

The Department's Strategic Vision –

Achieving and Maintaining Healthful Air Quality in
Maricopa County

The Role of Compliance Assurance

November 2011



Maricopa County
Air Quality Department

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On most days, air quality in Maricopa County is well within the national standards established to protect public health; however, on many days, air quality is failing to meet those standards and the consequences are significant. Maricopa County fails to meet the national ambient air quality standards for PM₁₀, will fail to meet the national ambient air quality standards for ozone, and has serious air quality challenges with PM_{2.5}. When dust particulate (PM₁₀) values are high, human health is adversely impacted and visibility is diminished. Asthma sufferers experience aggravated symptoms and the Valley of the Sun's grand desert vistas lose their clarity and, in severe dust events, are completely obscured from sight. Our economy can also face the effects of federal sanctions and subsequent job losses.

Although we are in attainment with the 1997 ozone standard, we continue to exceed the 75 parts per billion standard adopted in 2008. Based on EPA's recent announcement we will be in 'marginal' nonattainment for this standard and will have to develop a plan to achieve attainment in the next few years. Given the complexity of ozone formation, this will be a challenge.

During the winter holidays, weather conditions and the desire to have real wood fires in our homes combine to create our third "most serious" air quality challenge – that of small or fine particulate (PM_{2.5}). These small particles, which are produced from wood fires as well as diesel combustion, become trapped by temperature inversions and remain close to the ground triggering air quality alerts.

There are many reasons why our air quality is not what it should be. Weather plays an important role as do changing air quality standards, emissions, and economic conditions. Protecting air quality means, at its most fundamental level, protecting our health. Breathing good air means breathing healthful air and our challenge, as Maricopa County's air quality agency, is to ensure that our air is safe to breathe every day.

Mission Statement

The mission of the Air Quality Department is to provide clean air to Maricopa County residents and visitors so they can live, work and play in a healthy environment.

We achieve our mission by implementing programs that reduce the level of emissions of pollutants into the air, ensuring that those programs are followed, and measuring air quality on a daily, indeed a continuous basis. Our programs affect almost every source of emissions from vehicles to point sources to area sources.

The department has a set of comprehensive rules, authorized by statutes, which limit air emissions of specific pollutants, such as dust, oxides of nitrogen, odors, volatile organic compounds, etc., from a wide variety of sources. The expectation is that compliance with these rules will prevent an exceedance of the air quality standards or, at least, limit the degree of exceedance.

The department expects that, when a rule is adopted, compliance with the rule will start with the effective date of the rule, with continuing compliance thereafter. When establishing a rule, and especially a set of complex rules that restrict or require behaviors that are new and different, it is essential that the department ensure that the regulated communities are aware of the rule's requirements, understand what is expected to be in compliance and have adequate time to comply with the rule. Our goal, however, is always 100% compliance with each rule, every day.

Figure 1 gives an example of compliance rates for three of our dust control rules measured over the 2007 to 2010 timeframe using EPA approved "rule effectiveness" criteria. The chart shows a positive trend, but is still below our desired 100% compliance goal. Figure 2 looks at this data another way by measuring compliance with permit requirements which may include provisions from several rules (eg, VOC, dust, etc.)

