# 3.2 Air Quality

## Environmental Setting

### PHYSICAL SETTING

#### Regional Air Quality

Atmospheric conditions such as wind speed, wind direction, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants. Daly City is within the boundaries of the San Francisco Bay Area (Bay Area) Air Basin. The Bay Area Air Basin encompasses the nine-county region, including all of Alameda, Contra Costa, Santa Clara, San Francisco, San Mateo, Marin and Napa counties, and the southern portions of Solano and Sonoma counties. The climate of the Bay Area is determined largely by a high-pressure system that is almost always present over the eastern Pacific Ocean off the West Coast of North America. During winter, the Pacific high-pressure system shifts southward, allowing storms to pass through the region. During summer and fall, emissions generated within the Bay Area can combine with abundant sunshine under the restraining influences of topography and subsidence inversions to create conditions that are conducive to the formation of photochemical pollutants, such as ozone, and secondary particulates, such as nitrates and sulfates.

Regionally, the Pacific high-pressure system influences the wind patterns of California. The prevailing winds are westerly along the San Francisco Peninsula's west coast. Annual average wind speeds range from five to 10 mph throughout the Peninsula, with the tendency for higher wind speeds to be found along the western coast. On the west side of the Santa Cruz Mountains, which extend up the center of the Peninsula, lie coastal towns and cities, such as Half Moon Bay, Pacifica, and Daly City, which, due to coastal ocean upwelling and northwest winds, experience a high incidence of cool, foggy weather in the summer.[1]

The Bay Area Air Quality Management District (BAAQMD) and the California Air Resources Board (ARB) operate a regional monitoring network that measures the ambient concentrations of six criteria air pollutants: ozone, carbon monoxide (CO), nitrogen dioxide ($NO_2$), sulfur dioxide ($SO_2$), particulate matter (PM), and lead. Table 3.2-1 shows trends in regional exceedances of the federal and state ozone standards. Because of the number of exceedances, ozone is the pollutant of greatest concern in the Bay Area. Bay Area counties experience most ozone exceedances during the period from April through October. The San Francisco Bay Area Basin is also currently designated as a

[1] Bay Area Air Quality Management District, Subregions, available at http://www.baaqmd.gov/Divisions/Communications-and-Outreach/Air-Quality-in-the-Bay-Area/Bay-Area-Climatology/Subregions/Peninsula.aspx, Accessed August 2012.

nonattainment area for State PM-10 and PM-2.5 standards but is listed as unclassified under federal PM-10 and PM-2.5 standards.[2] Table 3.2-2 shows trends in regional exceedances of the federal and state particulate matter standards. The standards for CO, $NO_2$, $SO_2$, and lead are being met in the Bay Area.

Transportation, including automobiles, trucks, transit buses, and other modes, is a major contributor to regional air pollution. Although stationary sources were once important contributors to both regional and local pollution, their role has been substantially reduced in recent years by pollution control programs and decline of heavy manufacturing in the Bay Area. Further progress in air quality improvement now focuses heavily on transportation sources.

**TABLE 3.2-1: SUMMARY OF OZONE DATA FOR THE SAN FRANCISCO BAY AREA AIR BASIN (1999-2010)**

| | *Number of Day Standard Exceeded [1]* | | | *Ozone Concentration [2] (ppm )[3]* | | |
|---|---|---|---|---|---|---|
| *Year* | *State 1 Hour* | *State 8 Hour* | *Federal 1 Hour* | *Federal 8 Hour* | *Maximum 1 Hour* | *Maximum 8 Hour* |
| Standard (ppm) | 0.09 | 0.070 | 0.12 | 0.075 | - | - |
| 2010 | 8 | 11 | 3 | 9 | **0.15** | **0.098** |
| 2009 | 11 | 13 | 0 | 8 | **0.12** | **0.095** |
| 2008 | 9 | 20 | 2 | 12 | **0.14** | **0.111** |
| 2007 | 4 | 9 | 0 | 2 | **0.12** | **0.091** |
| 2006 | 18 | 22 | 1 | 17 | **0.13** | **0.106** |
| 2005 | 9 | 9 | 0 | 5 | **0.12** | **0.090** |
| 2004 | 7 | 13 | 0 | 7 | **0.11** | **0.085** |
| 2003 | 19 | 20 | 1 | 12 | **0.13** | **0.101** |
| 2002 | 16 | 19 | 2 | 15 | **0.16** | **0.106** |
| 2001 | 15 | 21 | 1 | 13 | **0.13** | **0.102** |
| 2000 | 12 | 17 | 3 | 9 | **0.15** | **0.115** |
| 1999 | 20 | 28 | 3 | 18 | **0.16** | **0.123** |

1 This table summarizes the data from all of the monitoring stations within the Bay Area.

2 Values shown in bold type are in excess of applicable standard.

3 ppm = parts per million.

Source: California Air Resources Board, Air Quality Trend Summaries, 2010, http://www.arb.ca.gov/adam/trends/trends1.php, 2012.

[2] California Air Resources Board, The California Almanac of Emissions and Air Quality, 2009.

**TABLE 3.3-2: SUMMARY OF DATA FOR PARTICULATE MATTER IN THE SAN FRANCISCO BAY AREA AIR BASIN (1999-2010)**

| | *PM 2.5* | | | | *PM 10* | | |
|---|---|---|---|---|---|---|---|
| *Year* | *State Annual Average* | *High 24-Hour National Average* | *Estimated Days Exceeding Federal Standard* | *Estimated Days Exceeding Federal Standard* | *Estimated Days Exceeding State Standard* | *State 3-year Average* | *High 24-Hour National Average* |
| Standard [2] (ug/m3) [1] | 12 | 35 | - | - | - | 20 | 150 |
| 2010 | 9.0 | **46.5** | 3.2 | 0 | 6.1 | **24** | 69.1 |
| 2009 | 10.1 | **45.7** | 5.4 | 0 | 6.5 | **24** | 51.7 |
| 2008 | **13.7** | **60.3** | 7.1 | 0 | 18.3 | **24** | 78.2 |
| 2007 | **13.3** | **57.5** | 12.1 | 0 | 24.2 | **35** | 72.9 |
| 2006 | 12.4 | **75.3** | 8.6 | 0 | 77.3 | **35** | 103.9 |
| 2005 | 11.8 | **54.6** | 16.2 | 0 | 23.2 | **26** | 78.1 |
| 2004 | **12.7** | **73.7** | 14.4 | 0 | 24.5 | **26** | 62.8 |
| 2003 | 11.7 | **56.1** | 10.6 | 0 | 18.2 | **28** | 58.3 |
| 2002 | **14.0** | **76.7** | 27.3 | 0 | 24.4 | **30** | 79.8 |
| 2001 | **12.9** | **107.5** | 18.2 | 0 | 47.6 | **30** | 108.9 |
| 2000 | **13.6** | **67.2** | 31.0 | 0 | 42.4 | **30** | 76.1 |
| 1999 | * | **90.5** | 27.3 | 0 | 36.8 | **30** | 119.2 |

1 ug/m3 = micrograms per cubic meter

2 Values shown in bold type are in excess of applicable standard.

Source: California Air Resources Board, Air Quality Trend Summaries, 2010, http://www.arb.ca.gov/adam/trends/trends1.php.

## City of Daly City Air Quality

Daly City is located within the Peninsula subregion of the Bay Area Air Basin. This region extends from the area northwest of San José to the Golden Gate. The Santa Cruz Mountains extend up the center of the peninsula, with elevations exceeding 2,000 feet at the south end, and gradually decreasing to 500 feet elevation in South San Francisco, where they terminate. The presence of the mountains results in significant differences in climate and air quality on their east and west slopes.

Air pollution potential in the Peninsula subregion varies significantly by location. Potential is highest along the southeastern portion of the peninsula because this area is most protected from the high winds and fog, the emission density is relatively high, and pollutant transport from upwind sites is

possible. Further north in San Francisco pollutant emissions are high, but winds are generally fast enough to carry the pollutants away before they can accumulate.[3]

Existing and probable future air quality conditions in Daly City can generally be inferred from ambient air quality measurements conducted by BAAQMD at its nearby monitoring stations. The monitoring stations closest to the city are in San Francisco and Redwood City. Table 3.2-3 shows a five-year summary of monitoring data for ozone, respirable particulate matter (PM10), and fine particulate matter (PM2.5) from these stations. The table also compares these measured concentrations with federal and State air quality standards.

