

**APPENDIX L**  
**PERTINENT REGULATIONS**



## PERTINENT REGULATIONS

The following discussion provides an overview of some federal, state, and local regulations, and may be used as a reference for project-specific analysis. Additional requirements may apply to subsequent projects that receive federal funding or otherwise affect federal lands and federal decision-making.

## AESTHETICS

### ***California Department of Transportation – California Scenic Highways Program***

California's Scenic Highway Program, run by Caltrans, was created by the Legislature in 1963. Its purpose is to protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment. State laws governing the Scenic Highway Program are found in the Streets and Highways Code, sections 260 through 263. Responsibility for development of scenic highways, and establishment and application of specific planning and design standards and procedures falls to state and local agencies.

### **Local Jurisdictions**

California counties and cities have general plan documents that provide guidance and policies related to land use. Some general plans may designate scenic vistas or corridors in addition to those recognized at the state level. Local zoning ordinances establish design guidelines such as minimum setbacks, maximum height requirements, maximum density, and/or landscaping requirements.

Some counties possess General Plans that provide guidance and policies regarding management and siting of existing and new facilities specific to composting. Such guidance includes buffer zones between composting operations and sensitive receptors such as residences, schools, and hospitals. Guidance can also include policies addressing light and glare issues from composting operations on surrounding sensitive receptors.

## AGRICULTURE AND FORESTRY

### ***Federal Farmland Protection Policy Act***

The federal Farmland Protection Policy Act (FPPA) was enacted to minimize federal contributions to conversion of farmland to nonagricultural uses by ensuring that federal programs are administered in a manner compatible with state government, local government, and private programs designed to protect farmland. The FPPA established the Farmland Protection Program (FPP) and the Land Evaluation and Site Assessment (LESA) system.

The FPP is a voluntary program that provides funds to help purchase development rights to keep productive farmland in agricultural uses. The LESA system helps state and local officials make sound decisions about land use and accurately ranks land for suitability and inclusion in the FPP. LESA evaluates several factors, including soil potential for agriculture, location, market access, and adjacent land use. These factors are used to rank land parcels for inclusion in the FPP based on local resource evaluation and site considerations. The LESA system classifies

land based on ten soil and climatic characteristics. The California Department of Conservation (CDOC) augmented that program in 1980 by initiating a system of inventorying, mapping, and monitoring the acreage of farmland in California. The CDOC inventory system was designed to document how much agricultural land in California was being converted to nonagricultural land or transferred into Williamson Act contracts.

### ***National Forest Management Act***

National Forest Management Act (NFMA) requires United States Forest Service (USFS) to provide for a diversity of plant and animal communities as part of its multiple use mandates. NFMA regulations require that each forest prepare a plan that provides strategic direction for managing land and resources during the next 10 to 15 years. USFS must maintain viable populations of existing native and desired non-native species in the planning area. The Regional Forester designates sensitive and management indicator species as part of a proactive approach to ensuring biodiversity is maintained.

### ***Healthy Forests Restoration Act***

Healthy Forests Restoration Act (HFRA) contains a variety of provisions to speed up hazardous-fuel reduction and forest-restoration projects on specific types of federal land at risk of wildland fire and/or of insect and disease epidemics. The HFRA helps states, tribes, rural communities and landowners restore healthy forest and rangeland conditions on state, tribal, and private lands.

### ***The California Land Conservation Act (Williamson Act)***

The California Land Conservation Act, better known as the Williamson Act, was enacted by the California State Legislature in 1965 to encourage preservation of agricultural and open-space lands. The Williamson Act allows for property tax relief for landowners who contract with a city or county to keep their land in agricultural production or approved open-space uses for at least 10 years. Williamson Act contracts are renewed annually for 10 years unless a party to contract files for nonrenewal. The filing of a non-renewal application by a landowner ends automatic annual extension of a contract and starts a 9-year non-renewal and phase-out of the contract. During the phase-out period, the land remains restricted to agricultural and open-space uses. At the end of the 9-year non-renewal process, the contract expires and the owner's uses of the land are restricted only by applicable local zoning. The Williamson Act defines compatible use of contracted lands as any use determined by the county or city administering the agricultural preserve to be compatible with agricultural, recreational, or open space use of land within the preserve and subject to contract. (Gov. Code, § 51202(e).) However, uses deemed compatible by a county or city government must be consistent with principles of compatibility set forth in Government Code section 51238.1.

### ***Farmland Mapping and Monitoring Program (FMMP)***

In 1982, the CDOC created the FMMP to carry on the mapping activity from the National Resources Conservation Service (NRCS) on a continuing basis. The FMMP is a non-regulatory program that provides consistent and impartial analysis of agricultural land use and land use changes throughout California for use by decision-makers in assessing present status, reviewing trends, and planning for the future of California's agricultural land resources. The

FMMP produces Important Farmland Maps, which are a hybrid of resource quality (soils) and land use information. The FMMP is the primary system by which the extent, distribution, and quality of farmland is evaluated and monitored. Farmland is designated in one of several categories: Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance (if adopted by a county), Grazing Land, Urban and Built-up Land, Other Land, and Water. Maps of Important Farmland are prepared periodically (approximately every 2 years) by the FMMP for most of the state's agricultural regions, based on soil survey information and land inventory and monitoring criteria developed by the NRCS.

### ***Z'berg-Nejedly Forest Practice Act***

Z'Berg-Nejedly Forest Practices Act (FPA) ensures that logging on privately owned lands in California is done in a manner that will preserve and protect fish, wildlife, forests, and streams. This act established a nine member Board of Forestry whose mandate was control over forest practices and forest resources in California. The Board of Forestry is the policy arm of the California Department of Forestry (CALFIRE), which is the enforcement branch.

The Forest Practice Act requires that a Timber Harvest Plan (THP) be prepared by a Registered Professional Forester for timber harvest on virtually all non-federal land. THPs are submitted to CALFIRE for its review prior to approval. The THP process is the functional equivalent of an EIR under CEQA. The Forest Practice Act also established the requirement that all non-federal forests cut in the State of California be regenerated with at least three hundred stems per acre on high site lands, and one hundred fifty trees per acre on low site lands.

### ***California Forest Practice Rules 2010***

The State Board of Forestry has authority delegated by legislature to adopt forest practice and fire protection regulations on non-federal lands. These regulations carry out California legislature's mandates to protect and enhance the state's unique forest and wildland resources.

### ***Local Jurisdictions - General Plans, Community and Specific Plans, and Zoning***

The most comprehensive land use planning for a region is provided by city and county general plans, which local governments are required by state law to prepare as a guide for future development. The general plan contains goals and policies concerning topics mandated by state law or which the jurisdiction has chosen to include such as: land use, conservation and open space, natural resources, parks and recreation, and agricultural elements. City and county general plans must be consistent with each other. County general plans must cover areas not included by city general plans (i.e., unincorporated areas). A city or county may also provide land use planning by developing community or specific plans for smaller, more specific areas within their jurisdiction. These more localized plans provide for focused guidance for developing a specific area, with development standards tailored to the area, as well as systematic implementation of the general plan.

The city or county zoning code is the set of detailed requirements that implement the general plan policies at the level of the individual parcel. The zoning code presents standards for different uses and identifies which uses are allowed in the various zoning districts of the jurisdiction.

### ***Public Ownership, Purchase of Development Rights, and Open-Space Acquisition***

Local governments and special districts, either on their own or working with land trusts and conservancies, can acquire fee title to agricultural and open space lands or purchase development rights to preserve rural and agricultural areas, watersheds, or critical habitat, or to create public parks and recreational areas.

## **AIR QUALITY AND GREENHOUSE GASES**

### **Federal Clean Air Act**

The Clean Air Act of 1970 is the comprehensive federal law that regulates air emissions from stationary and mobile sources. In 1990, Congress dramatically revised and expanded the Clean Air Act, providing United States Environmental Protection Agency (USEPA) even broader authority to implement and enforce regulations reducing air pollutant emissions. Under the Clean Air Act, USEPA sets limits on certain air pollutants, including limits on how much can be in the air anywhere in the United States. The Clean Air Act also gives USEPA authority to limit emissions of air pollutants from sources like chemical plants, utilities, and steel mills. Individual states or tribes may have stronger air pollution laws, but they may not have weaker pollution limits than those set by USEPA.

To protect public health and welfare nationwide, the Clean Air Act authorized the USEPA to establish National Ambient Air Quality Standards (NAAQS) for certain common and widespread pollutants based on science at that time. USEPA has set air quality standards for six common “criteria pollutants”:

- 1) PM,
- 2) Ozone,
- 3) SO<sub>2</sub>,
- 4) NO<sub>2</sub>,
- 5) CO, and
- 6) Lead

States were then required to develop and enforce state implementation plans to achieve and maintain the standards. State plans must control emissions that drift across state lines and harm air quality in downwind states. USEPA must approve state, tribal, and local agency plans for reducing air pollution. If a plan does not meet the necessary requirements, USEPA can issue sanctions against the state and, if necessary, take over enforcing the Clean Air Act in that area. Current federal and state ambient air quality standards are provided in Appendix G.

Other key provisions of the Clean Air Act were designed to minimize pollution increases from growing numbers of motor vehicles, and from new or expanded industrial plants. The law called for new stationary sources (e.g., power plants and factories) to use the best available technology, and allows less stringent standards for existing sources. These requirements were implemented through an operating permit program. Operating permits include information on which pollutants are being released, how much may be released, and what kinds of steps the source's owner or operator is required to take to reduce the pollution. Permits must include plans to measure and report the air pollution emitted. States and tribes issue operating permits.

If those governments do not do a satisfactory job of carrying out the Clean Air Act permitting requirements, USEPA can take over issuing permits.

The Clean Air Act also contains specific provisions to address “hazardous” or “toxic” air pollutants that pose health risks; acid rain that damages aquatic life and ecosystems, acidifies forest soils, damages property, and degrades visibility; chemical emissions that deplete the stratospheric ozone layer; and regional haze that impairs visibility. In addition, Congress drafted the Clean Air Act with general authorities that can be used to address pollution problems that emerge over time, such as GHGs that cause climate change.

The Clean Air Act’s authority to regulate emissions that cause or contribute to air pollution that may endanger public health or welfare extends to air pollution from GHGs. In 2007, the Supreme Court decided that the Clean Air Act’s definition of air pollutant includes GHGs. Since then, the USEPA has determined that certain provisions of the Clean Air Act should be used to control large sources of emissions that contribute to climate change.

USEPA has issued GHG regulations for motor vehicles, including cars, trucks, and buses. Because GHGs are now regulated pollutants, large new and modified stationary sources of GHGs must comply with preconstruction permitting provisions of the Clean Air Act under the Prevention of Significant Deterioration (PSD) program, including requirement to apply the best available control technology (BACT) considering cost and other factors. USEPA has issued rules to limit this statutory requirement to large emitters (e.g., power plants, cement manufacturers, refineries, etc.).