Figure 1

Rule Effectiveness Studies for Rules 310, 310.01 and 316

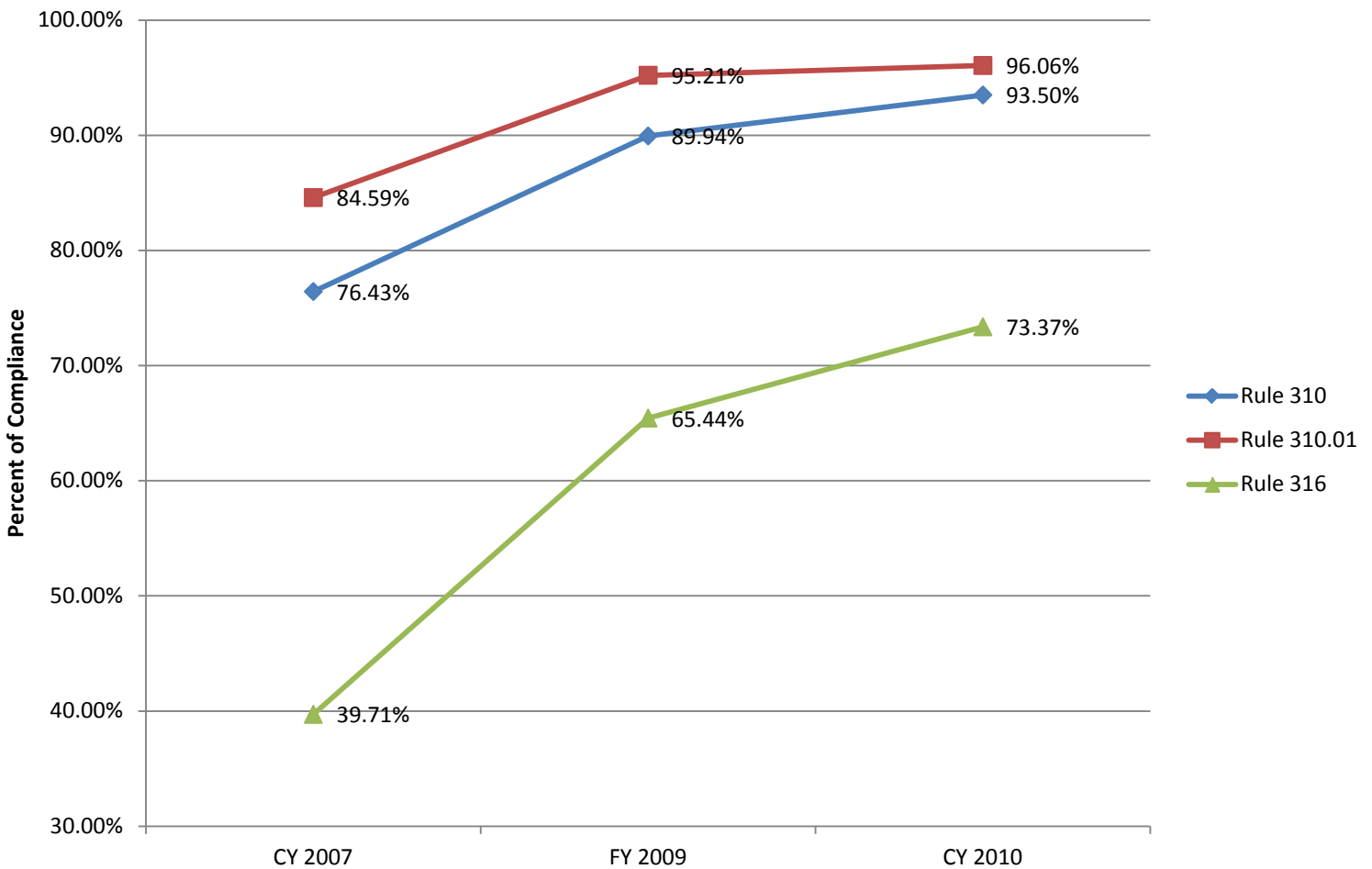
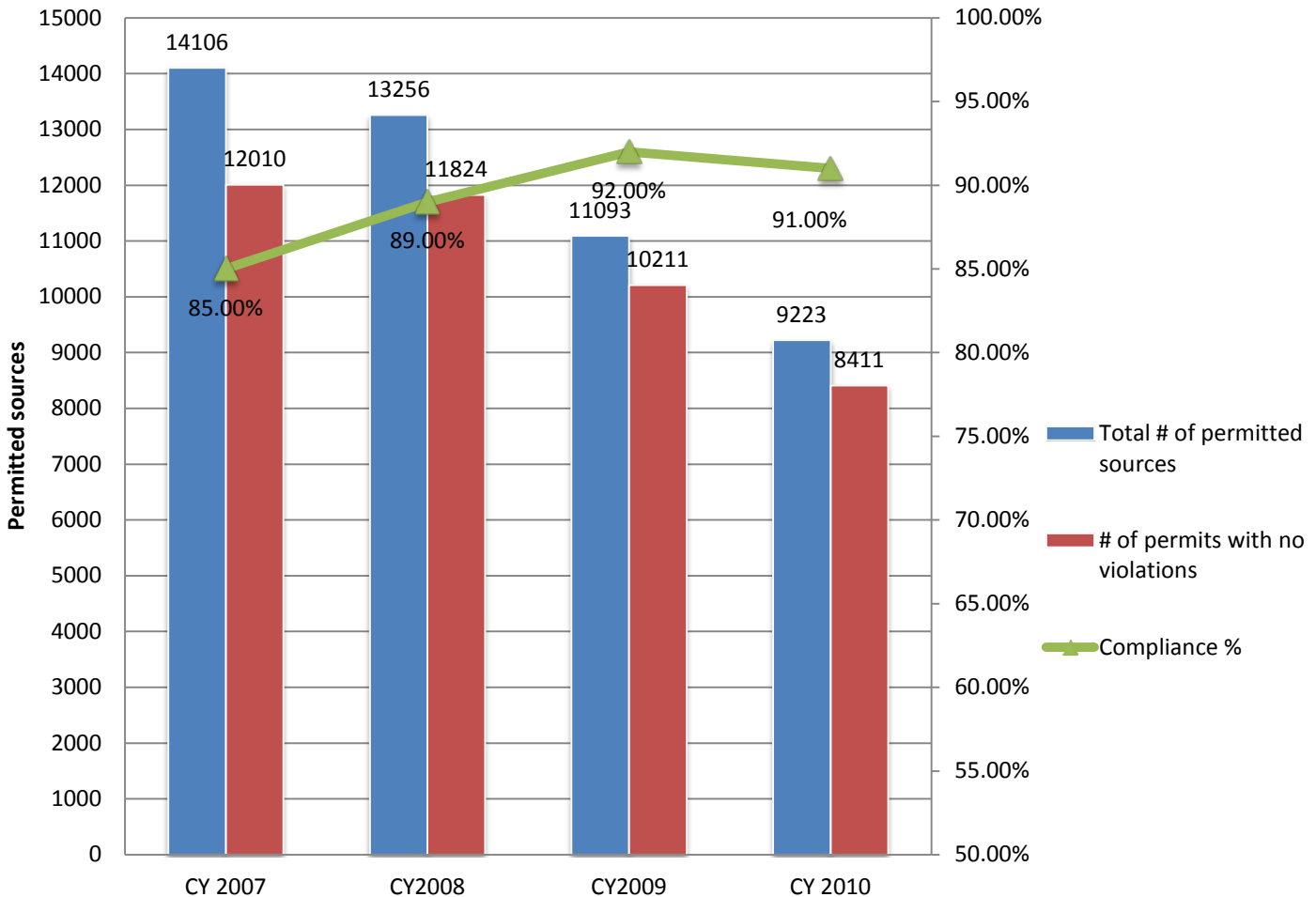