**TABLE 3.2-3: AIR QUALITY DATA SUMMARY FOR THE DALY CITY AREA (2007-2011)**

| | | *Monitoring Data by Year [1]* | | | | |
|---|---|---|---|---|---|---|
| *Pollutant* | *Standard [2]* | *2007* | *2008* | *2009* | *2010* | *2011* |
| Ozone – San Francisco | | | | | | |
| Highest 1-hour Average (ppm)[3] | | 0.060 | 0.082 | 0.072 | 0.079 | 0.070 |
| Days over State Standard | 0.09 | 0 | 0 | 0 | 0 | 0 |
| Highest 8-hour Average (ppm) | | 0.053 | 0.066 | 0.057 | 0.051 | 0.054 |
| Days over State Standard | 0.07 | 0 | 0 | 0 | 0 | 0 |
| Days over National Standard | 0.075 | 0 | 0 | 0 | 0 | 0 |
| Ozone – Redwood City | | | | | | |
| Highest 1-hour Average (ppm) [3] | | 0.077 | 0.082 | 0.072 | **0.113** | 0.076 |
| Days over State Standard | 0.09 | 0 | 0 | 0 | 2 | 0 |
| Highest 8-hour Average (ppm) [3] | | 0.070 | 0.070 | 0.063 | **0.077** | 0.062 |
| Days over State Standard | 0.07 | 0 | 0 | 0 | 1 | 0 |
| Days over National Standard | 0.075 | 0 | 0 | 0 | 1 | 0 |
| PM10 – San Francisco | | | | | | |
| Highest 24-hour Average (ug/m3)[3] | | **69.8** | 41.3 | 36.0 | 39.7 | 45.6 |
| Estimated Days over State Standard | 50 | 12 | 0 | 0 | * | 0 |
| Estimated Days over National Standard | 150 | 0 | 0 | 0 | 0 | 0 |
| State Annual Average (ug/m3)[3] | 20 | **21.8** | **21.9** | 18.6 | * | 19.5 |
| PM10 – Redwood City | | | | | | |
| Highest 24-hour Average (ug/m3)[3] | | **55.8** | 41.0 | * | * | * |
| Estimated Days over State Standard | 50 | 6 | * | * | * | * |
| Estimated Days over National Standard | 150 | 0 | * | * | * | * |
| State Annual Average (ug/m3)[3] | 20 | 19.6 | * | * | * | * |

[3] Bay Area Air Quality Management District, Subregions, available at http://www.baaqmd.gov/Divisions/Communications-and-Outreach/Air-Quality-in-the-Bay-Area/Bay-Area-Climatology/Subregions/Peninsula.aspx, Accessed August 2012.

**TABLE 3.2-3: AIR QUALITY DATA SUMMARY FOR THE DALY CITY AREA (2007-2011)**

| | | *Monitoring Data by Year [1]* | | | | |
|---|---|---|---|---|---|---|
| *Pollutant* | *Standard [2]* | *2007* | *2008* | *2009* | *2010* | *2011* |
| PM2.5 – San Francisco | | | | | | |
| Highest 24-hour Average (ug/m3)[3] | | **45.2** | 39.2 | **49.8** | * | * |
| Estimated Days over National Standard | 35 | 5.1 | * | * | 3.2 | 2 |
| State Annual Average (ug/m3)[3] | 12 | 8.8 | 11.6 | * | * | * |
| PM2.5 – Redwood City | | | | | | |
| Highest 24-hour Average (ug/m3)[3] | | **45.6** | **36.0** | 34.2 | 32.7 | 24.0 |
| Estimated Days over National Standard | 35 | 2.9 | 0 | 0 | 1 | 1 |
| State Annual Average (ug/m3)[3] | 12 | 8.2 | 10.5 | * | * | * |

1 Values shown in bold type are in excess of applicable standard.

2 Generally, state standards are not to be exceeded and federal standards are not to be exceeded more than once per year.

3 ppm = parts per million; ug/m3 = micrograms per cubic meter.

* There was insufficient (or no) data available to determine value.

Source: California Air Resources Board, ADAM Air Quality Data Statistics, http://www.arb.ca.gov/adam, Accessed August, 2012.

## Criteria Air Pollutants

As required by the federal Clean Air Act passed in 1970, the U.S. EPA has identified six criteria air pollutants that are pervasive in urban environments and for which state and national health-based ambient air quality standards have been established. EPA calls these pollutants criteria air pollutants because the agency has regulated them by developing specific public health- and welfare-based criteria as the basis for setting permissible levels. Additionally, in April 2009, EPA released an Endangerment Finding that greenhouse gases (GHGs) significantly contribute to air pollution, likely triggering the process under the Clean Air Act for developing National Ambient Air Quality Standards for GHGs and establishing emissions standards for stationary and mobile sources. GHGs are addressed in greater length in Chapter 3.6: Energy and Greenhouse Gases.

***Ozone.*** Short-term exposure to ozone can irritate the eyes and cause constriction of the airways. Besides causing shortness of breath, ozone can aggravate existing respiratory diseases such as asthma, bronchitis, and emphysema. Ozone is not emitted directly into the atmosphere, but is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROGs) and nitrogen oxides (NOx). ROGs and NOx are known as precursor compounds for ozone. Significant ozone production generally requires ozone precursors to be present in a stable atmosphere with strong sunlight for approximately three hours. Ozone is a regional air pollutant because it is not emitted directly by sources, but is formed downwind of sources of ROGs and NOx under the influence of wind and sunlight. Ozone concentrations tend to be higher in the late spring, summer, and fall, when the long sunny days combine with regional subsidence inversions to create conditions conducive to the formation and accumulation of secondary photochemical compounds, like ozone.

***Carbon Monoxide (CO).*** Ambient CO concentrations normally are considered a local effect and typically correspond closely to the spatial and temporal distributions of vehicular traffic. Wind speed and atmospheric mixing also influence CO concentrations. Under inversion conditions, CO concentrations may be distributed more uniformly over an area that may extend some distance from vehicular sources. When inhaled at high concentrations, CO combines with hemoglobin in the blood and reduces the oxygen-carrying capacity of the blood. This results in reduced oxygen reaching the brain, heart, and other body tissues. This condition is especially critical for fetuses and people with cardiovascular diseases, chronic lung disease, or anemia.

CO concentrations have declined dramatically in California due to existing controls and programs, and most areas of the state have no problem meeting the carbon monoxide state and federal standards. CO measurements and modeling were important in the early 1980s when CO levels were regularly exceeded throughout California. In more recent years, CO measurements and modeling have not been a priority in most California air districts, including the San Francisco Bay Area Air Basin, due to the retirement of older polluting vehicles, fewer emissions from new vehicles, and improvements in fuels.

***Nitrogen Dioxide ($NO_2$).*** $NO_2$ is a reddish brown gas that is a by-product of combustion processes. Automobiles and industrial operations are the main sources of $NO_2$. $NO_2$ may be visible as a coloring component of a brown cloud on high pollution days, especially in conjunction with high ozone levels.

$NO_2$ poses an air quality concern because it acts as a respiratory irritant and is a precursor of ozone. It is a major component of the group of gaseous nitrogen compounds commonly referred to as NOx. NOx are produced by fuel combustion in motor vehicles, industrial stationary sources (such as industrial activities), ships, aircraft, and rail transit. Typically, nitrogen oxides emitted from fuel combustion are in the form of nitric oxide (NO) and $NO_2$. NO is often converted to $NO_2$ when it reacts with ozone or undergoes photochemical reactions in the atmosphere. Therefore, emissions of $NO_2$ from combustion sources are typically evaluated based on the amount of NOx emitted from the source.

***Sulfur Dioxide ($SO_2$).*** $SO_2$ is a combustion product of sulfur or sulfur-containing fuels such as coal and oil, which are restricted in the Bay Area. $SO_2$ is also a precursor to the formation of atmospheric sulfate and particulate matter, and it contributes to potential atmospheric sulfuric acid formation that could precipitate downwind as acid rain. Its health effects include breathing problems and may cause permanent damage to lungs.