A related provision provides for regulation of existing sources, in specific circumstances, for pollutants such as GHGs that are not regulated through requirements for national air quality standards or hazardous air pollutant provisions. USEPA is responsible for regulations that establish a procedure for each state, in those circumstances, to submit a plan containing emissions performance standards for existing sources of such emissions. USEPA is authorized to prescribe a plan for a state if the state fails to submit or enforce a satisfactory plan.

Congress directed USEPA to establish a mandatory reporting system for GHG emissions in the fiscal year 2008 Consolidated Appropriations Act (613 pp, 1.5M) (Pub.L.110-161 (Dec. 26, 2007) 121 Stat. 1844–2456). USEPA’s Greenhouse Gas Reporting Rule requires reporting for direct GHG emitters, fossil fuel suppliers, industrial gas suppliers, and facilities that inject CO<sub>2</sub> underground for sequestration. Municipal solid waste landfills that generate CH<sub>4</sub> in amounts equivalent to 25,000 metric tons or more CO<sub>2</sub>e per year are subject to reporting. Composting was not listed as an affected source category.

### **California Clean Air Act**

ARB is responsible for developing and enforcing the state implementation plan to meet standards set by USEPA. ARB works with local air districts to manage air quality by establishing state ambient air quality standards and regulating mobile and stationary source emission sources.

California has adopted ambient standards that are more stringent than federal standards for criteria air pollutants. The California Clean Air Act, which is patterned after the federal Clean Air Act, also requires designation of clean and dirty air areas based on whether state and national standards are met. Areas where the air quality falls short of national standards are designated

as “non-attainment areas.” Areas where air quality meets the standards are called “attainment areas.” Areas for which data is lacking are designated “unclassifiable,” and generally have the same obligations as attainment areas. An area can be attainment for one pollutant and non-attainment for another. Air quality planning and control requirements differ for non-attainment and attainment areas. The status for each air basin is shown in the Environmental Setting subsection.

The 1988 California Clean Air Act required 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 PM standards). Maintenance plans are required for attainment areas that had previously been designated non-attainment to ensure continued attainment of the standards. Air quality plans developed to meet federal requirements are referred to as State Implementation Plans.

### **Air Toxics Program**

The Air Toxics Program was established in 1983 under Assembly Bill No. 1807 (1983–1984 Reg. Sess.). A total of 243 substances have been designated TACs under California law; they include the 189 (federal) hazardous air pollutants (HAPs) adopted in accordance with AB 2728. The Air Toxics “Hot Spots” Information and Assessment Act of 1987 (Assem. Bill No. 2588 (Health & Saf. Code, § 44300, et seq.)) 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. “High-priority” facilities are required to perform a health risk assessment and, if specific thresholds are violated, are required to communicate the results to the public in the form of notices and public meetings.

ARB developed the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles* (ARB, 2000), which represents proposals to reduce DPM 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 DPM filters and ultra-low sulfur diesel fuel on diesel-fueled engines.

ARB recently published the *Air Quality and Land Use Handbook: A Community Health Perspective* (ARB, 2005). The primary goal in developing the handbook was to provide information that will help keep California’s children and other vulnerable populations out of harm’s way with respect to nearby sources of TACs. The handbook highlights recent studies that have shown that public exposure to air pollution can be substantially elevated near freeways and certain other facilities. The health risk is greatly reduced with distance. For that reason, ARB provides some general recommendations aimed at keeping appropriate distances between sources of air pollution and sensitive land uses, such as residences.

### **Executive Order S-3-05**

In 2005, in recognition of California’s vulnerability to the effects of climate change, Governor Schwarzenegger established Executive Order No. S-3-05 (June 1, 2005), which sets forth a series of target dates by which statewide emission of GHG would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels
- By 2020, reduce GHG emissions to 1990 levels

- By 2050, reduce GHG emissions to 80 percent below 1990 levels

### ***Global Warming Solutions Act of 2006***

The California Global Warming Solutions Act of 2006 (Assem. Bill No. 32; Stats. 2006, ch. 488, hereafter AB 32), creates a comprehensive, multi-year program to reduce GHG emissions to 1990 levels by the year 2020. AB 32 requires that the ARB develop GHG reduction strategies that do not interfere with existing air pollution control measures. The AB 32 Scoping Plan contains the main strategies California will use to reduce the GHGs that cause climate change. The AB 32 Scoping Plan (Measure No. RW-3) commits ARB staff to work with CalRecycle, CDFA, Caltrans, and others to increase production and markets for organic products. ARB projects a reduction of 2 million metric tons CO<sub>2</sub>E from this effort alone.

ARB is currently collaborating with CalRecycle on the development of Waste Management Sector element for the 2013 Scoping Plan Update. A primary objective of this effort is to merge California's GHG emissions reductions goals with the Assembly Bill No. 341 (2011–2012 Reg. Sess.) 75 percent recycling goal, which will require about 22 million tons per year of material be removed from the landfill waste stream and used in non-disposal alternatives by 2020. Composting biodegradable solid waste is viewed to have a significant role in helping to achieve these goals.

### **Local Air Districts**

State law delegates air pollution control authority for stationary sources to local air pollution control districts (APCDs) and air quality management districts (AQMDs). The districts are shown in Figure 1. For some air basins covering more than one county, a unified air district has been formed to manage air quality issues throughout the basin. In other multicounty air basins, individual county air districts manage air quality in only their county. Individual air districts or groups of air districts prepare air quality management plans designed to bring an air basin into compliance for non-attainment criteria pollutants. Those plans are submitted to the ARB for approval, and usually contain an emissions inventory and a list of rules proposed for adoption.

All districts have permitting programs that implement requirements of the federal and state Clean Air Acts, their air quality management plan, and air quality rules and regulations by specifying operating and compliance requirements for stationary sources that emit air pollutants. New major and non-major sources with a potential to emit (including air toxics and hazardous air pollutants) must have a permit prior to commencing construction and/or operation, unless specifically exempt. Since composting operations and associated equipment have the potential to emit several of the criteria pollutants, they must apply for and obtain permits from the air districts.

## California Air Districts

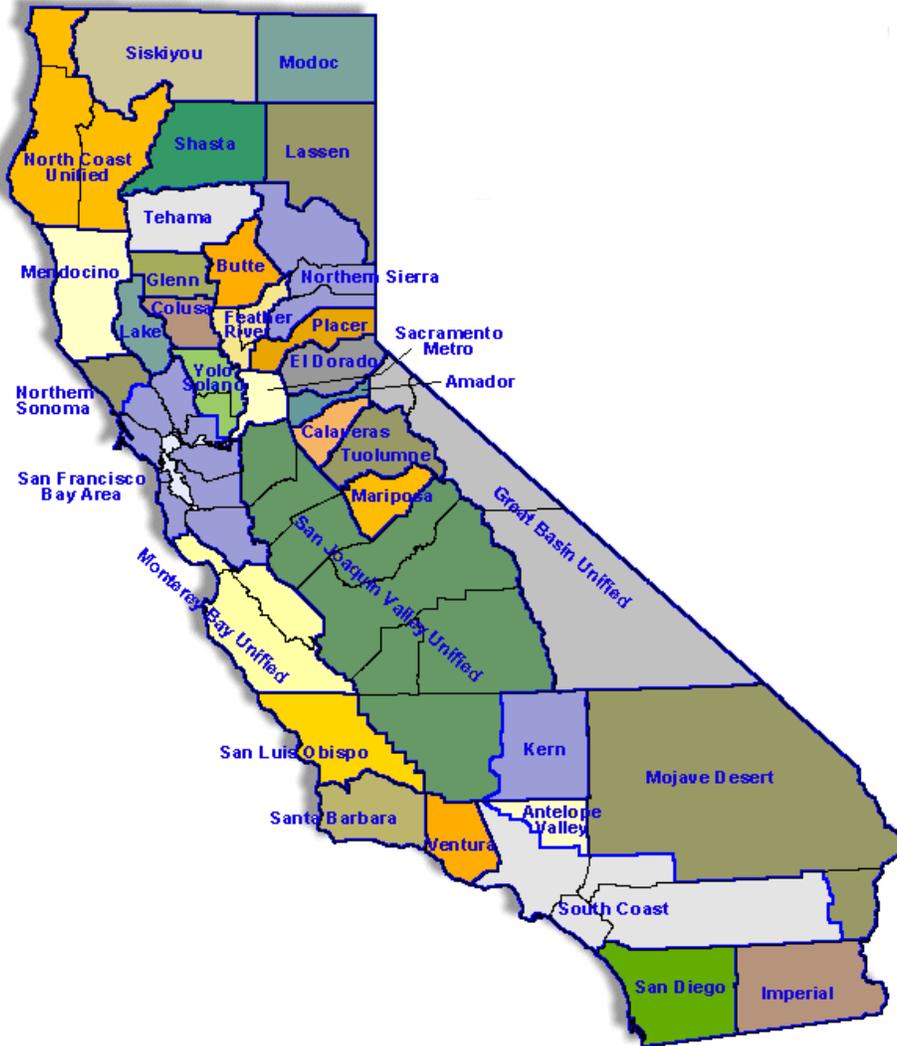


FIGURE 1. Map of California Air Districts

### ***Authority to Construct/Permit to Operate***

The *Authority to Construct* is a permit issued by the air district granting permission to install, modify, and/or construct equipment or processes that will meet local air quality standards. This permit is required when building, erecting, altering, or replacing any article, machine, equipment or other contrivance that may cause issuance of air contaminants, or use of which may eliminate, reduce, or control issuance of air contaminants. The *Authority to Construct* permit typically remains in effect until the *Permit to Operate* the article, machine, equipment, or other contrivance is granted.

The *Permit to Operate* is a permit granting permission to operate the equipment or processes within enforceable limits designed to meet local air quality standards. It must be obtained before any machine, equipment or other contrivance may be operated, used, leased, or rented for operation or use.

**Title V Program**

Title V is a federal program designed to standardize air quality permits and the permitting process for major sources of emissions across the country. The name "Title V" comes from Title V of the 1990 federal Clean Air Act Amendments, which requires USEPA to establish a national operating permit program. Accordingly, USEPA adopted regulations (40 C.F.R. ch. 1(c), § 70), which require states and local permitting authorities to develop and submit a federally enforceable operating permit programs for USEPA approval. All air districts adopted regulations to interface federal permitting requirements with the submitted Title V permit program.

Title V only applies to "major sources," which USEPA defines as a facility that emits, or has the potential to emit any criteria pollutant or HAPs at levels equal to or greater than Major Source Thresholds. Major Source Thresholds for criteria pollutants may vary depending on the attainment status (i.e. marginal, serious, or extreme) of the geographic area and the Criteria Pollutant or HAP in which the facility is located. Table 6-3 provides a summary of major source thresholds found in the rules of each air district.

