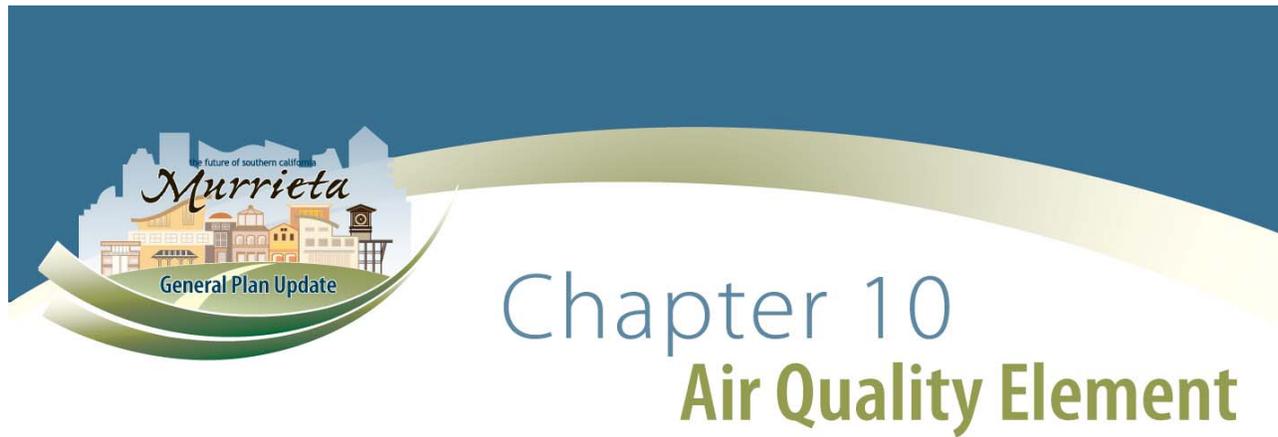




Chapter 10: Air Quality Element



10.1 INTRODUCTION

Recognizing the importance of air quality associated with the public's health and welfare and that air quality is a regional issue that extends beyond the jurisdictional boundaries of a city, Murrieta has chosen to include Air Quality as an optional Element within its General Plan. The Air Quality Element is intended to establish policy direction and implementation measures that allow the South Coast Air Basin to attain Federal and State air quality standards, as well as to protect Murrieta residents and businesses from the harmful effects of poor air quality. The Element establishes a number of programs to reduce current pollution emissions and to require new development to include measures to comply with air quality standards. This Element also contains provisions to address new air quality regulations and requirements. The City has also prepared a Climate Action Plan, which addresses global climate change issues and the reduction of greenhouse gas emissions.

The City of Murrieta is located in the South Coast Air Basin (Basin), a 10,743-square mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. Regulatory oversight for air quality in the Basin rests with South Coast Air Quality Management District (SCAQMD) at the regional level, the California Air Resources Board (CARB) at the State level and the United States Environmental Protection Agency (U.S. EPA) at the Federal level. The SCAQMD monitors air quality at 37 monitoring stations throughout the Basin. Each monitoring station is located within a Source Receptor Area (SRA). The communities within an SRA are expected to have similar climatology and ambient air pollutant concentrations. The City of Murrieta is located in SRA 26 (Temecula Valley).

10.2 AUTHORITY FOR ELEMENT

Although Air Quality is not a required element, California *Government Code* Section 65303 authorizes cities and counties to adopt “*any other elements or address any other subjects, which, in the judgment of the legislative body, relate to the physical development of the county or city.*” Once adopted, an optional element carries the same legal weight as any of the seven mandatory elements and must be consistent with all other elements. *Government Code* Section 65302(d), which provides the statutory requirements for the Conservation Element, also serves as the applicable *Government Code* section for the Air Quality Element. Further guidance is provided in the Office of Planning and Research's *2003 General Plan Guidelines* regarding the assessment of air quality impacts in General Plans.

10.3 SETTING THE CONTEXT: KEY ISSUES AND CHALLENGES

The following have been identified as key issues and challenges facing Murrieta in regards to air quality, its effects on the community, and how it can be addressed as the City continues to grow.