***Particulate Matter (PM10 and PM2.5).*** PM10 and PM2.5 consist of particulate matter that is 10 microns or less in diameter and 2.5 microns or less in diameter, respectively. (A micron is one-millionth of a meter). PM10 and PM2.5 represent fractions of particulate matter that can be inhaled into the air passages and the lungs and can cause adverse health effects. Some sources of particulate matter, such as wood burning in fireplaces, demolition, and construction activities, are more local in nature, while others, such as vehicular traffic, have a more regional effect. Very small particles of certain substances (e.g., sulfates and nitrates) can cause lung damage directly, or can contain adsorbed gases (e.g., chlorides or ammonium) that may be injurious to health. Particulates also can damage materials and reduce visibility. Large dust particles (diameter greater than 10 microns) settle out rapidly and are easily filtered by human breathing passages. This large dust is of more concern as a

soiling nuisance rather than a health hazard. The remaining fraction, PM10 and PM2.5, are a health concern particularly at levels above the federal and state ambient air quality standards. PM2.5 (including diesel exhaust particles) is thought to have greater effects on health, because these particles are so small and thus, are able to penetrate to the deepest parts of the lungs. Scientific studies have suggested links between fine particulate matter and numerous health problems including asthma, bronchitis, acute and chronic respiratory symptoms such as shortness of breath and painful breathing. Recent studies have shown an association between morbidity and mortality and daily concentrations of particulate matter in the air. Children are more susceptible to the health risks of PM10 and PM2.5 because their immune and respiratory systems are still developing.

Mortality studies since the 1990s have shown a statistically significant direct association between mortality (premature deaths) and daily concentrations of particulate matter in the air. Despite important gaps in scientific knowledge and continued reasons for some skepticism, a comprehensive evaluation of the research findings provides persuasive evidence that exposure to fine particulate air pollution has adverse effects on cardiopulmonary health.[4] The ARB has estimated that achieving the ambient air quality standards for PM10 could reduce premature mortality rates by 6,500 cases per year (ARB, 2002).

***Lead.*** Leaded gasoline (currently phased out), paint (houses, cars), smelters (metal refineries), and manufacture of lead storage batteries have been the primary sources of lead released into the atmosphere. The phase-out of leaded gasoline in California resulted in decreasing levels of atmospheric lead. Lead has a range of adverse neurotoxic health effects; children are at special risk. Some lead-containing chemicals cause cancer in animals.

## Toxic Air Contaminants (TACs)

TACs are non-criteria air pollutants that are airborne substances that are capable of causing short-term (acute) and/or long-term (chronic or cancer causing) adverse human health effects (i.e., injury or illness). TACs include both organic and inorganic chemical substances. TACs may be emitted from a variety of common sources including gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations. The current California list of TACs includes approximately 200 compounds, including particulate emissions from diesel-fueled engines.

## Odorous Emissions

Though offensive odors from stationary sources rarely cause any physical harm, they remain unpleasant and can lead to public distress generating citizen complaints to local governments. The occurrence and severity of odor impacts depend on the nature, frequency and intensity of the source; wind speed and direction; and the sensitivity of receptors. Generally, increasing the distance between the receptor and the source will mitigate odor impacts.

## Sensitive Receptors

Some persons are considered more sensitive than others to air pollutants. Reasons for heightened sensitivity may include pre-existing health problems, proximity to emissions source, and duration of

[4] C. Arden Pope III and Douglas W. Dockery, Health Effects of fine Particulate Air Pollution: Lines that Connect, Air & Waste Management Association, 2006, available at http://www.noaca.org/pmhealtheffects.pdf, Accessed August 2012.

exposure to air pollutants. Land uses such as schools, hospitals, and convalescent homes are considered to be relatively sensitive to poor air quality because the very young, the old, and the infirm are more susceptible to respiratory infections and other air-quality-related health problems than the general public. Residential areas are also sensitive to poor air quality because people usually stay home for extended periods of time. ARB identifies sensitive land uses as residences, schools, day care centers, playgrounds and medical facilities.

### Local Sources of Air Pollution

Interstate 280 (I-280) traverses the entire length of the city from north to south, and is a primary automobile route between San Francisco and the Peninsula/South Bay. I-280 is the only roadway in Daly City with average daily trip volumes of over 100,000.[5] Other major roadways running through the city include State Route 35 (Skyline Boulevard), State Route 1, and State Route 82 (Mission Street). Many of these major roadways in Daly City carry regional traffic due to the city's location on the Peninsula. Heavy industrial and manufacturing uses are generally not present in Daly City.

## REGULATORY SETTING

### Federal Regulations and Authorities

The Federal Clean Air Act (FCAA) was enacted in 1970 and was last amended in 1990 (United States Code Title 42, Chapter 85). Legislation passed since then has made several minor changes. The FCAA requires the U.S. Environmental Protection Agency (EPA) to identify National Ambient Air Quality Standards (NAAQS or national standards) to protect public health and welfare. National standards have been established for all the criteria air pollutants described above. Table 3.2-4 shows current national and State ambient air quality standards and provides a brief description of principal sources for each pollutant. Pursuant to the 1990 Federal Clean Air Act Amendments (FCAAA), the EPA classifies air basins (or portions thereof) as "attainment" or "nonattainment" for each criteria air pollutant, based on whether or not the NAAQS had been achieved.

The FCAA requires each state to prepare an air quality control plan referred to as the State Implementation Plan (SIP). The FCAAA added requirements for states containing areas that violate the NAAQS to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The EPA has responsibility to review all state SIPs to determine if they conform to the mandates of the FCAAA and will achieve air quality goals when implemented. If the EPA determines a SIP to be inadequate, it may prepare a Federal Implementation Plan (FIP) for the nonattainment area and may impose additional control measures. Failure to submit an approvable SIP or to implement the plan within mandated timeframes can result in sanctions being applied to transportation funding and stationary air pollution sources in the air basin.

### State Regulations and Authorities

The EPA has delegated the authority to implement many of the federal programs to the states while retaining an oversight role to ensure that the programs continue to be implemented. In California,

[5] Kittelson & Associates, 2012.

the California Air Resources Board (ARB) manages air quality, regulates mobile emissions sources, and oversees the activities of county Air Pollution Control Districts and regional Air Quality Management Districts. ARB develops and manages the California SIP, securing approval of this plan from U.S. EPA, and identifying TACs. (A notable exception exists for radioactive air contaminants as the EPA has retained its authority to enforce National Emission Standards for Hazardous Air Pollutants [NESHAP] requirements.) ARB establishes and reviews State ambient air quality standards and vehicle emissions standards. California has adopted ambient standards that are more stringent than the federal standards for criteria air pollutants. Under the California Clean Air Act, patterned after the Federal Clean Air Act, areas have been designated as attainment or nonattainment with respect to the State standards. Local and regional air districts are required to prepare and adopt air quality attainment plans if the district violates the state standards.

Thus, areas in California have two sets of attainment/non-attainment designations: one set with respect to the national standards and one set with respect to the state standards. The Bay Area is currently designated "non-attainment" for state one-hour and eight-hour ozone standards, the national eight-hour ozone standard and for the state PM10 and PM2.5 standards. The Bay Area is classified as a "marginal" nonattainment area for the federal eight-hour ozone standard. The Bay Area is "in attainment" or "unclassified" with respect to the other ambient air quality standards. Table 3.2-4 also shows the attainment status of the Bay Area with respect to the national and state ambient air quality standards for different criteria pollutants.