**TABLE L-1. MAJOR SOURCE THRESHOLDS PER AIR DISTRICT**

| APCD/AQMD                   | POLLUTANT (TONS PER YEAR) |     |     |     |      |            |               |                     |        |
|-----------------------------|---------------------------|-----|-----|-----|------|------------|---------------|---------------------|--------|
|                             | VOC                       | NOX | SOX | CO  | PM10 | SINGLE HAP | COMBO OF HAPS | Total GHG Emissions | CO2e   |
| Amador County APCD          | 50                        | 50  | 100 | 100 | 70   | 10         | 25            |                     |        |
| Antelope Valley AQMD        | 25                        | 25  | 100 | 100 | 100  | 10         | 25            |                     |        |
| Bay Area AQMD               | 100                       | 100 | 100 | 100 | 100  | 10         | 25            |                     |        |
| Butte County AQMD           | 50                        | 50  | 100 | 100 | 70   | 10         | 25            | 100                 | 100000 |
| Calaveras County APCD       | 100                       | 100 | 100 | 100 | 100  | 10         | 25            |                     |        |
| Colusa County APCD          | 100                       | 100 | 100 | 100 | 100  | 10         | 25            |                     |        |
| Eastern Kern APCD           | 50                        | 50  | 100 | 100 | 100  | 10         | 25            |                     |        |
| El Dorado County AQMD       | 25                        | 25  | 100 | 100 | 100  | 10         | 25            |                     |        |
| Feather River AQMD          | 25                        | 25  | 100 | 100 | 100  | 10         | 25            |                     |        |
| Glenn County APCD           | 100                       | 100 | 100 | 100 | 100  | 10         | 25            |                     |        |
| Great Basin APCD            | 50                        | 50  | 100 | 100 | 70   | 10         | 25            |                     |        |
| Imperial County APCD        | 100                       | 100 | 100 | 100 | 70   | 10         | 25            | 100                 |        |
| Lake County AQMD            | 50                        | 50  | 100 | 100 | 70   | 10         | 25            |                     |        |
| Lassen County AQMD          | 100                       | 100 | 100 | 100 | 100  | 10         | 25            |                     |        |
| Mariposa County APCD        | 100                       | 100 | 100 | 100 | 100  | 10         | 25            |                     |        |
| Mendocino County AQMD       | 50                        | 50  | 100 | 100 | 70   | 10         | 25            |                     |        |
| Modoc County APCD           | 100                       | 100 | 100 | 100 | 100  | 10         | 25            |                     |        |
| Mojave Desert AQMD - Zone A | 25                        | 25  | 100 | 100 | 100  | 10         | 25            |                     |        |

| APCD/AQMD  | POLLUTANT (TONS PER YEAR) |     |     |     |      |            |               |                     |        |
|--|---------------------------|-----|-----|-----|------|------------|---------------|---------------------|--------|
|  | VOC                       | NOX | SOX | CO  | PM10 | SINGLE HAP | COMBO OF HAPS | Total GHG Emissions | CO2e   |
| Mojave Desert AQMD - Zone B  | 100                       | 100 | 100 | 100 | 100  | 10         | 25            |                     |        |
| Monterey Bay Unified APCD  | 100                       | 100 | 100 | 100 | 100  | 10         | 25            |                     | 100000 |
| North Coast Unified AQMD   | 50                        | 50  | 100 | 100 | 70   | 10         | 25            | 100                 |        |
| Northern Sierra AQMD   | 50                        | 50  | 100 | 100 | 70   | 10         | 25            |                     |        |
| Northern Sonoma County APCD  | 50                        | 50  | 100 | 100 | 70   | 10         | 25            |                     |        |
| Placer County APCD   | 50                        | 50  | 100 | 100 | 70   | 10         | 25            | 100                 | 100000 |
| Sacramento Metropolitan AQMD   | 25                        | 25  | 100 | 100 | 100  | 10         | 25            | 100                 |        |
| San Diego County APCD  | 50                        | 50  | 100 | 100 | 100  | 10         | 25            |                     |        |
| San Joaquin Valley APCD  | 10                        | 10  | 70  | 100 | 70   | 10         | 25            |                     |        |
| San Luis Obispo County APCD  | 100                       | 100 | 100 | 100 | 100  | 10         | 25            |                     | 100000 |
| Santa Barbara County APCD  | 100                       | 100 | 100 | 100 | 100  | 10         | 25            |                     | 100000 |
| Shasta County AQMD   | 50                        | 50  | 100 | 100 | 70   | 10         | 25            |                     |        |
| Siskiyou County APCD   | 100                       | 100 | 100 | 100 | 100  | 10         | 25            |                     |        |
| South Coast AQMD   |                           |     |     |     |      |            |               |                     |        |
| - South Coast Air Basin <sup>(a)</sup>                               | 10                        | 10  | 100 | 50  | 70   | 10         | 25            |                     |        |
| - Riverside County Portion of Salton Sea Air Basin <sup>(a)</sup>    | 25                        | 25  | 100 | 100 | 70   | 10         | 25            |                     |        |
| - Riverside County Portion of Mojave Desert Air Basin <sup>(a)</sup> | 100                       | 100 | 100 | 100 | 100  | 10         | 25            |                     |        |
| Tehama County APCD   | 50                        | 50  | 100 | 100 | 70   | 10         | 25            | 100                 | 100000 |
| Tuolumne County APCD   | 50                        | 50  | 100 | 100 | 70   | 10         | 25            |                     |        |
| Ventura County APCD  | 25                        | 25  | 100 | 100 | 100  | 10         | 25            |                     |        |
| Yolo-Solano AQMD   | 25                        | 25  | 100 | 100 | 100  | 10         | 25            |                     |        |

Notes:

- 1) Criteria pollutant thresholds were found in the district rules regarding Title V or Part 70 permitting.
- 2) Some Air Districts may regulate over multiple air basins. In these cases, thresholds may be different depending on the specific project location and area designation.

### Source Specific Rules

The air districts listed below have established specific rules and regulations for composting operations, as planned in their State Implementation Plan shown below. Not every air district has done this; however, this does not imply that composting is unregulated by these other air districts. Many of the other air districts look to the ones below as guidance for permitting composting facilities.

**Antelope Valley Air Quality Management District (AQMD):** The Antelope Valley AQMD was established in 1997 by the state Legislature, which separated Antelope Valley and northern Los Angeles County from the South Coast AQMD. The Antelope Valley AQMD is the local agency

with primary responsibility for control of non-vehicular sources of air pollution throughout Antelope Valley. The Antelope Valley AQMD is located within the Mojave Desert air basin, in the northern part of Los Angeles County. The district boundaries start on the south just outside of Acton, north to the Kern County line, east to the San Bernardino County line, and west to the Quail Lake area.

The Antelope Valley AQMD adopted Regulation XI Rule 1133 for Composting and Related Operations on March 17, 2009. The purpose of the rule is to limit emissions of VOCs and ammonia; prevent inadvertent decomposition occurring during chipping and grinding operations; and create an emissions-related informational database through administrative requirements as part of a composting registration program. A copy of the rule is available at: <http://www.avagmd.ca.gov/Modules/ShowDocument.aspx?documentid=1503>.

**San Joaquin Valley Air Pollution Control District (APCD):** The San Joaquin Valley APCD is comprised of eight counties in California's Central Valley: San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and the San Joaquin Valley Air Basin portion of Kern. The San Joaquin Valley APCD is a public health agency whose mission is to improve the health and quality of life for all San Joaquin valley residents through efficient, effective, and entrepreneurial air quality-management strategies.

San Joaquin Valley APCD adopted Regulation IV Rule 4566 for Organic Material Composting Operations on August 18, 2011. The purpose of this rule is to limit emissions of volatile organic compounds from composting operations. A copy of the rule is available at: <http://www.valleyair.org/rules/currnrules/Rule4566CleanRule.pdf>.

**South Coast Air Quality Management District:** The South Coast AQMD is the air pollution control agency for all of Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino counties. The South Coast AQMD is committed to undertaking all necessary steps to protect public health from air pollution, with sensitivity to impacts of actions on the community and businesses. This protection is accomplished through a comprehensive program of planning, regulation, compliance assistance, enforcement, monitoring, technology advancement, and public education primarily focused on controlling stationary source emissions.

South Coast AQMD adopted Regulation XI Rule 1133 for Composting and Related Operations – General Administrative Requirements on January 10, 2003; Rule 1133.2 for Emission Reductions from Co-Composting Operations on January 10, 2003, and; Rule 1133.3 for Emission Reductions from Greenwaste Composting Operations on July 8, 2011. The purpose of the rules is to reduce fugitive emissions of volatile organic compounds and ammonia occurring during these composting operations. Copies of the rules are available at: [http://aqmd.gov/rules/reg/reg11\\_tofc.html](http://aqmd.gov/rules/reg/reg11_tofc.html).

## **BIOLOGICAL RESOURCES**

### ***Endangered Species Act***

The 1973 Endangered Species Act (16 U.S.C. § 1531 et seq.) protects fish and wildlife species and their habitats that have been identified by the United States Fish and Wildlife Service (USFWS) or the National Oceanic and Atmospheric Administration's (NOAA) National Marine

Fisheries Service (NMFS) as threatened or endangered. Endangered refers to species, subspecies, or distinct population segments in danger of extinction through all or a significant portion of their range. Threatened refers to species, subspecies, or distinct population segments that are likely to become endangered in the near future. The act is administered by USFWS and the NMFS. In general, NMFS is responsible for protection of listed marine species and anadromous fish, whereas other listed species are under USFWS jurisdiction.

#### ***Federal Migratory Bird Treaty Act***

The Migratory Bird Treaty Act states that without a permit issued by the U.S. Department of the Interior, it is unlawful to pursue, hunt, take, capture, or kill any migratory bird.

#### ***Bald and Golden Eagle Protection Act***

The Bald and Golden Eagle Protection Act makes it illegal to import, export, take (which includes molest or disturb), sell, purchase, or barter any bald eagle, golden eagle or any parts thereof.

#### ***Fish and Wildlife Coordination Act***

The Fish and Wildlife Coordination Act requires coordination with USFWS, NMFS, and the DFW when waters of any stream or other body of water are proposed, authorized, permitted, or licensed to be impounded, diverted, or otherwise controlled or modified under a federal permit or license (16 U.S.C. § 661–667(e)). USFWS typically prepares an advisory Coordination Act Report with recommendations to address impacts on fish and wildlife resources only.

