

# Chapter 15

# **AIR QUALITY**

A place where all citizens enjoy opportunities to thrive in a safe, healthy, and productive community.

- The Tuolumne County Vision

#### Introduction

While the residents of Tuolumne County enjoy good air quality in contrast to urban areas of the state, the growing population of Tuolumne County is accompanied by typical sources of air pollution: on and off road vehicles, commercial and industrial facilities, open burning, and indoor wood heading stoves. County air quality is further diminished by the transport of pollutants from the more industrialized and populated San Joaquin Valley and Bay Area. As these upwind areas continue to address their air quality issues their impacts on

#### **Purpose**

Plan is to reduce emissions and improve air quality, as clean air is a fundamental natural resource that the citizens of and visitors to Tuolumne County deserve and expect.

Tuolumne County will be reduced. The County must also incorporate into its plans the measures necessary to facilitate growth while protecting the public health and ambient air quality.

# **Overarching Vision**

OAV1. Promote development in Tuolumne County that reflects the values and vision of the community and implement the latest legal, statutory, scientific, and technical changes and advances.

OAV2. Achieve, enable and preserve maximum flexibility within the constraints of state and federal law and an ever-evolving legal, cultural and environmental landscape.

OAV3. Recognize that the County has a unique role to collaborate with special districts/stakeholders within the County to promote the delivery of efficient and cost effective public services.



# **GOAL 15A:**

Develop and sustain an air quality program that protects the public health and ambient air quality while encouraging the economic vitality of local businesses and industries.

# POLICIES & IMPLEMENTATION PROGRAMS

**Policy 15.A.1:** Accurately determine and fairly mitigate the local and regional air quality impacts of land development projects proposed in the County.

#### **Implementation Program**

- **15.A.a** Coordinate and cooperate with other local, regional and State agencies to develop a consistent and effective approach to air quality planning and management.
- **Policy 15.A.2:** Integrate land use planning, transportation planning, and air quality planning to make the most efficient use of public resources and to create a more livable environment.

#### **Implementation Programs**

- **15.A.b** Require an air quality impact evaluation for development projects, as necessary, pursuant to the requirements of the Tuolumne County Air Pollution Control District. The air quality impact evaluation shall be the responsibility of the developer or proponent and prepared by a qualified consultant at their expense.
- **15.A.c** -- Require project applicants to identify alternatives or amendments for proposed projects that would reduce emissions of air pollutants, if air pollutant emissions exceed applicable air quality standards. Require all air quality mitigation to be real, feasible, cost effective, and enforceable.
- **15.A.d** Require project applicants to implement innovative mitigation measures that include best available control technology and/or best management practices as needed to reduce air quality impacts.
- **15.A.e** Require proposed new development projects to analyze their contribution to increased traffic and to implement, as needed, transportation demand management measures or other improvements to reduce vehicle miles traveled, which, in turn, reduces air pollutant and GHG emission.
- **15.A.f** Work cooperatively with major local employers to offer incentives and services which decrease auto commuting, such as telecommuting and alternative work schedules.
- **Policy 15.A.3:** Avoid converting land designated for industrial use to non-industrial land use designations where that change would result in land where sensitive receptors could be located in in proximity to industry, and avoid converting land to industrial use where the existing surrounding land uses support sensitive receptors, to minimize the health risks to the public resulting from criteria and toxic air pollutant emissions.

#### **Implementation Programs**

**15.A.g** - Establish buffer zones to separate new residential development projects and projects categorized as sensitive receptors (e.g., hospitals, convalescent homes, day care facilities, and schools) from existing industrial sites and/or sites that emit criteria and toxic or air pollutants.



**15.A.h** - Establish buffer zones to create an adequate distance between new air pollution point and area sources such as industrial, manufacturing and processing facilities, and residential areas and sensitive receptors.

**15.A.i** – Avoid locating new urban residential development projects and other projects categorized as sensitive receptors (e.g., hospitals, convalescent homes, day care facilities, and schools) within 500 feet from industrial sites and/or sites that may emit criteria toxic or air pollutants. If a 500 foot buffer is not feasible, compliance with Implementation Program 15.A.j shall be required.

**15.A.j** – When a criteria pollutant or toxic generating source (e.g., industrial sources, distribution centers, dry cleaning facilities, gas stations, major roadways, large combustion sources, etc.) and potentially other sources of diesel particulate matter and other known carcinogens is proposed within 500 feet of a sensitive receptor, require the project applicant to retain a qualified consultant to prepare a health risk assessment in accordance with CARB and the Office of Environmental Health and Hazard Assessment requirements to determine the exposure of project residents/occupants/users to stationary and mobile air quality polluters prior to issuance of a demolition, grading, or building. The health risk assessment shall be submitted to the County for review and approval. The County shall implement any approved health risk assessment recommendations to a level which would not result in exposure of sensitive receptors to substantial pollutant concentrations.