**TABLE 3.2-4: AMBIENT AIR QUALITY STANDARDS AND BAY AREA ATTAINMENT STATUS**

| *Pollutant* | *Averaging Time* | *State Standard* | *Bay Area Attainment Status for California Standard* | *Federal Primary Standard* | *Bay Area Attainment Status for Federal Standard* | *Major Pollutant Sources* |
|---|---|---|---|---|---|---|
| Ozone | 8 hours | 0.07 ppm | Non-attainment | 0.075 ppm | Non-attainment | Formed when ROG and NOx react in the presence of sunlight. ROG sources include any source that burns fuels (e.g., gasoline, natural gas, wood, oil), solvents, petroleum processing and storage and pesticides. |
| | 1 hour | 0.09 ppm | Non-attainment | --- | --- | |

**TABLE 3.2-4: AMBIENT AIR QUALITY STANDARDS AND BAY AREA ATTAINMENT STATUS**

| *Pollutant* | *Averaging Time* | *State Standard* | *Bay Area Attainment Status for California Standard* | *Federal Primary Standard* | *Bay Area Attainment Status for Federal Standard* | *Major Pollutant Sources* |
|---|---|---|---|---|---|---|
| Carbon Monoxide | 8 hours | 9.0 ppm | Attainment | 9 ppm | Attainment | Any source that burns fuel such as automobiles, trucks, heavy construction equipment, farming equipment and residential heating. |
| | 1 Hour | 20 ppm | Attainment | 35 ppm | Attainment | |
| Nitrogen Dioxide | Annual Average | 0.03 ppm | --- | 0.053 ppm | Attainment | Any source that burns fuel such as automobiles, trucks, heavy construction equipment, farming equipment and residential heating. |
| | 1 Hour | 0.18 ppm | Attainment | 0.1 ppm | Unclassified | |
| Sulfur Dioxide | 24 Hours | 0.04 ppm | Attainment | 0.14 ppm | Attainment | Coal or Oil Burning Power Plants and Industries, Refineries, Diesel Engines. |
| | 1 Hour | 0.25 ppm | Attainment | 0.075 ppm | Attainment | |
| Particulate Matter (PM10) | Annual Arithmetic Mean | 20 μg/m3 | Non-attainment | --- | --- | Road Dust, Windblown Dust (Agriculture) and Construction (Fireplaces) Also formed from other pollutants (acid rain, NOx, SOx, organics). Incomplete combustion of any fuel. |
| | 24 Hours | 50 μg/m3 | Non-attainment | 150 μg/m3 | Unclassified | |

**TABLE 3.2-4: AMBIENT AIR QUALITY STANDARDS AND BAY AREA ATTAINMENT STATUS**

| *Pollutant* | *Averaging Time* | *State Standard* | *Bay Area Attainment Status for California Standard* | *Federal Primary Standard* | *Bay Area Attainment Status for Federal Standard* | *Major Pollutant Sources* |
|---|---|---|---|---|---|---|
| Particulate Matter (PM2.5) | Annual Arithmetic Mean | 12 μg/m3 | Non-attainment | 15 μg/m3 | Attainment | Fuel Combustion in Motor Vehicles, Equipment and Industrial Sources, Residential and Agricultural Burning. Also formed from reaction of other pollutants (acid rain, NOx, SOx, organics). |
| | 24 Hours | --- | --- | 35 μg/m3 | Non-attainment | |
| Lead | Calendar Quarter | --- | --- | 1.5 μg/m3 | Attainment | Metal Smelters, Resource Recovery, Leaded Gasoline, Deterioration of Lead Paint. |
| | 30 Day Average | 1.5 μg/m3 | Attainment | --- | --- | |

Note: ppm=parts per million; and μg/m3=micrograms per cubic meter

Source: BAAQMD, 2010; ARB, 2010.

### *Toxic Air Contaminants (TACs)*

California State law defines TACs as air pollutants having carcinogenic effects. The State of California's regulatory efforts regarding the identification and control of toxic air contaminants are embodied in AB 1807, the Tanner Bill (effective 1984). A total of 243 substances have been designated TACs under California law. The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) seeks to identify and evaluate risk from air toxics sources; however, AB 2588 does not regulate air toxics emissions. TAC emissions from individual facilities are quantified and prioritized. ARB identifies the most important toxic pollutants by considering risk of harm to public health, amount or potential amount of emissions, manner of usage of the substance, its persistence in the atmosphere, and its concentration in the outdoor air. In August of 1998, ARB identified particulate emissions from diesel-fueled engines (diesel particulate matter, or DPM) as TACs. ARB subsequently developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. The document represents proposals to reduce diesel particulate emissions, with the goal of reducing emissions and associated health risks by 75 percent in 2010 and by 85 percent in 2020. The program aims to require the use of state-of-the-art catalyzed diesel particulate filters and ultra-low sulfur diesel fuel on diesel-fueled engines

## Regional Regulations and Authorities

As noted above, the regional air quality management district for the Bay Area is the Bay Area Air Quality Management District (BAAQMD). The district is primarily responsible for regulating stationary emissions sources at facilities within its geographic area and for preparing the air quality plans that are required under the federal Clean Air Act and California Clean Air Act.

### *Air Quality Plans*

The 1977 federal Clean Air Act Amendments require that regional planning and air pollution control agencies prepare a regional Air Quality Plan to outline the measures by which both stationary and mobile sources of pollutants can be controlled in order to achieve all standards specified in the Clean Air Act. The 1988 California Clean Air Act also requires development of air quality plans and strategies to meet state air quality standards in areas designated as non-attainment (with the exception of areas designated as non-attainment for the state PM standards). Maintenance plans are required for attainment areas that had previously been designated non-attainment in order to ensure continued attainment of the standards.

On September 15, 2010, the BAAQMD adopted the Bay Area 2010 Clean Air Plan (CAP). The 2010 CAP serves to update the Bay Area 2005 Ozone Strategy plan in accordance with the requirements of the Chapter 10 of the California Health & Safety Code. In addition, the 2010 CAP provides an integrated, multi-pollutant strategy to improve air quality, protect public health, and protect the climate.[6]

The Bay Area 2010 Clean Air Plan serves to:

- Update the Bay Area 2005 Ozone Strategy in accordance with the requirements of the California Clean Air Act to implement "all feasible measures" to reduce ozone;
- Provide a control strategy to reduce ozone, particulate matter (PM), air toxics, and greenhouse gases in a single, integrated plan;
- Review progress in improving air quality in recent years; and
- Establish emission control measures to be adopted or implemented in the 2010-2012 timeframe.

### *BAAQMD Rules and Regulations*

The BAAQMD is the regional agency responsible for rulemaking, permitting, and enforcement activities affecting stationary sources in the Bay Area. Specific rules and regulations adopted by the BAAQMD limit the emissions that can be generated by various uses and/or activities, and identify specific pollution reduction measures that must be implemented in association with various uses and activities. These rules regulate not only emissions of the six criteria air pollutants, but also toxic emissions and acutely hazardous non-radioactive materials emissions.

[6] BAAQMD, 2010 Clean Air Plan, http://www.baaqmd.gov/Divisions/Planning-and-Research/Plans/Clean-Air Plans.aspx, accessed December 2010.

The Bay Area Air Quality Management District (BAAQMD) advises that special overlay zones be established identifying at least a 500 foot buffer around all freeways and high traffic roadways, defined in the ARB *Air Quality and Land Use Handbook* (2005) as freeways, urban roadways having more than 100,000 vehicle trips per day, and rural roadways having more than 50,000 vehicle trips per day.[7] This buffer applies to I-280 as it is currently the only roadway through the city with more than 100,000 vehicle trips per day.

### *New Source Review*

The BAAQMD's New Source Review regulations predominantly apply to non-attainment pollutants. The purpose of the New Source Review rule is to provide for the review of new and modified sources and provide mechanisms, including the use of best available control technology for both criteria and toxic air pollutants, and emissions offsets by which authorities to construct such sources could be granted. The New Source Review regulations also include Prevention of Significant Deterioration (PSD) rules for attainment pollutants. PSD rules are designed to ensure that the emission sources will not cause or interfere with the attainment or maintenance of ambient air quality standards.

With respect to the construction phase of the project, applicable BAAQMD regulations would relate to portable equipment (e.g., Portland concrete batch plants, and gasoline- or diesel-powered engines used for power generation, pumps, compressors, pile drivers, and cranes), architectural coatings, and paving materials. Equipment used during project construction would be subject to the requirements of BAAQMD Regulation 2 (Permits), Rule 1 (General Requirements) with respect to portable equipment unless exempt under Rule 2-1-105 (Exemption, Registered Statewide Portable Equipment); BAAQMD Regulation 8 (Organic Compounds), Rule 3 (Architectural Coatings); and BAAQMD Regulation 8 (Organic Compounds), Rule 15 (Emulsified and Liquid Asphalts).

