

V 1.4

Design principal entry corridors to the University Community as landscaped amenities that provide view of the Town Center, UC Merced campus core, Sierra Nevada, and other visual assets. *(Imp 2.4, 2.5)*

MAINTAINING LEVELS OF ILLUMINATION THAT ENHANCE COMMUNITY CHARACTER

Goal

Levels of nighttime illumination that enhance Community quality, while maintaining public safety.

Objective

V 2.0

To control levels of nighttime illumination and glare to sustain opportunities for night-sky viewing and the region's rural character, without sacrificing public safety.

Policies

V 2.1

Require that outdoor lighting fixtures be located and designed to minimize ambient levels of illumination and glare, while providing adequate illumination for public safety. *(Imp 2.5)*

V 2.2

Require that outdoor lighting fixtures be located and designed to prevent spillover and impacts on adjoining properties (e.g., use of fixtures that cast their illumination downward and in a contained area). *(Imp 2.5, 2.8)*

V 2.3

Require that buildings in the University Community minimize the use of surface materials and glazing that are highly reflective of sunlight and nighttime outdoor lighting and/or place such materials in locations that will not impact adjoining uses. *(Imp 2.5, 2.8)*

V 2.4

Establish standards to minimize the levels of illumination of outdoor signs in the University Community. *(Imp 2.5)*

AIR QUALITY

STATUTORY REQUIREMENTS

The California Government Code does not mandate air quality issues be addressed by local planning efforts. As such, the existing Merced County General Plan includes only one Open Space/Conservation goal related to air quality: "...to properly manage air resources." Regionwide air quality planning efforts are conducted under the Health and Safety Code (§§40910–40930) by the local air quality management district (San Joaquin Valley Unified Air Pollution Control District, or SJVUAPCD) in conjunction with transportation planning agencies. Congestion management programs are required by the Government Code (§65089) to address air quality consequences of regional transportation planning efforts.

Merced County is encouraged by the SJVUAPCD to use its land use and transportation planning authority to help achieve region-wide air quality goals. The *Air Quality Guidelines for General Plans*, published in 1994 by the SJVUAPCD, provides assistance for developing policies and implementation strategies at the local level

that will be consistent with regional efforts to manage air quality. These guidelines recommend incorporating air quality considerations when developing land use and transportation plans. Examples of this would be considering transportation demand (and motor vehicle emissions) that would be associated with land use patterns or considering land use compatibility of agricultural and industrial uses with uses that would be "sensitive" to localized air quality conditions. These guidelines provide the basis for the air quality components of the University Community Plan.

OVERVIEW

Merced County recognizes that land use planning, and the associated transportation and energy demand, affects management of air resources. This chapter of the UCP identifies policies to improve coordination and planning for air resources. To the extent that compact development and efficient infrastructure can be encouraged, indirect air quality benefits may be realized through implementation of the UCP. Opportunities to integrate land use and transportation planning are especially relevant in reducing trip lengths and improving the potential for transit service, thereby reducing the reliance on the automobile and emissions from motor vehicle use. Goals and strategies recommended by the San Joaquin Valley Unified Air Pollution Control District and included in the UCP are used to align the UCP with regional air quality planning efforts through land use and transportation planning. Additionally, strategies are identified for managing other specific activities that cause air pollution (e.g., energy use, wood-burning appliances, and agricultural activities).

GOALS, OBJECTIVES, AND POLICIES

A COMMUNITY THAT VALUES ITS HEALTHY AIR QUALITY

Goal

Effective communication, cooperation, and coordination for the development and operation of community and regional air quality programs.

Objective

AQ 1.0

To coordinate air quality management efforts for the University Community with regional programs and those of neighboring jurisdictions, especially the City of Merced.

Policies

AQ 1.1

Determine air quality effects of projects using analysis methods and significance criteria recommended by the SJVUAPCD. This would help to ensure impacts identified during CEQA review are consistently and fairly mitigated with feasible, implementable, and cost effective strategies. (*Imp 2.3, 3.3*)

AQ 1.2

Work with the City of Merced and other jurisdictions and agencies to address cross-jurisdictional and regional transportation and air quality issues. Encourage staff planners to participate in activities of neighboring jurisdictions and regional agencies. The aim would be to examine congestion in other jurisdictions caused by University Community projects, effects of projects on viability of regional transit and pedestrian-oriented projects, progress of jurisdictions to construct segments of regional bikeway plans, proposed land use or circulation changes that would alter traffic flow or increase urban sprawl in jurisdictions. (*Imp 3.3*)

Goal

Improve air quality through land use patterns that minimize the generation of pollutants and reduce vehicle trips.

Objective

AQ 2.0

To integrate air quality goals with proper land use and transportation planning and management.