#### **Policy 15.A.4:** Reduce air emissions from project construction.

#### **Implementation Program**

**15.A.k** - Require the following dust-control measures during all project-related site preparation activities (i.e., grading, excavation and associated materials hauling) to reduce air quality impacts:

- Exposed soils shall be watered as needed to control wind borne dust.
- Exposed piles of dirt, sand, gravel, or other construction debris shall be enclosed, covered and/or watered as needed to control wind borne dust.
- Vehicle trackout shall be minimized through the use of rumble strips and wheel washers for all trucks and equipment leaving the site.
- Sweep streets once a day if visible soil materials are carried to adjacent streets (recommend water sweepers with reclaimed water).
- On-site vehicle speed shall be limited to 15 miles per hour on unpaved surfaces.
- Loads on all haul/dump trucks shall be covered securely or at least two feet of freeboard shall be maintained on trucks hauling loads.
- Construction equipment shall be maintained and tuned at the interval recommended by the manufacturers to minimize exhaust emissions.
- Equipment idling shall be kept to a minimum when equipment is not in use.
- Construction equipment shall be in compliance with the California Air Resources Board off-road and portable equipment diesel particulate matter regulations.

Alternative construction-related air quality measures may be adopted by the decision-making body after considering a project-specific air quality analysis prepared by a qualified consultant.



# **GOAL 15B:**

Reduce traffic congestion, vehicle trips and their emissions through more efficient infrastructure, low emission technologies, and support for trip reduction programs.

### POLICIES & IMPLEMENTATION PROGRAMS

**Policy 15.B.1:** Create a land use pattern that will encourage people to walk, bicycle or use public transit for a significant number of their daily trips.

#### **Implementation Programs**

- **15.B.a** Encourage pedestrian oriented development to reduce the use of motor vehicles.
- **15.B.b** Establish an incentive program to encourage transit-oriented development, including, where appropriate, exempting such projects from traffic impact mitigation fees.
- **15.B.c** Support the development of high density housing, commercial and offices along high priority transit routes.
- **15.B.d** Work with Caltrans, transit providers, and property owners to identify park-and-ride sites with convenient access to public transit.
- **15.B.e** Seek funding for park-and-ride facilities and develop, or support the development of such facilities, within the identified communities, and permit park-and-ride facilities in commercial and industrial zoning districts.
- **15.B.f** Create additional, and improve existing, car-sharing and ride-sharing programs and promote them within the region.
- **15.B.g** Work with Caltrans and other agencies to establish transportation demand management programs, such as park-and-ride facilities, transit incentives and telecommute centers.
- **15.B.h** Aggressively identify and utilize State and federal grants to support and implement transportation control measures, including on-road and off-road mobile source emissions reduction strategies.
- **Policy 15.B.2:** Develop a modern transportation system that incorporates alternative transportation modes into the system design.

**GOAL 15C:** 

Reduce criteria and toxic air pollutant emissions from woodburning fireplaces and other wood-burning appliances.

# POLICIES & IMPLEMENTATION PROGRAMS

**Policy 15.C.1:** Require development to reduce criteria and toxic air pollutant emissions from the use of wood burning appliances, through low emission technology, and maximize the use of energy conservation and clean or renewable energy sources.

#### **Implementation Programs**



- **15.C.a** Continue to require the installation of only low-emitting, EPA-certified fireplaces, woodstoves or pellet stoves where such wood-burning devices are desired by the developers and/or future homeowners, except in areas with poor air quality or dispersion, or where otherwise prohibited.
- **15.C.b** Develop and implement a wood burning stove and fireplace change-out program to install non-wood burning, or EPA-certified wood burning, stoves and fireplaces.

# GOAL 15D:

Maintain an effective open burning enforcement program that protects the public health and welfare while recognizing the need to reduce vegetative matter for the purposes of fire hazard reduction, wildland vegetation management and forest ecosystem management.

#### POLICIES & IMPLEMENTATION PROGRAMS

**Policy 15.D.1:** Work closely with federal, state and local agencies to minimize the emissions and smoke impacts from fire hazard reduction and forest management burn activities and during wildfire episodes.

#### **Implementation Programs**

- **15.D.a** Encourage alternative methods of disposal of vegetative matter, including, but not limited to, composting, mulching or transporting the material to biomass facilities that are capable of generating energy and designed to reduce emissions.
- **15.D.b** Establish community programs that reduce residential open burning, such as local pickup and delivery of vegetative matter to biomass facilities or composting projects that do not create a public nuisance.
- **15.D.c** Provide public information through the media and the Air Pollution Control District Burn Day Phone Recorder regarding best management practices for burning, burn permit requirements, burn hours and local and state fire restrictions.
- **15.D.d** Where feasible and appropriate, require alternative methods of fire hazard reduction on private and public lands, including, but not limited to, selective thinning of timber stands, mastication, and chipping of slash for fuel in biomass facilities.
- **15.D.e** Coordinate and cooperate with other agencies to plan and monitor prescribed fires to minimize the impact on public health, taking into consideration the size and location of the proposed burn and the expected weather conditions, among other parameters.
- **15.D.f** Participate in committees and task forces that are established for the purpose of developing and discussing smoke management policies and practices necessary to meet the requirements of the Clean Air Act while effectively managing the resources of California.
- **15.D.g** Enforce applicable Federal, State and local open burning regulations related to agriculture, wildland vegetation management, forest management, range improvement and fire hazard reduction.
- 15.D.h Aggressively identify and utilize State and federal grants for fuel reduction projects. Work with local stake holders, fire agencies, and land managers in providing increased opportunities for burning or to help apply alternatives to burning.