#### ***Clean Water Act***

The Clean Water Act was enacted as an amendment to the federal Water Pollution Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to waters of the United States. The Act serves as the primary federal law protecting quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. The Act empowers the USEPA to set national water quality standards and effluent limitations and includes programs addressing both point-source and nonpoint-source pollution. Point-source pollution is pollution that originates or enters surface waters at a single, discrete location, such as an outfall structure or an excavation or construction site. Nonpoint-source pollution originates over a broader area and includes urban contaminants in storm water runoff and sediment loading from upstream areas. The CWA operates on the principle that all discharges into the nation's waters are unlawful unless specifically authorized by a permit; permit review is the Act's primary regulatory tool.

In addition, the Act requires permitting and monitoring of all discharges to surface water bodies. Section 404 requires a permit from the United States Army Corps of Engineers (USACE) for a discharge from dredged or fill materials into waters of the United States, including wetlands. Section 401 requires a permit from a Regional Water Board for discharge of pollutants. By federal law, every applicant for a federal permit or license for an activity that may result in a discharge into a California water body, including wetlands, must request state certification that the proposed activity would not violate state and federal water quality standards.

### ***Federal Noxious Weed Act of 1974***

The Federal Noxious Weed Act (enacted Jan. 3, 1975; 7 U.S.C. 2801 et seq.) establishes a federal program to control the spread of noxious weeds. A noxious weed is a plant species that has been designated by the Secretary of Agriculture as one that is injurious to agricultural and/or horticultural crops, natural habitats and/or ecosystems, and/or humans or livestock. The Secretary of Agriculture designates plants as noxious weeds by regulation and movement of all such weeds in interstate or foreign commerce is prohibited except under permit.

### ***National Forest Management Act***

The NFMA requires USFS to provide for a diversity of plant and animal communities as part of its multiple-use mandate. NFMA regulations require that each forest prepare a plan that provides strategic direction for managing land and its resources during the next 10 to 15 years. USFS must maintain viable populations of existing native and desired non-native species in the planning area. The Regional Forester designates sensitive and management indicator species as part of a proactive approach to ensure biodiversity is maintained.

### ***California Environmental Quality Act***

CEQA projects will be deemed to have a significant environmental impact on biological resources if it substantially reduces the number or restricts the range of a rare, threatened, or endangered species or habitat of that species; substantially interferes with movement of resident or migratory fish or wildlife; or substantially diminishes habitat for fish, wildlife, or plants. CEQA Guidelines define rare, threatened, or endangered species as those listed under the California Endangered Species Act and the Endangered Species Act, as well as other species that meet criteria of resource agencies or local agencies — for example, DFW-designated species of special concern and some California Native Plant Society-listed species.

### ***California Endangered Species Act***

The California Endangered Species Act of 1984 (Fish & G. Code, div. 3, ch. 1.5, § 2050 et seq.) requires that state agencies seek and conserve threatened and endangered species and restricts all persons from taking listed species. DFW administers the act and authorizes take under Fish and Game Code, section 2081 agreements (except for designated “fully protected species”). The California Endangered Species Act defers to the California Native Plant Protection Act of 1977 (Fish & G. Code, § 1904), which prohibits importing of rare and endangered plants into California, taking of rare and endangered plants, and selling of rare and endangered plants. State-listed species are protected mainly in cases where state agencies are involved in projects under CEQA. In this case, plants listed as rare under the California Native Plant Protection Act are not protected under the California Act but can be protected under CEQA. The following activities are exempt from the California Native Plant Protection Act:

- Agricultural operations;
- Fire control measures;
- Timber harvest operations;
- Mining assessment work;
- Removal of plants by private landowners on private land for construction of canals, ditches, buildings, roads, or other rights-of-way; and

- Removal of plants for performance of a public service by a public agency or a publicly or privately owned public utility.

### ***Clean Water Act, Section 401***

The State Water Board has authority over wetlands through section 401 of the federal Clean Water Act of 1972 (33 U.S.C. § 1251 et seq.), which requires that an application for a section 404 permit (to discharge dredged or fill material into waters of the United States) first obtain certification from the appropriate state agency, stating that the fill is consistent with the state's water quality standards and criteria. In California, authority to either grant certification or waive requirements for permits is delegated to the nine Regional Water Boards.

### ***DFW Lake and Streambed Alteration Agreements***

Under sections 1600–1616 of the California Fish and Game Code, the DFW prohibits activities that would “substantially divert or obstruct natural flow of, or substantially change or use material of the bed, channel, or bank of any river, stream, and lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake” without consulting with DFW. Notification is required prior to any such activities and DFW will issue an Agreement with any necessary mitigation to ensure protection of the State's fish and wildlife resources.

### ***California Oak Woodlands Conservation Act***

The California Oak Woodlands Conservation Act was enacted in 2001 to protect oak woodland habitats that were being diminished by development, firewood harvesting, and agricultural conversions. (Fish & G. Code, § 1360 et seq.) The Oak Woodlands Conservation Program was established because of the act and is intended to provide project funding opportunities for private landowners, conservation organizations, and cities and counties to conserve and restore oak woodlands. The program authorizes the Wildlife Conservation Board to purchase oak woodland conservation easements and provide grants for land improvements and oak restoration efforts.

### ***Local Jurisdictions - Habitat Conservation Plans/Natural Community Conservation Plans***

During implementation of specific projects, an activity subject to section 10 of the Endangered Species Act (16 U.S.C. § 1539) and considered a covered project under the implementing rules of an adopted Habitat Conservation Plan or Natural Community Conservation Plan may be able to participate in the plan for effects on covered species.

## **CULTURAL RESOURCES**

While historic resources are generally known, archaeological and paleontological resources are frequently uncovered during construction of projects that require excavation. Strict mitigation and protection measures are required whenever such resources are discovered. In addition, there is a general requirement that a cultural resource survey and environmental analysis be prepared prior to commencement of any action, development, or land use change subject to CEQA or NEPA on lands subject to federal jurisdiction or for projects involving federal funds.

## ***National Historic Preservation Act***

The National Historic Preservation Act (NHPA) of 1966 (16 U.S.C. § 470f), as amended, is the primary federal law governing preservation of cultural and historic resources in the United States. The act establishes the federal government policy on historic preservation and programs through which this policy is implemented. Section 106 of the NHPA (16 U.S.C. § 470f) requires federal agencies to take into account effects of their undertakings on any district, site, building, structure, or object included in or determined eligible for inclusion in the National Register for Historic Places (NRHP), and to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings (36 C.F.R. § 800.1). Under §section 106 of the NHPA, significance of any adversely affected cultural resource is assessed and mitigation measures are proposed to reduce any impacts to an acceptable level. Significant cultural resources (historic properties) are those resources listed in, or are eligible for listing on the NRHP per criteria listed at 36 Code of Federal Regulations section 60.4. Section 101(d)(6)(A) of the NHPA (16 U.S.C. § 470a(d)(6)(a)) allows properties of traditional religious and cultural importance to a Native American tribe to be determined eligible for inclusion on the NRHP. Section 106 also directs federal agencies to involve consulting parties, including the State Historic Preservation Officer, Native American tribes, and local governments, to provide an opportunity for public involvement during the compliance process (36 C.F.R. § 800.2(4)(c)). To be eligible for the NRHP, cultural resources must possess integrity and meet at least one of the following four criteria delineated at 36 Code of Federal Regulations section 60.4:

- a) Are associated with events that have made a significant contribution to broad patterns of American history;
- b) Are associated with lives of persons significant in American history;
- c) Embody distinctive characteristics of a type, period, or method of construction, or that represent work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- d) Have yielded, or may be likely to yield, information important in prehistory or history.

Under title 16 of the United States Code section 470f, impacts of a project to historic properties that affect characteristics that qualify a property for NRHP inclusion are considered a significant effect on the environment. Examples of adverse effects on historic properties are listed under 36 Code of Federal Regulations section 800.5(a)(2) and include, but are not limited to, physical destruction or damage to all or part of a property, change of character of use of the property or physical feature within the setting of the property that contribute to its significance, or introduction of visual, atmospheric, or audible elements that diminish integrity of significant features of the property. If an adverse effect is found, the agency shall act pursuant to 36 Code of Federal Regulations section 800.6 (36 C.F.R. § 800.5(d)(2)) to resolve the adverse effect by developing and evaluating alternatives or modifications to the undertaking that “could avoid, minimize or mitigate adverse effects on historic properties” (36 C.F.R. § 800.6(a)).

Cultural resources that have been determined not eligible for the NRHP, in consultation with the State Historic Preservation Officer and interested parties, require no further consideration unless new discoveries trigger re-evaluation. Section 106 of the act does not apply to paleontological resources unless they are found in a culturally-related context. In addition to the Antiquities Act (16 U.S.C. §§ 431–433) of 1906, preservation and salvage of fossils and other

paleontological resources can be protected under the National Registry of Natural Landmarks (16 U.S.C. §§ 461–467) and NEPA which directs federal agencies to “preserve important historic, cultural, and natural aspects of our national heritage.”

### ***Archeological Resources Protection Act of 1979***

The Archeological Resources Protection Act of 1979 (43 C.F.R. § 7) may impose additional requirements on an agency if federal or Indian lands are involved. This act:

1. Prohibits unauthorized excavation on federal and Indian lands;
2. Establishes standards for permissible excavation;
3. Prescribes civil and criminal penalties;
4. Requires agencies to identify archeological sites; and
5. Encourages cooperation between federal agencies and private individuals.

### ***American Indian Religious Freedom Act of 1978***

The American Indian Religious Freedom Act of 1978 (42 U.S.C. §§ 1996, 1996a) affirms the right of Native Americans to have access to their sacred places. If a place of religious importance to American Indians may be affected by an undertaking, the act promotes consultation with Indian religious practitioners. Amendments to section 101 of NHPA in 1992 strengthened interface between the two acts by clarifying the following:

1. Properties of traditional religious and cultural importance to an Indian tribe or organization may be determined to be eligible for inclusion in the NRHP.
2. In carrying out its responsibilities under section 106, a federal agency shall consult with any Indian tribe or Native Hawaiian organization that attaches religious and cultural significance to properties described under (1).

### ***Native American Graves Protection and Repatriation Act of 1990***

For activities on federal lands, the Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 (43 C.F.R. §10) requires consultation with “appropriate” Indian organizations prior to intentional excavation, or removal after inadvertent discovery, of several kinds of cultural items, including human remains and objects of cultural patrimony. For activities on Native American lands, which are defined in the statute, NAGPRA requires consent of the Indian tribe or organization prior to removal of cultural items. The law also provides for repatriation of such items from federal agencies and federally assisted museums and other repositories.