## Local Regulations

### *Daly City Climate Action Plan (2011)*

The Daly City Climate Action Plan (CAP) seeks to reduce the City operation's overall carbon footprint through a series of ten goals by the year 2020. The goals cover topics such as reducing solid waste, recycling and reuse of wastewater, preservation of urban forests, adoption of a master pedestrian and bicycle plan, reuse of biosolids, the use of green building standards, and community education.

### *Daly City Green Building Ordinance*

Chapter 15.65 of the Daly City Municipal Code contains the green building program for new residential buildings. The purpose of the city's Green Building Program is to encourage the conservation of natural resources, reduce waste, increase energy efficiency, lower energy use, and promote a healthy indoor environment. The Green Building Ordinance requires that new residential projects meet a minimum standard of points in accordance with Build it Green or LEED green building certification systems.

[7] California Air Resources Board. Air Quality and Land Use Handbook: A Community Health Perspective (2005). Available online at http://www.arb.ca.gov/ch/handbook.pdf, accessed February 2012.

# Impact Analysis

## SIGNIFICANCE CRITERIA[8]

Implementation of the proposed General Plan will have a significant impact on air quality if it would:

- Be inconsistent with or fail to implement the current Bay Area Clean Air Plan Transportation Control Measures (particularly those for which local governments are implementing agencies);
- Result in greater congestion, as measured by daily vehicle miles traveled and daily vehicle trips per capita, than the future No Project condition;
- Fail to identify or establish goals, policies, and objectives for existing and proposed sources that would emit odors or toxic air contaminants, in order to minimize potentially adverse impacts.

## METHODOLOGY AND ASSUMPTIONS

Criterion 1 is assessed based on BAAQMD guidance that identifies three tests to determine consistency:

- Does the proposed General Plan support the primary goals of the 2010 Bay Area Clean Air Plan? The primarily goals are: attain air quality standards; reduce population exposure to potentially harmful air pollutant emissions and protect public health in the Bay Area; and reduce greenhouse gas and other air pollutant emissions and protect the climate.
- Does the proposed General Plan include applicable control measures from the Clean Air Plan (CAP)? The 2010 CAP contains 55 control measures to reduce air pollution. Consistency with greenhouse gas reduction measures of the CAP addressed in the Greenhouse Gas Section of this EIR.
- Does the proposed General Plan disrupt or hinder implementation of any CAP control measures? BAAQMD identified examples of how a Plan may cause the disruption or delay of control measures, such as a project which may preclude an extension of a transit line or bike path or proposes excessive parking beyond parking requirements.

Criterion 2 is assessed based on service population, vehicle miles traveled (VMT) and average daily trips (ADT) in the current condition (2008) and projected in 2035 (but assumed to occur in 2030 for a more conservative analysis) under the proposed General Plan and under the No Project condition

[8] On March 5, 2012, the Alameda County Superior Court overturned on CEQA grounds BAAQMD's adoption of its new CEQA Guidelines and thresholds (Alameda Superior Court Case No. RG10-548693). Although the Court's order prohibits BAAQMD from further dissemination of the thresholds as a BAAQMD-approved set of air quality thresholds, it does not prohibit a local lead agency from relying on these thresholds for purposes of evaluating a project's air quality emissions. The claims made in the case concerned the environmental impacts of adopting the thresholds, that is, how the thresholds would indirectly affect land use development patterns. Those issues are not relevant to the scientific soundness of the BAAQMD's analysis of what levels of pollutants should be deemed significant, or the threshold to use in assessing any health risk impact a plan will have on the existing environment. Accordingly, the analysis herein uses the updated thresholds and methodologies for Significance Criterion 1 BAAQMD's *CEQA Air Quality Guidelines* to determine the potential impacts of the project on the existing environment.

(which assumes that the current General Plan remains in effect). Service population growth (population and jobs) projections are those anticipated under the proposed land uses.

Criterion 3 is the identification of stationary TAC sources and buffers of at least 500 feet from each high volume roadway, as defined by ARB. Additionally, the Plan must identify goals, policies and objectives to minimize potential impacts and create overlay zones for sources of TACs and receptors. It is also assessed based on BAAQMD guidance to identify locations of odor sources in plans; and identify goals, policies, and objectives to minimize potentially adverse impacts. Criterion 3 is discussed in two different impact statements.

### Service Population

The second significance criteria employs the concept of "service population" to account for growth in both residential population and jobs. Distributing ADT and VMT across a whole service population allows the analysis to more accurately project the air quality impacts of future development in the city, and the relative role that residential and non-residential activities will play.

## SUMMARY OF IMPACTS

### Criteria Air Pollutants and Precursor Emissions

The proposed General Plan is consistent with the 2010 Bay Area Clean Air Plan control measures.

### Comparison of Projected ADT and VMT under the Proposed Project versus the No Project Conditions

With implementation of the proposed General Plan, forecasted ADT and VMT will increase in the city, beyond the projected increase in population. These two metrics would both increase under the future No Project scenario as well (that is, without implementation of the proposed General Plan). However, with implementation of the proposed General Plan, daily ADT per capita service population would be 5.3, which is the same as Existing and No Project. Daily VMT per capita service population would be 20.2 under the proposed General Plan, versus 20.3 with the No Project. Though VMT per capita service population is increasing from Existing, much of this increase in VMT growth is regional traffic growth as supported by the fact that vehicle trips per capita within the city will remain the same as Existing. Additionally VMT per capita with the proposed General Plan will be less than the No Project in the future. The impact is less than significant.

### Local Community Risks and Hazards

There are 89 permitted sources of TACs and one roadway with more than 100,000 vehicles per day (I-280) in the city. These sources are identified on a map along with the proposed General Plan policies designed to mitigate potential impacts. Given that the proposed General Plan identifies goals, policies and objectives to minimize potential impacts, the proposed General Plan is expected to have a less than significant impact related to local community risks and hazards.

### Odors

Though offensive odors from stationary sources rarely cause any physical harm, they still remain unpleasant and can lead to public distress. Development under the proposed General Plan could

place residences and other sensitive receptors in proximity to odor emitting uses such as the North San Mateo County Sanitation District Treatment Plant in the Westlake Planning Area, which could result in odor impacts. However, policies in the proposed General Plan would reduce these impacts to less than significant.

## IMPACTS AND MITIGATION MEASURES

### Impact 3.2-1

**Implementation of the proposed General Plan will result in an implementing document that is consistent with the goals and control measures of the Clean Air Plan. *(No Impact)***

The proposed Plan policies conform to the control strategies included in the Bay Area 2010 Clean Air Plan. These policies are detailed in Table 3.2-5 and show that the proposed Plan is consistent with the 2010 Bay Area Clean Air Plan control measures, resulting in no impact.

**TABLE 3.2-5: PROPOSED GENERAL PLAN CONSISTENCY WITH RELEVANT 2010 CLEAN AIR PLAN CONTROL STRATEGIES**

| *2010 CAP Control Strategy* | *Goals and Policies of the Proposed Plan Consistent with the Strategy* | |
|---|---|---|
| **Transportation Control Measures** | | |
| TCM A: Improve Transit Services<br>A-1: Improve Local & Areawide Bus Service<br>A-2: Improve Local & Regional Rail Service | CE-7 | Ensure an effective transit system by supporting the work of other agencies in their efforts to expand public transit in and around Daly City. |
| | CE-8 | Accommodate the transit system by considering mechanisms which help public transit agencies reduce the headway times of their vehicles. |
| | CE-9 | Increase ridership levels for all public transit services by promoting public transit programs. |
| TCM B: Improve System Efficiency<br>B-1: Freeway & Arterial Operations Strategies<br>B-2: Transit Efficiency & Use Strategies<br>B-3: Bay Area Express Lane Network<br>B-4: Goods Movement Improvements & Emission Reduction Strategies | CE-1 | Use the City's traffic model and environmental review process outlined by the California Environmental Quality Act (CEQA) to ensure that the City's existing roadway network is relatively free flowing during peak traffic periods. |
| | CE-2 | Minimize impacts on collector and local streets by moving traffic with origins and destinations outside of Daly City efficiently to area freeways and major arterial streets. |
| | CE-3 | In areas adjacent to principal intersections anticipated to experience Level of Service degradations, give preference to new development that can demonstrate a 20 percent reduction in long-term vehicular trip generation. |
| | CE-4 | Proactively plan for roadway network improvements by using the City's Capital Improvement Program (CIP) to prioritize necessary traffic improvements and identifying the funding sources necessary to construct these improvements. |
| | CE-5 | Work with the Metropolitan Transportation Commission to coordinate the transportation planning efforts of the City with those of adjacent jurisdictions. |

