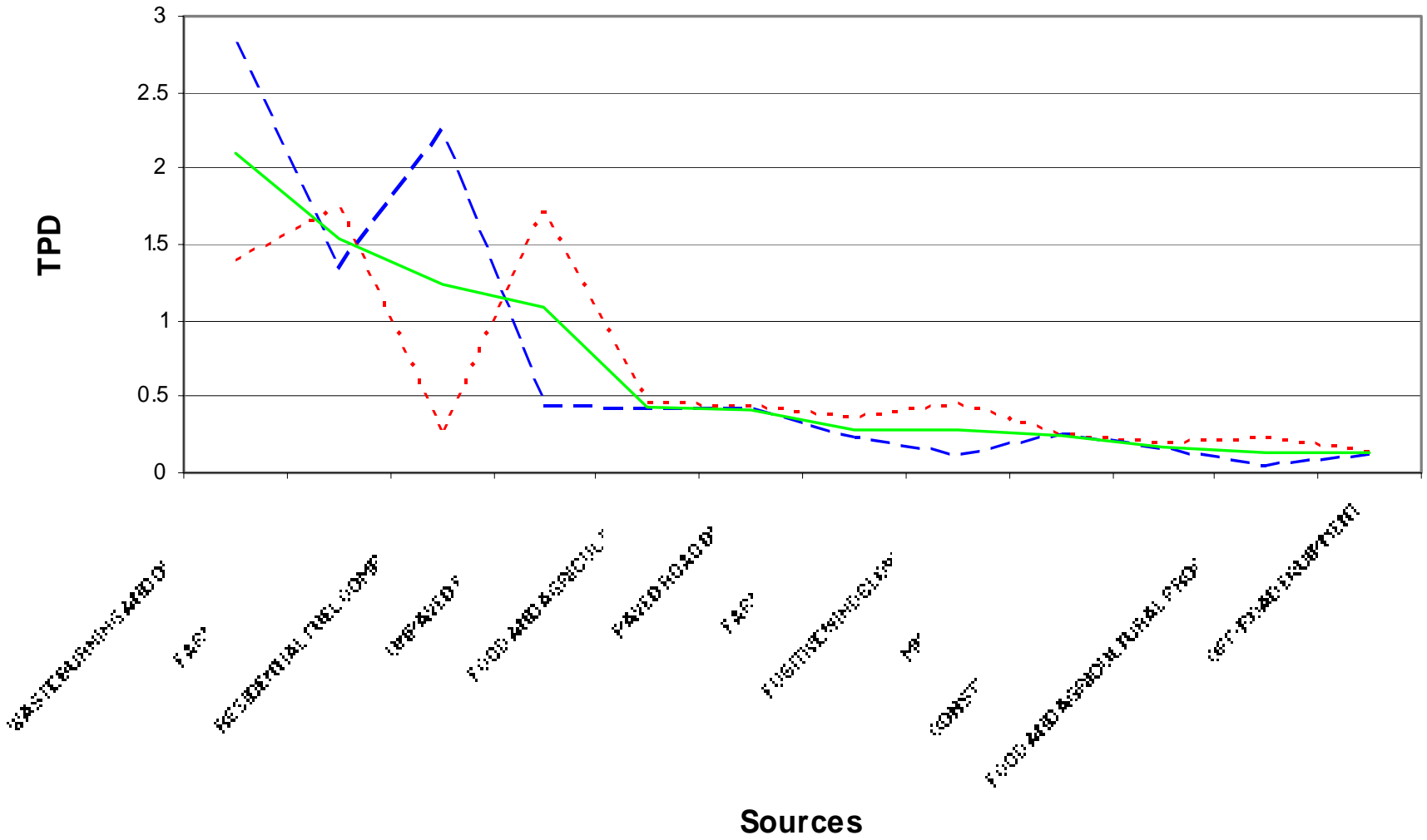
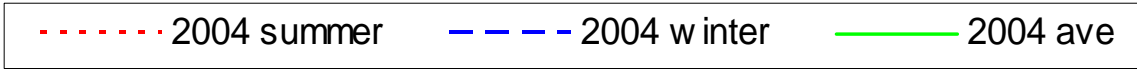
2004 PM10 Emission Sources in FRAQMD (Source: CARB)