The 1992 amendments to the NHPA strengthened NAGPRA by encouraging “protection of Native American cultural items...and of properties of religious or cultural importance to Indian tribes, Native Hawaiians, or other Native American groups” (NHPA § 112[b][3]) and by stipulating that a federal “...agency’s procedures for compliance with section 106...provide for the disposition of Native American cultural items from federal or tribal land in a manner consistent with section 3(c) of the Native American Graves Protection and Repatriation Act....” The final rule of the NAGPRA regulations, effective May 14, 2010, added procedures for disposition of culturally unidentifiable Native American human remains in possession or under purview of museums of federal agencies. The rule also amended sections of NAGPRA related

to purpose and applicability of regulations, definitions, inventories of human remains and related funerary objects, civil penalties, and limitations and remedies.

### **California Environmental Quality Act**

CEQA of 1972 (Pub. Resources Code, § 21000 et seq.; and Cal. Code Regs., tit. 14, § 15000 et seq. (CEQA Guidelines hereafter and throughout)) is the principal regulatory control addressing impacts on historical and paleontological resources in California. Projects with potential to adversely affect significant cultural resources must be reviewed through the CEQA process.

Further direction on cultural resources can be found in the CEQA Guidelines section 15064.5, “Determining the Significance of Impacts to Archaeological and Historical Resources.” Subsection (a) defines the term “historical resources.” Subsection (b) explains when a project may be deemed to have a significant effect on historical resources and defines terms used in describing those situations. Subsection (c) describes CEQA’s applicability to archaeological sites and provides a bridge between application of the terms “historical resource” and a “unique” archaeological resource. The term “historical resource” is similar to, but more inclusive than the NRHP criteria. Under CEQA, a historical resource includes, but is not limited to:

- A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in the California Register of Historical Resources (Pub. Resources Code, §5024.1; Cal. Code Regs., tit. 14, § 4852).
- A resource included in a local register of historical resources (as defined by Pub. Resources Code, §5020.1(k)), or identified in a historical resource survey meeting requirements of Pub. Resources Code, §5024.1(g) (presumption of historical significance), and
  - Is associated with events that have made a significant contribution to broad patterns of California’s history and cultural heritage;
  - Is associated with lives of persons important to American history;
  - Embodies distinctive characteristics of a type, period, region, or method of installation, represents work of an important creative individual, or possesses high artistic values; or
  - Has yielded, or may be likely to yield, information important in prehistory or history.
- A resource that the lead agency otherwise determines is a historical resource as defined by Public Resources Code section 5020(j) or section 5024.1. (CEQA Guidelines, § 15064.7), “Thresholds of Significance,” encourages agencies to develop thresholds of significance to be used in determining potential impacts and defines the term “cumulatively significant.”

CEQA Guidelines section 15065, “Mandatory Findings of Significance,” state that a lead agency shall find that a project may have significant effect on the environment and thereby require an EIR to be prepared in certain circumstances. Subsection (a) of section 15065 is applicable to cultural resources, and states that the project has the potential to eliminate important examples of major periods of California history or prehistory. CEQA Guidelines section 15126.4, “Consideration and Discussion of Mitigation Measures Proposed to Minimize Significant

Effects,” subsection (b) discusses impacts of maintenance, repair, stabilization, restoration, conservation, or reconstruction of a historical resource. Subsection (b) also discusses mitigation through avoidance of damaging effects on any historical resource of an archaeological nature, preferably by preservation in place, or by data recovery through excavation if avoidance or preservation is not feasible.

In the case of projects that must consider both federal and state laws, regulations and standards, joint environmental documents, and time limits for preparation, and cooperation with federal agencies on common documents is encouraged (Cal. Code Regs., tit. 14, §§ 15222, 15225).

### ***California Public Resources Code***

Public Resources Code section 5024.1, establishes the California Register of Historical Resources, sets forth criteria to determine significance (detailed above), defines eligible properties, and lists nomination procedures. As described in subsection (d), resources automatically listed in the register include those listed in or formally determined eligible for listing in the NRHP and California Historical Landmarks from No. 770 onward. section 5097.5 states that any unauthorized removal or destruction of archaeological or paleontological resources on sites located on public land is a misdemeanor. As used in this section, “public lands” is defined as “lands owned by, or under the jurisdiction of, the State, or any city, county, district, authority, or public corporation, or agency thereof.”

Section 5097.9 prohibits interference with free expression of Native American religion as provided in the United States Constitution and the California Constitution. it also prohibits severe or irreparable damage to any Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine on public property, except on a clear and convincing showing that the public interest and necessity so require.

Section 5097.98 requires the Native American Heritage Commission, upon notification by a county coroner, to notify the most likely descendants regarding discovery of Native American human remains, it enables descendants, within 48 hours of notification by the commission, to inspect the site of discovery of Native American human remains and to recommend to the landowner or person responsible for the excavation work means for treating or disposition, with appropriate dignity, the human remains and any associated grave goods, it requires the owner of land upon which Native American human remains were discovered, in event that no descendant is identified or the descendant fails to make a recommendation for disposition or the landowner rejects the recommendation of the descendant, to reinter the remains and burial items with appropriate dignity of the property in a location not subject to further disturbance.

Section 5097.99 prohibits obtaining or possessing Native American artifacts or human remains taken from a grave or cairn and sets penalties for those actions.

Section 5097.991 states that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated.

Section 21083.2 states that if a project may affect a resource that has not met with the definition of a historical resource set forth in section 21084, then the lead agency may determine whether a project may have a significant effect on “unique” archaeological resources, if so, an EIR shall

address these resources. If a potential for damage to unique archaeological resources can be demonstrated, such resources must be avoided, if they cannot be avoided, mitigation measures shall be required. The law also discusses excavation as mitigation, discusses costs of mitigation for several types of projects, sets time frames for excavation, defines unique and non-unique archaeological resources, provides for mitigation of unexpected resources, and sets financial limitations for this section.

Section 21084.1 indicates that a project may have a significant effect on the environment if it causes a substantial adverse change in the significance of a historical resource. The section further defines a “historical resource” and describes what constitutes a “significant” historical resource.

### ***California Code of Regulations***

California Code of Regulations (Cal. Code Regs., tit. 14, div. 3, ch. 1, §§ 4307, 4308) states that no person shall remove, injure, deface, or destroy any object of paleontological, archaeological or historical interest or value.

### ***California Penal Code***

California Penal Code section 622.5 establishes willful injury, disfiguration, defacement, or destruction of any object or thing of archaeological or historical interest or value, whether situated on private or public lands, as a misdemeanor.

### ***California Health and Safety Code***

California Health and Safety Code section 7050.5 requires that if human remains are discovered during construction outside of a dedicated cemetery, the project owner is required to contact the county coroner and further excavation or disturbance of land cease until the coroner has made a determination. If the coroner determines the remains are Native American, procedures outlined in Public Resources Code section 5097.98 must be followed.

### ***Senate Bill No. 18***

Senate Bill No.18 (2003–2004 Reg. Sess.) (SB 18) was signed into law in September 2004, and became effective on March 1, 2005. (Gov. Code §§ 65352.3, 65352.4.) SB 18 permits California Native American tribes recognized by the Native American Heritage Commission to hold, on terms mutually satisfactory to the tribe and the landowner, conservation easements. The term “California Native American tribe” is defined as a federally recognized California Native American tribe or a non-federally recognized California Native American tribe on the contact list maintained by the Native American Heritage Commission.

SB 18 also requires that, prior to adoption or amendment of a city or county’s general plan of the adoption of a Specific Plan, the city or county conduct consultations with California Native American tribes for the purpose of preserving specified places, features, and objects located within the city or county’s jurisdiction. Specifically, SB 18 requires public notice to be sent to tribes listed on the Native American Heritage Commission’s SB 18 Tribal Consultation list within the geographical areas affected by the proposed changes. Tribes must respond to a local government notice within 90 days (unless a shorter time frame has been agreed upon by the tribe), indicating whether they want to consult with the local government.

## **Local Jurisdictions – Historic Preservation Ordinances**

Each local government has authority to adopt a historic preservation ordinance that provides regulations for historical resources. In addition, some City and County General Plans also contain goals, policies and programs that promote protection of cultural heritage within a Conservation and Open Space, Resources, or similarly titled Element. For instance, the Sacramento County General Plan Resources Element includes a goal to inventory, protect, and interpret the cultural heritage of the County, and policies and programs that specifically address cultural resources of Native Americans (County of Sacramento, 2011). Another example can be found in the Los Angeles City General Plan, which addresses archaeological significance to the history of that City in the Conservation Element (City of Los Angeles, 2001). Paleontological resources may not be included in General Plans for any local agency. However, paleontological resources are included as significant cultural resources under CEQA.

## **GEOLOGY, SOILS, SEISMICITY, AND MINERALOGY**

### ***National Earthquake Hazards Reduction Program 1977, Reauthorization Act of 2004***

The National Earthquake Hazards Reduction Act was enacted in 1977 to “reduce the risks to life and property from future earthquakes in the United States through establishment and maintenance of an effective earthquake hazards and reduction program.” To accomplish this, the act established the National Earthquake Hazards Reduction Program. The program’s mission includes improved understanding, characterization, and prediction of hazards and vulnerabilities; improvement of building codes and land use practices; risk reduction through post-earthquake investigations and education; development and improvement of design and construction techniques; improvement of mitigation capacity; and accelerated application of research results. The Act designates the Federal Emergency Management Agency (FEMA) as the lead agency of the program and assigns it several planning, coordinating, and reporting responsibilities. Other agencies include the National Institute of Standards and Technology, National Science Foundation, and the USGS. <http://www.nehrp.gov/about/PL108-360.htm>

### ***Soil and Water Resources Conservation Act of 1977 (16 U.S.C. §§ 2001–2009)***

The Soil and Water Resources Conservation Act provides broad natural resource strategic assessment and planning authority for the United States Department of Agriculture (USDA). The purpose of the Act was to ensure that USDA programs for the conservation of soil, water, and related resources are responsive to the long-term needs of the nation. Provisions of the Act include 1) a continuing appraisals of soil, water, and resources; 2) a National Conservation Program; 3) implementation of conservation strategies through legislative changes. NRCS' natural resources conservation programs help people reduce soil erosion, enhance water supplies, improve water quality, increase wildlife habitat, and reduce damages caused by floods and other natural disasters. NRCS programs that may be applicable to the order include Colorado River Basin Salinity Control, Highly Erodible land and Wetland Conservation, Environmental Justice, National Environmental Policy Act, Rapid Watershed Assessment, Soil Survey Program, State Technical Committees, Watershed Surveys and Planning. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/technical/nra/rca/?cid=nrcs143\\_008206](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/technical/nra/rca/?cid=nrcs143_008206)

### ***Alquist-Priolo Earthquake Fault Zoning Act***

The Alquist-Priolo Earthquake Fault Zoning Act was passed into law following the February 9, 1971 Mw 6.6 San Fernando earthquake. The intent of the Act was to ensure public safety by prohibiting the siting of structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep, and to mitigate existing fault rupture hazards.