**TABLE 3.2-5: PROPOSED GENERAL PLAN CONSISTENCY WITH RELEVANT 2010 CLEAN AIR PLAN CONTROL STRATEGIES**

| *2010 CAP Control Strategy* | *Goals and Policies of the Proposed Plan Consistent with the Strategy* | |
|---|---|---|
| | CE-6 | Support regional efforts to improve traffic while accommodating future development. |
| | CE-9 | Increase ridership levels for all public transit services by promoting public transit programs). |
| TCM C: Encourage Sustainable Travel Behavior<br>C-1: Voluntary Employer-Based Trip Reduction Program<br>C-2: Safe Routes to School & Safe Routes to Transit<br>C-3: Rideshare Services & Incentives<br>C-4: Conduct Public Outreach & Education<br>C-5: Smart Driving | CE-17 | Work with local school districts to implement projects and activities that promote walking to school among students, parents, and staff. |
| | CE-19 | Take proactive steps to ensure that owning and using a bicycle in Daly City is a viable transportation option. |
| | CE-21 | Provide children with safe and appealing opportunities for walking and bicycling to school in order to decrease rush hour traffic and fossil fuel consumption, encourage exercise and healthy living habits in children, and reduce the risk of injury to children through traffic collisions near schools. |
| | CE-22 | Prioritize safety and roadway improvements around schools. |
| TCM D: Support Focused Growth<br>D-1: Bicycle Access & Facilities Improvement<br>D-2: Pedestrian Access & Facilities Improvements<br>D-3: Local Land Use Strategies | HE-25 | Provide a greater number of street trees throughout Daly City's neighborhoods. |
| | CE-13 | View transportation improvements (new and retrofit) as opportunities to improve safety, access, and mobility for all travelers and recognize bicycle, pedestrian, and transit modes as integral elements of the transportation system. |
| | CE-14 | Actively comment on the environmental reviews completed by other public agencies and quasi-public agencies desiring to undertake projects within Daly City in an effort to ensure impacts to pedestrian and bicycle circulation systems are not impacted. |
| | CE-18 | Continue to install bicycle facilities throughout the city in accordance with the Bicycle Master Plan. |
| | CE-19 | Take proactive steps to ensure that owning and using a bicycle in Daly City is a viable transportation option. |
| | CE-15 | Ensure the new building along Mission Street and Geneva Avenue are situated so that they are easily accessible by pedestrians. |
| | CE-16 | Strengthen pedestrian access between and within residential areas and schools, commercial areas, recreational facilities, transit centers, and major activity centers in the City. |
| | LU-4 | Provide regulatory incentives for developers to construct higher-density mixed-use development along Mission Street, Geneva Avenue, and any other locations within close proximity to public transit. |

**TABLE 3.2-5: PROPOSED GENERAL PLAN CONSISTENCY WITH RELEVANT 2010 CLEAN AIR PLAN CONTROL STRATEGIES**

| *2010 CAP Control Strategy* | *Goals and Policies of the Proposed Plan Consistent with the Strategy* | |
|---|---|---|
| | HE-2 | Support infill housing in existing neighborhoods by offering streamlined planning and environmental reviews. |
| | HE-5 | Allow the construction of additional second units throughout the City. |
| | HE-27 | Revise land use policies to meet or exceed the greenhouse gas reduction goals established in Assembly Bill 32 (reducing California's greenhouse gas emissions to 1990 levels by 2020). |
| | CE-10 | Parking requirements contained within the Zoning Ordinance should, as closely as possible, reflect accepted current parking trends. Regulations for residential uses should recognize the ability for high-density mixed-use development that is close to transit to reduce parking requirements. |
| TCM E: Implement Pricing Strategies<br>E-1: Value Pricing Strategies<br>E-2: Promote Parking Pricing to Reduce Motor Vehicle Travel<br>E-3: Implement Transportation Pricing Reform | CE-11 | Consider the use of in-lieu fees for parking areas, joint-use of parking areas, the creation of parking assessment districts, and other innovative methods of providing off-street parking. |

Source: BAAQMD, 2010; Dyett & Bhatia, 2012.

### *Proposed General Plan Policies that Reduce the Potential Impact*

The policies listed in Table 3.2-5 will ensure that there is no impact.

### *Mitigation Measures*

None required.

## Impact 3.2-2

**Implementation of the proposed General Plan will not significantly contribute to the increase of traffic, and thereby will not significantly exacerbate air quality problems. *(Less than Significant)***

BAAQMD states that "due to the [Bay Area's] nonattainment status for ozone and PM, and the cumulative impacts of growth on air quality [long-range] plans almost always have significant unavoidable adverse air quality impacts." To assess this possibility related to the proposed General Plan, the increases in VMT, daily vehicle trips, and population projected at buildout of the proposed General Plan were calculated and compared. These transportation performance metrics were modeled city-wide assuming regional growth in addition to the adoption and implementation of the

proposed General Plan, primarily because air quality impacts are a regional, cumulative concern. Transportation metrics under the cumulative No Project scenario were also calculated, representing what would occur if the proposed General Plan were not adopted and the current General Plan were to remain in effect.

Table 3.2-6 compares transportation metrics of current conditions, the proposed General Plan, and the No Project scenario. Both the proposed General Plan and the No Project scenarios show increases in VMT and daily vehicle trips relative to the existing condition, due to population growth in the city and regional growth in through traffic on highways traversing Daly City. However, on a per capita service population basis, the proposed General Plan results in the same vehicle trips as compared to existing conditions and fewer VMT than the No Project scenario. As such, the impact of the proposed General Plan on air quality will be less than significant.

**TABLE 3.2-6: COMPARISON OF TRANSPORTATION METRICS**

| *Metric* | *Existing (2008)* | *No Project (2030)* | *Proposed Plan (2030)* |
|---|---|---|---|
| Service Population (Population + Jobs) | 118,779 | 126,860 | 128,033 |
| Total Daily Vehicle Trips | 627,596 | 678,569 | 682,467 |
| Daily Vehicle Trips Per Capita | 5.3 | 5.3 | 5.3 |
| Total Daily Vehicle Miles Traveled | 1,999,751 | 2,577,085 | 2,582,619 |
| Daily Vehicle Miles Traveled Per Capita | 16.8 | 20.3 | 20.2 |

Source: Kittelson & Associates, 2012; Dyett & Bhatia, 2012

### *Proposed General Plan Policies that Reduce the Potential Impact*

The policies listed in Table 3.2-5 will ensure that there are less than significant impacts.

### *Mitigation Measures*

None required.

## Impact 3.2-3

**Implementation of the proposed General Plan addresses Toxic Air Contaminant sources and sensitive receptors in its goals, policies and objectives. (*Less than Significant*)**

ARB notes that the location of land uses where sensitive receptors are present, such as day care centers, schools, nursing homes, and hospitals, should be carefully evaluated. State law restricts the siting of new schools within 500 feet of a freeway, urban roadways with 100,000 vehicles/day, or rural roadways with 50,000 vehicles, with some exceptions. ARB has published advisory recommendations on siting new sensitive land uses, with the same guidelines as the State school limitation.[9]

[9] ARB, Air Quality and Land Use Handbook: A Community Health Perspective, April 2005.

TACs are categorized as those from mobile sources (vehicles on roadways) and stationary sources (such as gasoline filling stations, diesel-powered generators, and other industrial uses). Interstate 280 is the only roadway in the city that carries 100,000 vehicles per day. A 500 foot distance from I-280 on each side of the freeway is shown in Figure 3.2-1. Figure 3.2-1 shows the permitted stationary sources of TAC in the city, which are listed in Table 3.2-7. The proposed General Plan includes policies which address air quality impacts and requires the preparation of risk assessments for new hazardous waste facilities as well as requiring air quality assessments from new development. These policies will help reduce impacts to less than significant.