- **Air Quality.** Although air quality has steadily improved in the Basin in recent history, the Basin (including the City) is designated as a nonattainment area under State standards for one-hour ozone and under Federal standards is designated as nonattainment for eight-hour ozone. The Basin is nonattainment under both State and Federal standards for PM₁₀, and PM_{2.5}. Murrieta community members have identified “good air quality” as a treasure of the City, in comparison to other cities within the region. Maintaining and improving upon the existing air quality is a focus for Murrieta.
- **Land Use Patterns that Contribute to Air Pollutant Emissions.** Air pollutant emissions within the City of Murrieta are currently generated by stationary and mobile sources, with mobile sources accounting for the majority of emissions. Mobile sources of emissions refer to those moving objects that release pollution and include cars, trucks, buses, planes, trains, and motorcycles. Within the County of Riverside, vehicular sources are the largest contributor to the estimated annual average pollutant levels for reactive organic gas (ROG), carbon monoxide (CO), nitrogen oxide (NO_x), sulfur oxide (SO_x), and particulate matter less than 10 and 2.5 microns in diameter (PM₁₀, and PM_{2.5}, respectively). In Murrieta, mobile sources of emissions are primarily attributed to automobiles and trucks. Murrieta’s urban form and street layout is primarily low-density and automobile-oriented with most uses separated from each other. These land use patterns support the use of low-occupancy vehicles and higher vehicle miles traveled. Many Murrieta residents travel outside the City for services, recreation, and amenities that could be provided more broadly within the City. Murrieta community members have identified “traffic issues,” “uncontrolled expansion,” and “attracting new business and jobs” as challenges within the City.
- **Population Growth and Development.** Population growth and associated increases in vehicles and development within the City and surrounding region would further contribute to the amount of air pollutants in the City and the Basin. Murrieta community members have identified “growth,” as well as increased “traffic and transportation issues” as challenges within the City.
- **Changing Regulations and Requirements.** As concerns over air quality continue to become more heightened, the regulatory agencies continue to investigate and implement policies and measures to achieve Federal and State standards for improved air quality. New and/or revised policies and guidelines require cities to be proactive in order to respond to these changes.
- **Health Impacts of Air Quality.** Air quality can directly impact a person’s health. Sensitive populations (or sensitive receptors) are more susceptible to the effects of air



pollution than are the general population. Consideration regarding the placement of land uses is important in order to ensure that land uses that potentially emit harmful emissions are not located in proximity to sensitive receptors, such as residences, schools, playgrounds, childcare centers, athletic facilities, churches, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

10.4 SETTING THE VISION: KEY CONCEPTS AND VISION FOR GENERAL PLAN

Murrieta community members have acknowledged the City’s air quality as a treasure and identified “stewardship of our good air” as a vision for the future. Maintaining good air quality is important for the physical health of the community, as well as for the City’s economic health. Many of the visions identified by the community contribute to improved air quality. The following key concepts and vision for the General Plan directly guide the Air Quality goals and policies and are intended to respond to the key issues and challenges identified above:

- New Development and Balanced Growth
- Land Use Compatibility
- Maintain Coordination with Regulatory Agencies and Compliance with New Regulations and Requirements



Clear skies provide views of mountain ranges around Murrieta.

NEW DEVELOPMENT AND BALANCED GROWTH

Murrieta has one of the fastest growth rates in the state over the past 20 years. With opportunities for new development, it is anticipated that Murrieta will continue to grow. Focusing growth and providing a balance of land uses to meet the needs of the community will contribute to a reduction in vehicle miles traveled and increase in non-motorized transportation, reducing mobile sources emissions. This can be achieved by developing a diverse mix of uses throughout the City, attracting a variety of employment opportunities to reduce the need for residents to commute for jobs, providing neighborhood retail and services near residential uses, and providing opportunities to shop, dine and recreate in Murrieta. It can also be achieved by creating attractive and safe pedestrian and bicycle facilities and by promoting high-quality transit service. This is consistent with the priorities articulated by the community, which include economic vitality by attracting higher education, growing a base of clean industry, improving roadway networks to reduce traffic, and providing a citywide system of bicycle lanes and recreational trails that improve accessibility without a car. Balancing land uses and growth will help to reduce air pollutant emissions, while at the same time contributing to achieving a sustainable economy.



LAND USE COMPATIBILITY



Murrieta can improve air quality by reducing the need for residents to make car trips outside the City.

As Murrieta continues to grow and development becomes more concentrated, it will become increasingly important to consider land use compatibility as it pertains to sensitive populations. Sensitive populations (or sensitive receptors) are more susceptible to the effects of air pollution than the general population. Additionally, locating sensitive receptors (i.e., residences, schools, playgrounds, childcare centers, athletic facilities, churches, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes) in proximity to sources of air pollutants that emit Toxic Air Contaminants (TACs) can have significant health impacts. Land use compatibility and potential health

impacts should be considered as part of the development review process. Addressing potential air pollutant impacts on sensitive receptors can be accomplished through the initial design phase of a development project, allowing for appropriate siting and identification of mitigation that minimize health impacts prior to construction. The General Plan guides development and establishes land use policies to avoid siting sensitive sites near sources of air pollution and to protect the health and safety of the Murrieta community.