The Act requires the State Geologist to delineate earthquake fault zones along known active faults in California, and prohibits new construction within these zones without investigation. The Act also requires owners of existing properties within these zones to disclose the earthquake zone prior to sale of the property.. Local regulatory agencies affected by the fault zones must regulate certain projects within the zone, including requiring geologic investigations to evaluate the threat of surface displacement (CGS, 2010b).

The Act only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards. The Seismic Hazards Mapping Act, passed in 1990, addresses non-surface fault rupture earthquake hazards, including liquefaction and seismically induced landslides. <http://www.conservation.ca.gov/cgs/rghm/ap/Pages/main.aspx>

### ***Seismic Hazards Mapping Act (Pub. Resources Code, div. 2, ch. 7.8)***

The intent of the Seismic Hazards Mapping Act is to provide a statewide seismic hazard mapping and technical advisory program to assist regulatory agencies. The maps and supporting documents provide information about areas more likely to be affected by strong ground shaking, liquefaction, landslides, and other seismic hazards caused by earthquakes.

California has designated areas where specific geologic hazards have been identified in sufficient number and severity to warrant special hazard zoning. Regulatory hazard zones require site-specific investigation for potential hazards such as faulting, landslides, and liquefaction as part of a grading or building permit.

The California Regional Geologic Hazards Mapping Program includes seismic hazards and analysis, regional geologic mapping, landslide and liquefaction mapping and information about hazardous minerals. The purpose of the mapping program is to identify significant geologic and seismic hazards in order to improve land use planning and emergency response planning decisions. The hazard maps are available on the CGS's website at:

[http://www.conservation.ca.gov/cgs/geologic\\_hazards/regulatory\\_hazard\\_zones/Pages/Index.aspx](http://www.conservation.ca.gov/cgs/geologic_hazards/regulatory_hazard_zones/Pages/Index.aspx)

### ***California Building Standards Code***

The California Building Code (CBC), also referred to as title 24, is administered by the California Building Standards Commission, which is responsible for coordinating all building standards. The purpose of the CBC is to establish minimum standards to safeguard the public health, safety, and general welfare through structural strength, means of egress, and general stability by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all building and structures within its jurisdiction. The CBC is based on the International Building Code (IBC) published by the International Code Conference, and

includes California amendments based on the American Society of Civil Engineers (ASCE) Minimum Design Standards 7-05. ASCE 7-05 provides requirements for general structural design and includes means for estimating earthquake loads and other loads.

The earthquake design requirements consider the occupancy category of a structure, site class, soil classifications, and various seismic coefficients, which are used to determine a Seismic Design Category for a project. This classification system combines the occupancy categories with the expected ground motions to estimate seismic vulnerability of a site and is used to develop design specifications. Appendix J of the CBC contains regulations for grading, excavation and earthwork construction, including fills and embankments.

### ***Statutes and Regulations Pertaining to Dams and Reservoirs, Water Code, Division 3, Dams and Reservoirs, Part 1, Chapter 1***

The Division of Safety of Dams has jurisdiction over large water containment structures: over a dam or barrier that is 1) more than 6 feet high and impounds 50 acre-feet or more of water, or 2) is 25 feet or higher and impounds more than 15 acre-feet of water, unless it is federally owned or exempted under special Water Code provisions. Some water containment structures are exempt from the Division's jurisdiction, including: circular tanks, tanks elevated above ground, sewage sludge drying facilities, and wastewater control facility ponds which are 15 feet or less in height and have a maximum storage capacity of 1,500 acre-feet or less and are constructed as part of a waste water facility.

## **HAZARDS AND HAZARDOUS MATERIALS**

Hazardous materials are subject to numerous federal, state, and local laws, regulations, ordinances, and guidance intended to protect public health and safety and the environment. The USEPA, CalEPA, DTSC, State and Regional Water Boards, ARB, federal and California Occupational Safety and Health Administration (OSHA), CalRecycle, CALFIRE and the local oversight agencies are the major federal, state, and regional agencies that enforce these regulations. The main focus of OSHA is to prevent work-related injuries and illnesses, including from exposures to hazardous materials. CalRecycle is mandated to reduce waste, promote management of materials to their highest and best use, and protect public health and safety and the environment. CALFIRE implements fire safety regulations. In accordance with Chapter 6.11 of the California Health and Safety Code (§ 25404, et seq.), local regulatory agencies enforce many federal and state regulatory programs through the Certified Unified Program Agency (CUPA) program, including:

- Hazardous materials business plans (Health & Saf. Code, ch. 6.95, § 25501 et seq.).
- State Uniform Fire Code requirements (§ 80.103 of the Uniform Fire Code as adopted by the state fire marshal pursuant to Health & Saf. Code, § 13143.9).
- UST (Health & Saf. Code, ch. 6.7, § 25280 et seq.).
- Aboveground storage tanks (Health & Saf. Code, § 25270.5, subd. (c)).
- Hazardous waste generator requirements (Health & Saf. Code, ch. 6.5, § 25100 et seq.).

The following is a summary of worker safety and hazardous materials regulations by applicable topic. Within each summary is a discussion of relevant federal, state, and local regulations.

### **State Agency Regulation**

CalRecycle regulates composting operation as a *Compostable Materials Handling Operations and Facilities* under California Code of Regulations, title 14, division 7, chapter 3.1. Regulations regarding solid waste facilities and compostable materials handling, operations, and regulatory requirements can be obtained at:

<http://www.calrecycle.ca.gov/Laws/Regulations/title14/default.htm>.

These regulations are overseen by CalRecycle and its designated local EAs. These regulations include, but are not limited to, the following for compost facility operations: establishes permitting and inspection requirements; prohibits acceptance of hazardous wastes, liquids and sludge; outlines general operating standards; provides for removal of contaminants from compost and feedstock; requires materials handling in a manner that minimizes vectors and prevents unauthorized access by individuals and animals; outlines pathogen reduction and sampling requirements; establishes recordkeeping and facility closure requirements.

Specific regulations that provide EAs the means to address issues regarding vectors, odor, and other nuisances include the following for composting operations and transfer/processing operations respectively:

1. *“All handling activities shall be conducted in a manner that minimizes vectors, odor impacts, litter, hazards, nuisances, and noise impacts; and minimizes human contact with, inhalation, ingestion, and transportation of dust, particulates, and pathogenic organisms”* (Composting Operating Standards in Cal. Code Regs., div. 7, ch. 3.1, art. 6, § 17867); and,
2. *“The operator shall take adequate steps to control or prevent the propagation, harborage, and attraction of flies, rodents, or other vectors and animals and to minimize bird attraction”* (Minimum Standards for Solid Waste Handling and Disposal are in Cal. Code Regs., tit. 14, div. 7, ch. 3. art. 6.1, § 17410.4).

EAs perform routine inspections to certify compliance with permit conditions to ensure that State programs are effectively implemented. CalRecycle can also initiate enforcement actions in addition to, or in lieu of, the EA.

### **Worker Safety**

The federal and California OSHA agencies are responsible for assuring worker safety in handling and using chemicals in the workplace. Federal regulations pertaining to worker safety are contained in 29 Code of Federal Regulations, as authorized in the Occupational Safety and Health Act of 1970. These regulations provide standards for safe workplaces and work practices, including standards relating to hazardous materials handling. California OSHA assumes primary responsibility for developing and enforcing workplace safety regulations. California OSHA standards are generally more stringent than federal regulations.

State regulations concerning use of hazardous materials in the workplace are included in California Code of Regulations, title 8 which contains requirements for safety training,

availability of safety equipment, accident and illness prevention programs, hazardous substance exposure warnings, and emergency action and fire prevention plan preparation. California OSHA also enforces hazard communication program regulations, which contain worker safety training and hazard information requirements, such as procedures for identifying and labeling hazardous substances, communicating hazard information related to hazardous substances and their handling, and preparation of health and safety plans to protect workers and employees.

At sites where hazardous materials are present, workers must receive training in hazardous materials operations and a site health and safety plan must be prepared. The health and safety plan establishes policies and procedures to protect workers and the public from exposure to potential hazards at the site.

Prior to any construction activities, a site health and safety plan must be prepared in accordance with 29 Code of Federal Regulations sections 1910 and 1926, to include procedures for managing:

- Preparation and maintenance of working surfaces
- Means of entry and egress
- Power equipment and heavy machinery
- Fire prevention
- Respiratory protection
- Noise
- Hazardous materials handling and storage
- Hazard communication
- Personal protective equipment
- Medical and first aid
- Traffic control
- Training
- Recordkeeping

### **Hazardous Materials Business Plans**

State and federal laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment. California's Hazardous Materials Release Response Plans and Inventory Law of 1985, sometimes called the "Business Plan Act," aims to minimize potential for accidents involving hazardous materials and to facilitate an appropriate response to possible hazardous materials emergencies.

The law requires businesses that use hazardous materials to provide inventories of those materials to designated emergency response agencies, to illustrate on a diagram where materials are stored on-site, to prepare an emergency response plan, and to train employees to use materials safely. A business plan includes an inventory of hazardous materials handled, facility floor plans showing where hazardous materials are stored, an emergency response plan, and provisions for employee training in safety and emergency response procedures (Health & Saf. Code, div. 20, ch. 6.95, art. 1). Statewide, DTSC has primary regulatory responsibility for management of hazardous materials, with delegation of authority to local jurisdictions that enter

into agreements with the state. Local agencies are responsible for administering these Business Plan Act regulations.

### **Hazardous Waste**

The California Hazardous Waste Control Act regulates generation, treatment, storage, and disposal of hazardous waste. (Health & Saf. Code, § 2510 et seq.) Hazardous waste is designated as any material or substance discarded, relinquished, disposed of, or burned, or for which there is no intended use or reuse, and the material or substance causes or significantly contributes to an increase in mortality or illness; or the material or substance poses a substantial present or potential hazard to human health or the environment. These materials or substances include spent solvents and paints, used oil, used oil filters, used hazards and hazardous materials, acids and corrosives, and unwanted or expired products (e.g., pesticides, aerosol cans, cleaners). If the original material or substance is labeled as dangerous, toxic, poisonous, flammable, corrosive, or reactive, the waste may be hazardous.

### **Use and Storage of Hazardous Materials and Wastes**

State and federal laws require detailed planning and management to ensure that hazardous materials are properly handled, used, stored, and disposed of, and, in the event that such materials are accidentally released, to reduce risks to human health and the environment. Hazardous waste regulations establish criteria for identifying, packaging, and labeling hazardous wastes; dictate management of hazardous waste; establish permit requirements for hazardous waste treatment, storage, disposal, and transportation; and identify hazardous wastes that cannot be disposed of in landfills.