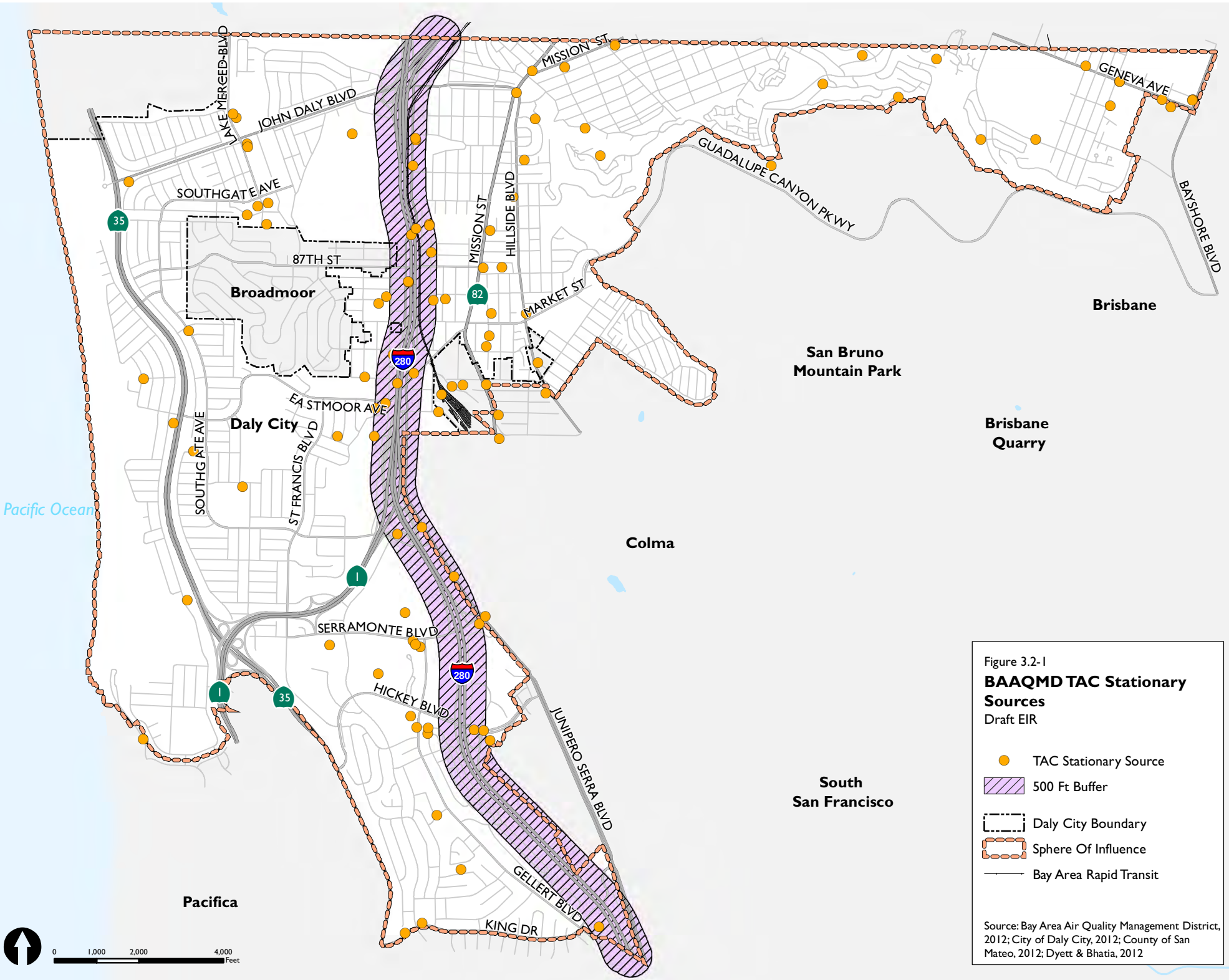


Figure 3.2-1

**BAAQMD TAC Stationary Sources**

Draft EIR

- TAC Stationary Source
- 500 Ft Buffer
- Daly City Boundary
- Sphere Of Influence
- Bay Area Rapid Transit

Source: Bay Area Air Quality Management District, 2012; City of Daly City, 2012; County of San Mateo, 2012; Dyett & Bhatia, 2012

**TABLE 3.2-7: PERMITTED STATIONARY SOURCES OF TACS IN DALY CITY**

| *Plant #* | *Facility Name* | *Street* |
|---|---|---|
| **Permitted Sources in Daly City (Non Generators)** | | |
| 5007 | All Bright Cleaners | 111 Acacia Street |
| 10373 | Allied Waste Services of North America L | Skyline Dr. & Westline Dr. |
| G10657 | Arco Facility # 00465 | 151 Southgate Avenue |
| G2810 | ARCO Facility # 02090 - COPOWER INC | 295 Washington Street |
| 19490 | Astound Broadband | 15 Knowles |
| 7976 | Auto Collision Center | 201 School Street |
| G10024 | Bayshore Chevron Auto Service | 2690 Bayshore Blvd |
| G9466 | BFI Waste Systems of North America Inc. | 1680 Edgeworth Avenue |
| 12568 | Calclean Inc. | 151 Southgate Avenue |
| G11681 | Chevron Station # 94632 | 410 Hickey Blvd |
| 12874 | City of Daly City | 515 West moor Avenue |
| 14103 | City of Daly City | 450 Martin Street |
| 19835 | City of Daly City | 444 Gellert Blvd |
| 19836 | City of Daly City | 191 Edgemont Drive |
| 19837 | City of Daly City | 333 90th Street |
| 5494 | City of Daly City (Water Resources) | 153 Lake Merced Blvd |
| G137 | City of Daly City Corp Yard | 798 Niantic Street |
| 20243 | City of Daly City Fire Station 91 | 151 Lake Merced Blvd |
| 18205 | Collision Specialists Auto Center (CST Co) | 250 San Pedro Road |
| 3603 | Colma Auto Body Shop Inc. | 7252 Mission Street |
| 12285 | Crocker Cleaners | 6215 Mission Street |
| 13255 | D & S Auto Body | 5945 Mission Street |
| 14858 | D&J Auto Body Specialists. Inc. | 7232 Mission Street |
| 16074 | Daly City Texaco c/o Blue Rock Environment | 2428 Junipero Serra Blvd |
| 9577 | D'Garcis Auto Body | 254 San Pedro Road |
| G12293 | G & J Acquisitions, Inc. | 950 Hillside Blvd |
| G11743 | Gellert Hickey Shell- Shell Oil Products | 398 Gellert Blvd |
| 12436 | Gomez Iron Works | 1195 Hillside Blvd |
| G12291 | Hickey Way Shell | 390 Hickey Blvd |
| 4235 | Hilltop Cleaners | 6379 Mission Street |
| 19359 | J&M Auto Body Shop | 620 Carter Street |
| G11517 | KNK Petroleum Inc. dba Triton Gas | 4698 Callan Blvd |
| G8582 | Lake Merced Country Club | 2300 Junipero Serra Blvd |
| 9441 | Masters Auto Body | 7031 Mission Street |