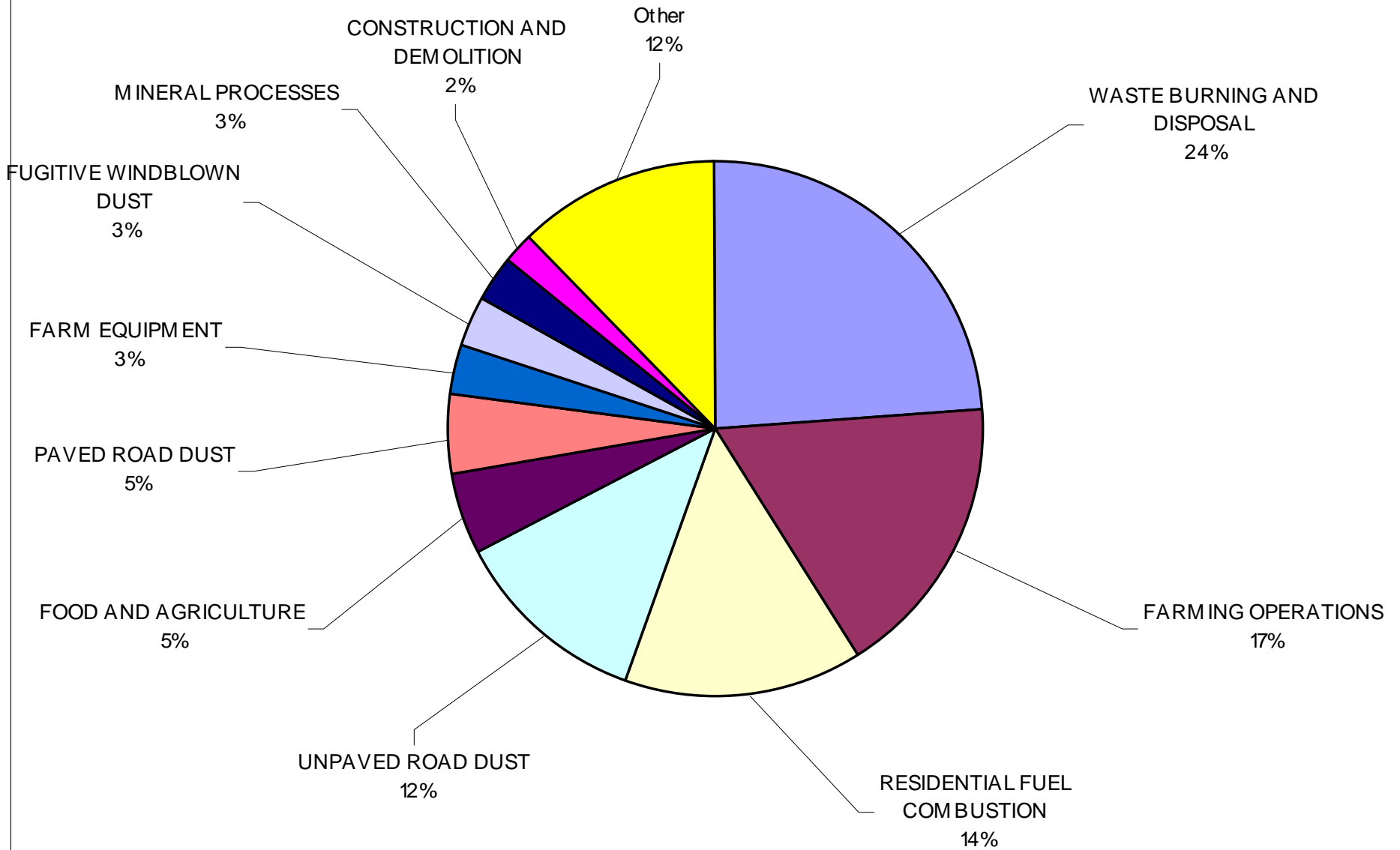
2004 Average PM10 Emission Sources in FRAQMD (Source: CARB)



2004 PM 2.5 Emission Sources in FRAQMD (Source: CARB)



2004 Average PM2.5 Emission Sources in FRAQMD (Source: CARB)



FRAQMD Current Rules Controlling PM Emissions

- ***Waste burning & disposal (Rule 2.0)***
- ***Storage and transfer of gasoline (Rule 3.8)***
- ***Storage of petroleum products (Rule 3.9)***
 - ***Architectural coating (Rule 3.15)***
 - ***Fugitive windblown dust (Rule 3.16)***
- ***Residential fuel combustion (Rule 3.17)***

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Other Programs that Also Reduce PM

- ***DMV Fund***
- ***Carl Moyer Program***
- ***Low Emission School Bus Program***
- ***Yuba Sutter Transit Ride Share Program***
- ***Yuba Sutter Transit Youth Summer Pass***

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FRAQMD's Current Exemptions on PM Control

- ***Agricultural operations (Rule 3.16 D.1)***
(soon to be removed under the requirement of SB 700)
- ***Currently unworked land designated as reclaimed for agriculture (Rule 3.16 D.2)***
- ***Unpaved roads open to public travel (this inclusion shall not apply to industrial or commercial facilities) (Rule 3.16 D.4)***

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FRAQMD's Proposed Rules and Adoption Schedules

Proposed Control Measures	Staff Evaluation on Proposed Rule	Public Review Process If Proposed by the Staff	Board Adoption & Implementation
Wood Burning Fireplaces and Wood Burning Heaters	2007	2008	2009
Residential Open Burning	2008	2009	2010
Boiler Rule	2005	2006	2006
Internal Combustion Engine Rule	2005	2006	2006
Wood Product Coating Rule	2005	2005	2005
Construction Related Fugitive Dust Control	2006	2007	2007
Agricultural Operation on High Wind Days	2016	2018	2020
Vehicle Travel on Paved Roads	2010	2013	2015
Vehicle Travel on Paved Roads	2012	2014	2016