State laws governing USTs specify requirements for permitting, monitoring, closure, and cleanup of these facilities. Regulations set forth construction and monitoring standards for existing tanks, release reporting requirements, and closure requirements. In general, the local CUPA has regulatory authority for permitting, inspection, and removal of USTs. Any entity proposing to remove a UST must submit a closure plan to the CUPA prior to tank removal. Upon approval of the UST closure plan, the CUPA would issue a permit, oversee removal of the UST, require additional subsurface sampling if necessary, and issue a site closure letter when the appropriate removal and/or remediation has been completed. USTs are not typically associated with compost facilities; however, these regulations are relevant due to the potential of leaking USTs to affect subsurface conditions at potential project sites.

The Aboveground Petroleum Storage Act of 1990 requires facilities storing petroleum products in a single tank greater than 1,320 gallons, or facilities storing petroleum in aboveground tanks or containers with a cumulative storage capacity of greater than 1,320 gallons to file a storage statement with the State Water Board and prepare a spill prevention, control, and countermeasure plan. The plan must identify appropriate spill containment or equipment for diverting spills from sensitive areas, as well as discuss facility-specific requirements for the storage system, inspections, recordkeeping, security, and personnel training.

### **Transport of Hazardous Materials and Wastes**

The United States Department of Transportation (USDOT) regulates hazardous materials transportation on all interstate roads. Within California, the state agencies with primary

responsibility for enforcing federal and State regulations and for responding to transportation emergencies are the CHP and Caltrans. Together, federal and State agencies determine driver-training requirements, load labeling procedures, and container specifications. Although special requirements apply to transporting hazardous materials, requirements for transporting hazardous waste are more stringent, and hazardous waste haulers must be licensed to transport hazardous waste on public roads.

### **Chemical Accident Prevention**

The 40 Code of Federal Regulations, section 68 provides a list of regulated substances and thresholds, a petition process for adding or removing substances to the list, requirements for owners or operators of stationary sources concerning prevention of accidental releases, and the state accidental release prevention program approved under section 112 subdivision r of the Clean Air Act. The California Accidental Release Prevention Program is the state adaptation of this federal regulation. The list of federally regulated substances with threshold quantities is available online at the California Office of Emergency Services web site (<http://www.oes.ca.gov>).

### **Emergency Planning Community Right-to-Know Act**

Emergency Planning Community Right-to-Know Act was passed in response to concerns regarding environmental and safety hazards posed by storage and handling of toxic chemicals. The Act establishes requirements for federal, state, and local governments, Indian tribes, and industry regarding emergency planning and “Community Right-to-Know” reporting on hazardous and toxic chemicals. Community Right-to-Know provisions are designed to increase the public’s knowledge and access to information on chemicals at individual facilities, their uses, and releases into the environment.

### **Fire Hazards**

The California Uniform Fire Code (Cal. Code Regs., tit. 24, pt. 9) and local building codes establish requirements for construction and maintenance of structures for fire safety. The National Fire Protection Association (NFPA) develops and publishes consensus codes and standards intended to minimize the possibility and effects of fire and other risks. While not regulations, these codes and standards are industry-accepted guidelines for construction and fire protection systems. NFPA Code 820 establishes the standard for fire protection in wastewater treatment and collection facilities, which may be applicable to compost facilities. Additional relevant codes include a fuel gas code, standard on explosion prevention systems, standards for fire prevention during welding, etc.

The California Public Resources Code includes fire safety regulations that restrict use of equipment that may produce a spark, flame, or fire; requires use of spark arrestors on construction equipment that use an internal combustion engine; specifies requirements for safe use of gasoline-powered tools in fire hazard areas; and specifies fire suppression equipment that must be provided onsite for various types of work in fire-prone areas during time of high fire danger to reduce risk of wildland fires.

## **Wildlife-Related Aviation Hazards**

Section 503 of the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (Public Law 106–181)(49 U.S.C. § 40101 as amended) limits construction or establishment of new municipal solid waste landfill facilities within 6 statute miles of certain public-use airports, when both the airport and landfill meet very specific conditions. FAA Advisory Circular No. 150-5200-33B (FAA, 2007) describes these requirements.

FAA Advisory Circular No. 150-5200-33B (FAA, 2007) provides guidance regarding hazardous wildlife attractants near airports. Separation distances depend on the type of aircraft the airport serves (piston vs. turbine powered aircraft) and proposed land use. The FAA recommends minimum separation criteria for land-use practices that attract hazardous wildlife to the vicinity of airports as follows:

- Airports serving piston-powered aircraft: 5,000 feet from the air operations area;
- Airports serving turbine-powered aircraft: 10,000 feet from the air operations area; and
- For all airports, 5 statute miles between the facility and the farthest edge of air operations area.

Guidance includes composting operations on or near airport property and associated storm water detention facilities. Composting operations that accept only yard waste (e.g., leaves, lawn clippings, or branches) generally do not attract hazardous wildlife. Sewage sludge, woodchips, and similar material are not municipal solid wastes and may be used as compost bulking agents. The compost, however, must never include food or other municipal solid waste. Composting operations should not be located on airport property. Off-airport property composting operations should be located no closer than the greater of the following distances: 1,200 feet from any air operations area or the distance called for by airport design requirements.

## **Pest Control**

Under the California Health and Safety Code, local vector control agencies (often public health departments or mosquito abatement districts) have authority to conduct surveillance for vectors, prevent occurrence of vectors, and abate production of vectors. These agencies also have authority to review, comment, and make recommendations during planning and environmental quality processes, permitting, licensing, etc., regarding the potential effects related to vector production of proposed projects. Additionally, agencies have broad authority to enforce abatement of vector sources on public and private property.

## **Soil and Groundwater Contamination**

Remediation of contaminated sites is generally performed under oversight of the counties (Local Oversight Program), the Regional Water Boards and/or DTSC. At sites where contamination is suspected or known to have occurred, the site owner is required to perform a site investigation and perform site remediation, if necessary. Site remediation or development may also be subject to regulation by other agencies. For example, if a project required dewatering near a hazardous waste site, the project sponsor might be required to obtain a permit from the municipal sewer agency before discharging water to the sewer system, or an NPDES permit from the Regional Water Board before discharging to the storm water collection system.

## HYDROLOGY AND WATER QUALITY

Numerous policies, laws, and programs are administered by local, state, and federal agencies to enforce limitations on discharge of pollutants to the environment; maintain surface water and groundwater quality; and protect beneficial uses such as municipal, industrial, and agricultural water supply, recreation, and fish and wildlife habitat.

### ***Clean Water Act***

The Clean Water Act establishes the basic structure for regulating discharges of pollutants into “waters of the United States.” The act specifies a variety of regulatory and non-regulatory tools to reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff.

Section 303(d) requires states, territories, and authorized tribes to develop a list of water-quality limited segments of rivers and other water bodies under their jurisdiction. Waters on the list do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. The law requires that these jurisdictions establish priority rankings for waters on the list and develop action plans, called total maximum daily loads (TMDL), to improve water quality.

Section 401 requires every applicant for a federal permit or license for any activity that may result in a discharge to a water body to obtain a water quality certification that the proposed activity will comply with applicable water quality standards.

Section 402 regulates point- and nonpoint-source discharges to surface waters through the NPDES program. In California, the State Water Board oversees the NPDES program, which is administered by the Regional Water Boards. The NPDES program provides for both general permits (those that cover a number of similar or related activities) and individual permits for municipalities, industrial activities, and construction activities. The industrial storm water permitting component of NPDES covers 10 categories of industrial activity. Compost facilities are covered by Category 1 under Industry Group 287, Standard Industrial Classification 2875 Fertilizers, Mixing Only. Construction activities, also administered by the State Water Board, are discussed below.

### ***National Toxics Rule***

The National Toxics Rule promulgates chemical-specific, numeric criteria for priority toxic pollutants for 14 states, including California, necessary to bring the states into compliance with requirements of section 303(c)(2)(B) of the Clean Water Act. States determined by USEPA to fully comply with section 303(c)(2)(B) requirements are not affected by this rule, however California is not in compliance. The rule addresses two situations. For a few states, USEPA is promulgating a limited number of criteria which were previously identified as necessary in disapproval letters to such states, and which the state has failed to address. For other states, federal criteria are necessary for all priority toxic pollutants for which USEPA has issued section 304(a) water quality criteria guidance and that are not the subject of approved State criteria. When these standards take effect, they will be the legally enforceable standards in the named States for all purposes and programs under the Clean Water Act, including planning, monitoring, NPDES permitting, enforcement and compliance.

### ***Federal Anti-degradation Policy (40 C.F.R. §131.12)***

The first anti-degradation policy statement was released in 1968, and subsequently included in USEPA's first Water Quality Standards Regulation (40 C.F.R. 130.17, 40 Fed. Reg. 55340-41) published in 1975. The policy was refined in 1983 (48 Fed. Reg. 51400; 40 C.F.R. § 131.12). Anti-degradation requirements and methods for implementing those requirements are minimum conditions to be included in a state's water quality standards, as required by the Clean Water Act. The anti-degradation policy and implementation methods are required, at a minimum, to be consistent with the following:

1. Existing in-stream water uses and level of water quality necessary to protect existing uses shall be maintained and protected.
2. Where the quality of waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the state finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the state's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In allowing such degradation or lower water quality, the state shall assure water quality adequate to protect existing uses fully. Further, the state shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control.
3. Where high quality waters constitute an outstanding national resource, such as waters of national and state parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.
4. In cases where potential water quality impairment associated with a thermal discharge is involved, the anti-degradation policy and implementing method shall be consistent with section 316 of the Clean Water Act.

The Anti-degradation Policy established a three-tiered program.

- Tier 1 maintains and protects existing uses and water quality conditions necessary to support such uses. An existing use can be established by demonstrating that fishing, swimming, or other uses have occurred since November 28, 1975, or that water quality is suitable to allow such uses to occur. Where an existing use is established, it must be protected even if it is not listed in water quality standards as a designated use. Tier 1 requirements are applicable to all surface waters.
- Tier 2 maintains and protects "high quality" waters -- water bodies where existing conditions are better than necessary to support Clean Water Act section 101(a)(2) "fishable/swimmable" uses. Water quality can be lowered in such waters. However, state and tribal Tier 2 programs identify procedures that must be followed and questions that must be answered before a reduction in water quality can be allowed. In no case may water quality be lowered to a level that interferes with existing or designated uses.

- Tier 3 maintains and protects water quality in outstanding national resource waters. Except for certain temporary changes, water quality cannot be lowered in such waters. Outstanding national resource waters generally include the highest quality waters of the United States. However, this classification also offers special protection for waters of exceptional ecological significance, i.e., those that are important, unique, or sensitive ecologically. Decisions regarding which water bodies qualify are made by states and authorized Indian Tribes. Anti-degradation implementation procedures identify the steps and questions that must be addressed when regulated activities are proposed that may affect water quality. The specific steps to be followed depend upon which tier or tiers of Anti-degradation apply.