**TABLE 3.2-7: PERMITTED STATIONARY SOURCES OF TACS IN DALY CITY**

| *Plant #* | *Facility Name* | *Street* |
|---|---|---|
| G11629 | Mayfair 76 | 101 So Mayfair Avenue |
| G11783 | Mission Unocal # 4113 | 6989 Mission Street |
| 18103 | Mr. Vincent Agbayani c/o CFR | 88 Dixon Court |
| 11422 | National Cleaners | 7375 Mission Street |
| G10779 | Nella Oil Company/dba Olympian Oil | 2195 Junipero Serra Blvd |
| G10780 | Nella Oil Company/dba Olympian Oil | 501 Serramonte Blvd |
| G7423 | No San Mateo County Sanitation District | 153 Lake Merced Blvd |
| 1507 | North San Mateo County Sanitation District | 153 Lake Merced Blvd |
| 3172 | Pacific Gas and Electric Company | 450 Eastmoor Avenue |
| 14159 | Pacific Gas and Electric Company | 3004 Geneva Avenue |
| G6644 | Pacific Gas and Electric Company | 3004 Geneva Avenue |
| G6665 | Pacific Gas and Electric Company | 450 Eastmoor Avenue |
| G9309 | R K Chan # 2611202 | 3001 Junipero Serra Blvd |
| 1000 | Seton Medical Center | 1900 Sullivan Avenue |
| G2818 | Seven Eleven | 2700 Bayshore Blvd |
| 20152 | Sideline Auto Body | 7323 Mission Street |
| G11081 | Skyline Auto Service | 505 Skyline Drive |
| 18063 | Skyline Plaza Shopping Center | 45 Skyline Plaza |
| G10514 | Sullivan Valero | 1690 Sullivan Avenue |
| G6743 | Texaco | 2428 Junipero Serra Blvd |
| 5936 | Tidy Cleaners | 51 St Francis Square |
| 4333 | Twin Cleaners | 6772 Mission Street |
| G9263 | Unocal # 256323 | 137 Serramonte Blvd |
| 18958 | Verizon Wireless | 2600 Geneva Ave |
| 2902 | View Rite | 455 Allan Street |
| G8634 | Westlake Chevron | 892 John Daly Blvd |
| **Permitted Sources in Daly City (Generators)** | | |
| 13433 | ADT Security Service c/o Earth Tech Inc. | 350 90th Street |
| 14104 | Bellevue Pump Station | 81 Bellevue Avenue |
| 19834 | City of Daly City | 6655 Mission Street |
| 14099 | City of Daly City | 65 Margate Street |
| 17622 | City of Daly City | 850 Saddleback Dr. |
| 12875 | City of Daly City | 792 Niantic Avenue |
| 12876 | City of Daly City | 295 Coronado Avenue |
| 14098 | City of Daly City | 7 Nelson Court |

**TABLE 3.2-7: PERMITTED STATIONARY SOURCES OF TACS IN DALY CITY**

| *Plant #* | *Facility Name* | *Street* |
|---|---|---|
| 14102 | City of Daly City | 280 A Street |
| 14105 | City of Daly City | 335 Hickey Blvd |
| 14106 | City of Daly City | 600 Point Pacific Dr. |
| 14107 | City of Daly City | 815 Skyline Drive |
| 14108 | City of Daly City | 611 S Hill Blvd |
| 14109 | City of Daly City | 200 Station Avenue |
| 14110 | City of Daly City | 799 Southgate Avenue |
| 15617 | City of Daly City | 650 Pointec Pacific Dr. |
| 16635 | Crocker Amazon Pump Station | 205 Baltimore Way |
| 16581 | Daly City | 57 Alta Vista Way |
| 15328 | Daly City Fire Station No 92 | 18 Bepler Street |
| 14382 | Daly City Serramonte Center LLC | 3 Serramonte Center |
| 13221 | DB Real Estate Pacific Plaza Partners LP | 2001 Junipero Serra Blvd |
| 13420 | Digidesign Inc. | 2001 Junipero Serra Blvd |
| 14852 | Genesys Telecommunications Laboratories | 2001 Junipero Serra Blvd |
| 14095 | North San Mateo County Sanitation District | 300 F Street |
| 16010 | Serramonte Corporation Center, LLC | 395 Hickey Blvd |
| 13457 | Target Store # 1407 | 133 Serramonte |
| 16794 | The Home Depot (Store # 1092) | 303 E Lake Merced Blvd |
| 19451 | Verizon Wireless | 1050 King Drive |
| 17748 | Verizon Wireless (Serramonte Shopping Center) | 303 Gellert Blvd |

Source: BAAQMD, 2012.

### *Proposed General Plan Policies and Tasks that Reduce the Potential Impact*

**Policy SE-4.6:** Require the preparation of a risk assessment to determine site suitability for applications for hazardous waste management facilities. Establish the distance requirements for these facilities from public assembly, residential or immobile population and recreation areas and structures. Assess impacts from seismic, geologic, and flood hazards, impacts on wetlands, endangered species, air quality and emergency response capabilities; and proximity to major transport routes.

**Policy RME-5:** Assess projected air emissions from new development and associated construction and demolition activities in conformance with the Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines, and relative to state and federal standards.

*Task RME-5.1:* Amend the Planning Division's development review procedures to include a formal step that would help identify how a development project can incorporate design or functional changes that will minimize air quality impacts.

*Task RME-5.2:* Incorporate air quality significance thresholds into the Local Thresholds of Significance document identified in Program RME-1.

*Task RME-5.3:* Consider cumulative air quality impacts consistent with the region's Clean Air Plan and State law.

*Task RME-5.4:* Require the preparation of a Transportation Systems Management plan for new development that has been determined to contribute to a reduction in location air quality.

*Task RME-5.5:* Consult with BAAQMD to identify stationary and mobile TAC sources and determine the need for and requirements of a health risk assessment for proposed developments.

**Policy RME-7:** To the maximum extent fiscally reasonable, minimize air quality impacts in City operations.

*Task RME-7.1:* Develop an Environmentally Preferable Purchasing Policy which requires City employees to consider the environmental attributes along with traditional purchasing factors such as performance, safety, price and local availability, when making purchasing decisions.

*Task RME-7.2:* Compile a master fleet replacement schedule which identifies vehicles in need of replacement (including heavy-duty and off-road vehicles) and offers suggestions for the most environmentally friendly replacement.

*Task RME-7.3:* Construct all new City facilities at a Leadership in Energy and Environmental Design Gold standard.

### *Mitigation Measures*

None required.

### Impact 3.2-4

**Implementation of the proposed General Plan will not expose substantial numbers of people to objectionable odors. (*Less than Significant*)**

Though offensive odors from stationary sources rarely cause any physical harm, they still remain unpleasant and can lead to public distress generating citizen complaints to local governments. The occurrence and severity of odor impacts depend on the nature, frequency and intensity of the source; wind speed and direction; and the sensitivity of receptors. Odor impacts should be considered for any proposed new odor sources located near existing receptors, as well as any new sensitive receptors located near existing odor sources. Generally, increasing the distance between a receptor and the source to an acceptable level will mitigate odor impacts. Table 3.2-8 shows BAAQMD-recommended buffer zones (distance between receptor and source) for known odor-emitting sources.

Development proposed under the proposed General Plan could place residences and other sensitive receptors in proximity to the North San Mateo County Sanitation District Treatment Plant in the Westlake Planning Area, which could result in odor impacts. However, the proposed General Plan contains policies which address potential impact odors, resulting in less than significant impacts.

**TABLE 3.2-8: BAAQMD-RECOMMENDED BUFFER ZONE DISTANCES FOR POTENTIAL ODOR SOURCES**

| *Land Use/Type of Operation* | *Screening Distance* |
|---|---|
| Wastewater Treatment Plant | 2 miles |
| Wastewater Pumping Facilities | 1 mile |
| Sanitary Landfill | 2 miles |
| Transfer Station | 1 mile |
| Composting Facility | 1 mile |
| Petroleum Refinery | 2 miles |
| Asphalt Batch Plant | 2 miles |
| Chemical Manufacturing | 2 miles |
| Fiberglass Manufacturing | 1 mile |
| Painting/Coating Operations (e.g., auto body shops) | 1 mile |
| Rendering Plant | 2 miles |
| Coffee Roaster | 1 mile |
| Food Processing Facility | 1 mile |
| Confined Animal Facility/Feed Lot/Dairy | 1 mile |
| Green Waste and Recycling Operations | 1 mile |
| Metal Smelting Plants | 2 miles |

Source: BAAQMD, 2010.

### *Proposed General Plan Policies and Tasks that Reduce the Potential Impact*

**Policy RME-6:** Minimize exposure of residents to objectionable smoke and odors by proactively regulating potential sources**.**

*Task RME-6.1:* For new, expanded, or modified development proposals (including tenant improvements) that are potential sources of objectionable smoke and odor, require an analysis of possible smoke and odor impacts and the provision of smoke and odor minimization and control measures as mitigation. The requirements for such shall be codified within the Daly City Municipal Code.

*Task RME-6.2:* Require new residential development projects and projects categorized as sensitive receptors to be located an adequate distance from facilities that are existing and potential sources of odor. An adequate separate distance will be determined based upon the type, size and operations of the facility.

### *Mitigation Measures*

None required.

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