Figure 2

Permit and Compliance Rates CY2007 - 2010



Compliance is not without cost and many rules do impose considerable effort and expense to implement fully. Therefore, there may be a temptation to avoid the cost of compliance in hopes that non-compliance will not be discovered. In other instances, genuine non-awareness of the rule can lead to non-compliant conditions and, yet in other circumstances, a rule may be misunderstood resulting in substandard compliance. Crafting an approach to achieve compliance should consider each of the above causes while ensuring that all regulated individuals and businesses follow the rules in a timely and comprehensive manner.

The department strives to respond to every instance of non-compliance, since compliance with the rules is essential to achieving our mission and to ensuring a level playing field for all. However, not every instance of non-compliance needs to be met with an identical response. Rather, the department's response should be tailored to reflect the nature, scope and origin of the violation; it should be commensurate to the significance and cause of the violation. An analogy is often drawn between the various types of enforcement options and a craftsman's tools. Like a craftsman, the department must choose the right regulatory tools when responding to a violation. No matter what approach is chosen, the objective of the department is a credible and effective response that will ensure that compliance is achieved and maintained.

If compliance is an essential objective of the department, then “compliance assurance” is both the path to compliance and the knowledge which the department uses to make sure our rules are being followed. Compliance assurance is not any single method. Instead, individual tools like education, outreach, business assistance, inspections, and enforcement are used in concert to promote compliance and to ensure that the incentive to not comply is removed. Compliance with the air quality rules and regulations is, therefore, a path to follow which starts with the “will” to be in compliance.

The department intends to pursue an integrated program *using all available tools* to achieve compliance with the air quality rules and regulations in Maricopa County. Our expectation is that the rules will be followed at all times. Our task is to develop and deploy these tools efficiently and effectively. Critical to these efforts are metrics that show where we are and that can be used to establish annual goals. These metrics must be based on our rules and will utilize EPA rule effectiveness methodology.

So what does “Compliance Assurance” mean for employees of MCAQD? It means we develop clear and understandable rules consistent with our statutory authority. We write permits that reference our rules and are able to be implemented by permittees. We conduct inspections professionally, competently and consistently. We develop and deliver excellent tools and training to help people understand what is required and expected of them and we prosecute violators appropriately and professionally. In every case, we understand that we are public servants.

To conclude, the department intends to pursue a comprehensive, multi-faceted program to protect air quality in the county. Promoting compliance with respect to the Maricopa County Air Quality Rules and Regulations is critical to this mission. This compliance assurance approach will use numerous tools all with the goal of protecting and improving the air that we all breathe.