MAINTAIN COORDINATION WITH REGULATORY AGENCIES AND COMPLIANCE WITH NEW REGULATIONS AND REQUIREMENTS

Rules, regulations, and guidelines to achieve Federal and State standards for improved air quality continue to change as new information and guidance becomes available. In order to maintain compliance with regulatory requirements, Murrieta will need to be proactive and monitor any updated rules and regulations from the SCAQMD, revisions to SCAQMD's CEQA Guidelines, and periodic updates to the Air Quality Management Plan (AQMP). General Plan policies encourage regional and local efforts to address air quality.



10.5 GOALS AND POLICIES

GOAL AQ-1 Improved air quality through participation in regional and local efforts.

POLICIES

- AQ-1.1 Continue to work with the Western Riverside Council of Governments (WRCOG) Regional Air Quality Task Force to implement regional and local programs designed to meet federal, state, and regional air quality planning requirements.
- AQ-1.2 Review and update City regulations and/or requirements, as needed, based on improved technology and new regulations including updates to the Air Quality Management Plan (AQMP), rules and regulations from South Coast Air Quality Management District (SCAQMD), and revisions to SCAQMD’s CEQA Guidelines.
- AQ-1.3 Cooperate with local, regional, State, and Federal agencies to achieve better transportation facility planning and development.
- AQ-1.4 Cooperate with the State and Southern California Association of Governments (SCAG) in the implementation of SB 375 – Regional Transportation Planning, Housing, CEQA and Global Warming Emission Reduction Strategies.
- AQ-1.5 Provide public education and/or materials to educate and encourage residents and business owners to purchase/use low toxicity household cleaning products.

GOAL AQ-2 The relationship between land use and air quality is considered in policy decisions in order to protect public health and improve air quality.

POLICIES

- AQ-2.1 Locate sensitive receptors (i.e., residences, schools, playgrounds, childcare centers, athletic facilities, churches, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes) away from significant pollution sources to the maximum extent feasible.
- AQ-2.2 Avoid locating new homes, schools, childcare and elder care facilities, and health care facilities within 500 feet of freeways.
- AQ-2.3 Consider air quality impacts from both existing and new development when making siting decisions.



- AQ-2.4 Consult the California Air Resources Board's (CARB) Land Use and Air Quality Handbook and current environmental health research for the safe distances to sensitive land uses including schools, hospitals, elder and childcare facilities, or residences when new or expanded industrial land uses or other stationary sources of pollution are proposed, such as gas stations or auto body shops.
- AQ-2.5 Work with developers and/or builders of any sensitive land uses, such as hospitals, to determine compliance with California Air Resources Board (CARB) standards and to ensure any future plans or expansions are in compliance, and encourage retrofits to the facility such as plantings or air filters to improve indoor air quality, if necessary.

GOAL AQ-3 **Reduced emissions during construction activities.**

POLICIES

- AQ-3.1 Ensure that construction activities follow current South Coast Air Quality Management District (SCAQMD) rules, regulations, and thresholds.
- AQ-3.2 Ensure all applicable best management practices are used in accordance with the South Coast Air Quality Management District (SCAQMD) to reduce emitting criteria pollutants during construction.
- AQ-3.3 Require all construction equipment for public and private projects comply with California Air Resources Board's (CARB) vehicle standards. For projects that may exceed daily construction emissions established by the South Coast Air Quality Management District (SCAQMD), Best Available Control Measures will be incorporated to reduce construction emissions to below daily emission standards established by the SCAQMD.
- AQ-3.4 Require project proponents to prepare and implement a Construction Management Plan, which will include Best Available Control Measures among others. Appropriate control measures will be determined on a project by project basis, and should be specific to the pollutant for which the daily threshold is exceeded. Such control measures may include but not be limited to:
- Minimizing simultaneous operation of multiple construction equipment units.
 - Implementation of South Coast Air Quality Management District (SCAQMD) Rule 403, Fugitive Dust Control Measures.
 - Watering the construction area to minimize fugitive dust.
 - Require that off-road diesel powered vehicles used for construction shall be new low emission vehicles, or use retrofit emission control devices, such as diesel oxidation catalysts and diesel particulate filters verified by California Air Resources Board (CARB).
 - Minimizing idling time by construction vehicles.



GOAL AQ-4 Mobile source emissions are reduced by providing a balance of jobs and housing that serve the needs of the community.