Policies

AQ 2.1

Integrate planning efforts by considering air quality when planning land use and transportation systems and considering air quality and mobility when reviewing any proposed change to the land use pattern. (*Imp 2.4, 2.5, 2.3*)

AQ 2.2

Develop a congestion management plan to reduce motor vehicle trips, as defined by the UCP's transportation policies (T 7.1 to 7.4). These include policies for (a) the provision of grid streets and "flexible corridors" that provide travel-mode options and future capacity and (b) street design standards for bicyclists, pedestrians, and traffic calming. (*Imp 2.5, 4.1*)

AQ 2.3

Establish land use pattern, densities, and pedestrian-enhanced infrastructure, in accordance with Land Use policies, to encourage the use of alternative transportation modes and reduce the length and number of motor vehicle trips. These encompass policies to manage the density and intensity of development; develop a planned "heart" of the community, parklands, pedestrian-

oriented mixed use districts, neighborhood convenience commercial, neighborhood schools, and centralized large-scale commercial and office uses in village centers with appropriate transportation services; as well as compact and orderly outward expansion of contiguous development and infrastructure through “land use phasing” and urban limit lines. *(Imp 2.4, 2.5)*

AQ 2.4

Design streetscapes, housing, and village centers to improve access by pedestrians and bicyclists. Land Use policies provide a structure that maximizes pedestrian activity and transit use. *(Imp 2.5)*

AQ 2.5

Implement a transportation infrastructure that provides opportunity for reduced trip lengths and minimized new trips while anticipating a multi-modal system in accordance with Transportation policies. This should include internal and regional public transit systems, supporting transit infrastructure and amenities (shelters, benches, bus turnouts, route signs, park and ride lots, and so on), multi-modal connections to regional transportation system (airports and passenger rail facilities), a comprehensive system of bikeways, required bicycle storage and parking at appropriate sites, and infrastructure for telecommunication facilities. *(Imp 2.4, 2.5, 4.1)*

AQ 2.6

Require the installation of electrical outlets in residential, commercial, and industrial buildings to support the use of low emission landscape and property maintenance equipment. *(Imp 2.5, 2.6)*

AQ 2.7

Comply with SJVUAPCD published guidelines and mitigation measures for analyzing and mitigating air quality impacts related to development of the University Community. *(Imp 2.3, 3.3)*

Objective

AQ 3.0

To properly manage land use to minimize health risks from air contaminants and exposure to airborne nuisances, such as odors and dust.

Policies

AQ 3.1

Adequately separate or buffer sensitive uses from sources of odors and dust. Require new point sources of pollution, including sources of odors and dust, to be located an adequate distance from sensitive receptors. *(Imp 2.3, 2.5)*

Objective

AQ 4.0

To minimize air pollutants from energy generation and consumption.

Policies

AQ 4.1

Implement energy conservation policies defined in the Energy policy section of the University Community Plan. *(Imp 2.5, 2.7)*

Objective

AQ 5.0

To minimize air emissions attributable to construction activities.

Policies

AQ 5.1

Implement measures to reduce dust and particulates created during construction activities including limiting traffic on unpaved roads, installing erosion control measures to prevent silt runoff onto public roads, use of wheel washers for construction vehicles, installation of windbreaks, suspension of excavation and grading during high winds, and similar techniques. *(Imp 2.7, 2.10)*

AQ 5.2

Promote the use of alternative fuel construction equipment, where feasible, and the use of low emission on-site stationary equipment. *(Imp 2.7)*

AQ 5.3

Limit the hours of operation of heavy-duty construction equipment and the amount of construction equipment in use at any time. *(Imp 2.7)*

AQ 5.4

Curtailed construction activities during periods of high ambient air pollution concentration. *(Imp 2.7)*

Objective

AQ 6.0

To minimize particulate matter, toxic air contaminants, and other pollutants resulting from wood-burning appliances in residential development.

Policies

AQ 6.1

Require the installation of low emitting, EPA-certified wood-burning appliances, natural gas fireplaces, or pellet stoves in residential developments when such heating units are incorporated in any development. *(Imp 2.6)*

Objective

AQ 7.0

To improve air quality by the procurement and operation of low emission vehicles.

Policies

AQ 7.1

Identify opportunities for and encourage the procurement and use of alternative fuel vehicle fleets by large employers in the University Community and UC Merced. Collaborate with UC Merced on an alternative fuel vehicle shuttle system servicing the campus, the University Community, and the City of Merced. *(Imp 4.9)*

SURFACE WATER AND GROUNDWATER QUALITY

CONTEXT

Surface and ground water quality is affected by the discharges into the water body from storm drainage, urban and agricultural run-off, the re-use of treated wastewater, water recharge programs, and urban use activities (e.g., pollutants from industrial manufacturing). Water quality standards are imposed by regional, state, and federal agencies.

The comprehensive policies for the development of an integrated water infrastructure system (potable, wastewater, and stormwater) have been drafted with the objective for compliance with applicable standards.

GOALS, OBJECTIVES, AND POLICIES

Goal

Surface and groundwater that meets or exceeds regional, state, and federal water quality standards.

Objective

W 1.0

To manage urban development, infrastructure, and agricultural uses in the University Community to assure compliance with surface and ground water quality standards.

Policies

W 1.1

Implement Integrated Water Infrastructure policies for the management of stormwater, urban, and agricultural runoff, manufacturing and other urban use pollutants, the re-use of treated wastewater, urban and agricultural pesticides, construction practices, and other functions of the University Community that do not substantially reduce the quantity or quality of surface waters or the groundwater supply and meet regional, state, and federal standards.