POLICIES

- AQ-4.1 Cooperate with local, regional, State, and Federal agencies to reduce vehicle miles traveled (VMT) and consequent emissions through job creation.
- AQ-4.2 Improve jobs/housing balance by encouraging the development, expansion, and retention of business.
- AQ-4.3 Improve access of businesses to local institutions that provide education and job training to prepare local residents to fill the jobs local industries create.
- AQ-4.4 Encourage a mix of housing types that are affordable to all segments of the population and are near job opportunities to further reduce vehicle trips.

GOAL AQ-5 Air quality is improved through an efficient circulation system, reduced traffic congestion, and reduced vehicle miles traveled.

POLICIES

- AQ-5.1 Encourage employers to implement transportation demand management (TDM) measures, such as the following programs to reduce trips and vehicle miles traveled:
 - Transit subsidies
 - Bicycle facilities
 - Alternative work schedules
 - Ridesharing
 - Telecommuting and work-at-home programs
 - Employee education
 - Preferential parking for carpools/vanpools
- AQ-5.2 Re-designate truck routes away from sensitive land uses including schools, hospitals, elder and childcare facilities, or residences, where feasible.
- AQ-5.3 Promote use of fuel-efficient and low-emissions vehicles, including Neighborhood Electric Vehicles.
- AQ-5.4 Encourage the use of lowest emission technology buses in public transit fleets.



- AQ-5.5 Provide a preference to contractors using reduced emission equipment for City construction projects as well as for City contracts for services (e.g., garbage collection).
- AQ-5.6 Manage the municipal vehicle fleet to achieve the highest possible number of fuel-efficient and low emissions vehicles commercially available.
- AQ-5.7 Reduce industrial truck idling by enforcing California’s five (5) minute maximum law, requiring warehouse and distribution facilities to provide adequate on site truck parking, and requiring refrigerated warehouses to provide generators for refrigerated trucks.

GOAL AQ-6 Stationary source pollution (point source and area source) are minimized through existing and future regulations and new technology.

POLICIES

- AQ-6.1 The City shall continue to minimize stationary source pollution through the following:
- Ensure that industrial and commercial land uses are meeting existing South Coast Air Quality Management District (SCAQMD) air quality thresholds by adhering to established rules and regulations.
 - Encourage the use of new technology to neutralize harmful criteria pollutants from stationary sources.
 - Reduce exposure of the City’s sensitive receptors to poor air quality nodes through smart land use decisions.
- AQ-6.2 Encourage and support the use of innovative ideas and technology to improve air quality.
- AQ-6.3 Encourage non-polluting industry and clean green technology companies to locate to the City.
- AQ-6.4 Work with the industrial business community to improve outdoor air quality through improved operations and practices.
- AQ-6.5 New multi-family residential buildings and other sensitive land uses in areas with high levels of localized air pollution should be designed to achieve good indoor air quality through landscaping, ventilation systems, or other measures.
- AQ-6.6 Encourage green building techniques that improve indoor air quality, energy efficiency and conservation in buildings, and utilization of renewable energy sources.



- AQ-6.7 During the design review process, encourage the use of measures to reduce indoor air quality impacts (i.e., air filtration systems, kitchen range top exhaust fans, and low-VOC paint and carpet for new developments busy roadways with significant volumes of heavy truck traffic).

GOAL AQ-7 Particulate matter and fugitive dust emissions are reduced throughout the City.

POLICIES

- AQ-7.1 Adopt incentives, regulations, or procedures to reduce particulate matter.
- AQ-7.2 Collaborate with transportation agencies, utilities, and developers to minimize fugitive dust and emissions from construction and maintenance activities.
- AQ-7.3 Cooperate with local, regional, State, and Federal jurisdictions and/or agencies to better control fugitive dust from stationary, mobile, and area sources.
- AQ-7.4 Consider the suspension of all grading operations, not including dust control actions, at construction projects when the source represents a public nuisance or potential safety hazard due to reduced visibility on streets surrounding the property.

10.6 IMPLEMENTATION OF THE ELEMENT

To meet State and Federal air quality goals requires commitment and involvement by all jurisdictions within the South Coast Air Basin. Protecting public health is a mutual goal shared by Murrieta, as well as other jurisdictions located within the Basin. Although an individual agency does not have the authority or jurisdiction to implement air quality measures for the larger region, local governments do have the legal authority and responsibility to direct policies and actions within their community. The City of Murrieta has established a policy program that addresses air quality through new development and balanced growth; land use compatibility; and coordination and compliance with regulatory agencies and new regulations/requirements. The responsibility of implementing the goals and policies of the Air Quality Element are assigned to the City's Community Development Department, and in some instances, this authority is shared with the South Coast Air Quality Management District (SCAQMD) and the South California Association of Governments (SCAG).



This page intentionally left blank.