### ***Safe Drinking Water Act***

Under the Safe Drinking Water Act (Pub.L. 93-523 (Dec. 16, 1974) 42 U.S.C. §§ 300f–300j–9), the USEPA regulates contaminants of concern to domestic water supply. Contaminants of concern relevant to domestic water supply are defined as those that pose a public health threat or that alter aesthetic acceptability of the water. These types of contaminants are regulated by USEPA primary and secondary Maximum Contaminant Levels (MCLs) applicable to treated water supplies delivered to the distribution system. MCLs and the process for setting these standards are reviewed triennially. Amendments to the Safe Drinking Water Act enacted in 1986 established an accelerated schedule for setting MCLs for drinking water. USEPA has delegated to the California Department of Public Health (CDPH; formerly the Department of Health Services) the responsibility for administering California's drinking-water program. CDPH is accountable to USEPA for program implementation, and for adopting standards and regulations at least as stringent as those developed by USEPA.

### ***Porter-Cologne Water Quality Control Act***

The Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.) (Porter-Cologne) established the State Water Board and divided the state into nine regions, each overseen by a Regional Water Board. The nine Regional Water Boards have primary responsibility for coordination and control of water quality within their respective jurisdictional boundaries. Under the act, water quality objectives are limits or levels of water quality constituents or characteristics established to protect beneficial uses. Porter-Cologne requires Regional Water Boards to establish water quality objectives while acknowledging that water quality may be changed to some degree without unreasonably affecting beneficial uses. Designated beneficial uses, together with corresponding water quality objectives, also constitute water quality standards under the federal Clean Water Act. Therefore, water quality objectives form regulatory references for meeting state and federal requirements for water quality control.

### ***California Code of Regulations, title 22, division 4.5***

Environmental health standards for management of hazardous waste are promulgated in California Code of Regulations, title 22. These regulations provide criteria for identification and classification of hazardous waste, rules for transporting hazardous waste, and standards for transferring, treating, storing, and disposing of hazardous waste.

### ***California Code of Regulations, title 23, chapter 15***

Regulations in this chapter pertain to water quality aspects of hazardous waste discharge to land, establish waste and site classifications, and waste management requirements for waste treatment, storage, or disposal in landfills, surface impoundments, waste piles, and land treatment facilities. Regional Water Boards may impose more stringent requirements to accommodate regional and site-specific conditions. In addition, requirements of this chapter apply to cleanup and abatement actions for unregulated discharges to land of hazardous waste (e.g., spills), taken pursuant to Resolution No. 92-49 (Cal. Code Regs., tit. 23, § 2907).

### ***California Code of Regulations, title 23, chapter 16***

Chapter 16 of California Code of Regulations, title 23 pertains to regulation of UST to protect waters of the state. These regulations define what constitutes an UST; provide for exemptions from these regulations; establish construction requirements for new USTs; stipulate environmental monitoring requirements for new and existing USTs; establish requirements for reporting unauthorized releases to appropriate regulatory agencies; institute standards for repairing, upgrading, and closing USTs; and specify procedures to request variances to these regulations.

### ***California Code of Regulations, title 27***

Non-hazardous waste is managed in California via combined State Water Board and CalRecycle regulations promulgated in California Code of Regulations, title 27, division 2, sections 20005 through 23014. The regulations that are promulgated by the State Water Board pertain to water quality aspects of discharges of waste to land for treatment, storage, or disposal. The State Water Board promulgated regulations establish waste and site classifications and waste management requirements for solid waste treatment, storage, or disposal in landfills, surface impoundments, waste piles, and land treatment units.

Regulations for developing WDRs for non-hazardous waste disposal facilities are specified in title 27, section 21710. Dischargers of solid waste to land where water quality could be affected must submit a report of waste discharge to the appropriate Regional Water Board, unless the report is waived by the Regional Water Board. Dischargers must provide information on waste characteristics, geologic and climatologic characteristics of the unit and the surrounding region, installed features, operation plans for waste containment, precipitation and drainage controls, and closure and post closure maintenance plans as set forth in title 27, sections 21740, 21750, 21760, and 21769.

### ***Leaking Underground Fuel Tank Guidance Manual***

The current version (September 2012) of this guidance document identifies roles and responsibilities for parties involved with leaking fuel UST systems; summarizes statutes and regulations pertaining to funding leaking fuel UST site cleanups; specifies project planning document requirements for site assessment, corrective action, and closure, including site assessment work plans and corrective action plans; provides guidance regarding UST removal, site assessment, risk analysis, site monitoring, and case closure; and outlines reporting requirements.

## **Basin Plans**

The nine Regional Water Boards are responsible for implementing water basin plans throughout California. These plans identify existing and potential beneficial uses of waters of the State and establish water quality objectives to protect these uses. Beneficial uses and associated narrative and numerical water quality objectives are established in a basin plan for each region that is updated through a triennial review process.

Basin plans also contain implementation, surveillance, and monitoring plans. Statewide and regional water quality control plans include enforceable prohibitions against certain types of discharges, including those that may pertain to nonpoint sources. Beneficial uses and corresponding water quality objectives meet federal regulatory criteria for water quality standards, and therefore, California's basin plans serve as regulatory references for meeting both state and federal requirements for water quality control (40 C.F.R. §§ 130,131). Beneficial uses are defined in Water Code section 13050 subdivision f.

Basin plans adopted by Regional Water Boards are primarily implemented through the NPDES and waste discharge to land permitting system and issuance of WDRs to regulate waste discharges so that water quality objectives are met. These permits impose discharge restrictions and pollutant limits that take into consideration applicable state and federal water quality criteria for surface water, groundwater, and drinking water. Basin plans provide the technical basis for determining WDRs and taking regulatory enforcement actions if deemed necessary.

### ***Statement of Policy With Respect to Maintaining High Quality of Waters in California (Resolution 68-16)***

A key policy of California's water quality program is the state's Anti-degradation Policy. This policy, formally known as the *Statement of Policy with Respect to Maintaining High Quality Waters in California* (State Water Board Resolution No. 68-16), restricts degradation of surface water and groundwater. In particular, this policy protects water bodies where existing quality is higher than necessary for protection of beneficial uses. Under the Anti-degradation Policy, any actions that can adversely affect water quality in all surface water and groundwater must:

- 1) Meet WDRs that result in the best practicable treatment or control of the discharge necessary to assure that:
  - (a) a pollution or nuisance will not occur, and
  - (b) the highest water quality consistent with maximum benefit to the people of the state will be maintained,
- 2) Not unreasonably affect present and anticipated beneficial use of the water, and
- 3) Not result in water quality less than that prescribed in water quality plans and policies.

Furthermore, any actions that can adversely affect surface waters are also subject to the federal Anti-degradation Policy (40 C.F.R. § 131.12), developed under the Clean Water Act.

***Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304 (Resolution 92-49)***

This resolution, Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304, provides specific requirements pertaining to implementation of the California Water Code (Porter-Cologne Water Quality Control Act). Section 13304 of this code requires that any person who discharges waste into waters of the state in violation of state statutes, regulations, requirements, prohibitions, permits, or who creates a condition of pollution or nuisance may be required to clean up the discharge and abate the effects thereof. This section authorizes Regional Water Boards to require complete cleanup of all waste discharged and restoration of affected water to ambient background conditions.

***Policy for Regulation of Discharges of Municipal Solid Waste (Resolution 93-62)***

This resolution was adopted to ensure compliance with the federal Solid Waste Disposal Act (SWDA) sections 4003 and 4005 (42 U.S.C. §§ 6943, 6945). The resolution requires each Regional Water Board to implement waste discharge requirements for discharges at MSW landfills, in accordance with California Code of Regulations, title 27 regulations and those applicable provisions of the federal MSW regulations necessary to protect water quality. Specific issues addressed by the resolution include:

- Composite liners - Test results have shown that releases of leachate and gas from MSW landfills that are unlined are likely to degrade the quality of underlying groundwater. Research on liner systems for landfills indicates that:
  - (a) Single clay liners only delay, rather than preclude, the onset of leachate leakage
  - (b) The use of composite liners represents the most effective approach for reliably containing leachate and landfill gas

The resolution provides prescriptive design standards for upper and lower MSW liners, as well as provisions for alternative designs meeting criteria provided by California Code of Regulations, title 27, section 20080(b).

- Sideslopes – alternate liner criteria are provided for containment systems installed on sideslopes that are too steep to permit construction of a stable composite liner that meets the prescriptive standards.
- Lack of compliance with landfill regulations - WDRs for many MSW landfills had not been revised to meet the State Water Board’s landfill regulations.

Standards for leachate collection — the resolution requires MSW facilities to have a leachate collection and removal system that conveys all leachate that reaches the liner to a sump or other appropriate lined collection area, and that does not rely upon unlined or clay-lined areas for such conveyance.

***Construction Storm Water NPDES Permit***

The federal Clean Water Act prohibits discharges of storm water from construction projects unless the discharge complies with a NPDES permit. The State Water Board is the permitting

authority in California, and has adopted the *National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Order No. 2012-0006-DWQ, NPDES No. CAS000002) (Construction General Permit) covering one or more acres of soil disturbance. Construction or demolition activities include clearing, grading, excavation, grubbing, stockpiling, and reconstruction of existing facilities (removal or replacement).

The Construction General Permit requires that the legally responsible person must file Permit Registration Documents prior to commencement of the construction activity. The Permit Registration Documents consists of a Notice of Intent, Storm Water Pollution Prevention Plan, and other documents required by the Construction General Permit. These documents are intended to establish a mechanism that can be used to clearly identify responsible parties, locations, and scope of operations of dischargers covered by the Construction General Permit and to document the discharger's knowledge of the permit's requirements.

### ***Industrial Storm Water NPDES Permit***

The Industrial Storm Water General Permit Order 97-03-DWQ ([General Industrial Permit](#)) is an NPDES permit that regulates discharges associated with 10 broad categories of industrial activities. The General Industrial Permit requires implementation of management measures that will achieve the performance standard of best available technology economically achievable and best conventional pollutant control technology. The General Industrial Permit also requires the development of a Storm Water Pollution Prevention Plan and a monitoring plan where sources of pollutants are identified and the means to manage the sources to reduce storm water pollution are described.

### ***California Department of Health Services Drinking Water Regulations***

California Department of Health Services (DHS) serves as the primary responsible agency for drinking water regulations. DHS must adopt drinking water quality standards at least as stringent as federal standards, and may also regulate contaminants to more stringent standards than USEPA, or develop additional standards. DHS regulations cover more than 150 contaminants, including microorganisms, particulates, inorganics, natural organics, synthetic organics, radionuclides, and disinfection by-products.

### ***California Toxics Rule***

The USEPA published the California Toxics Rule in the Federal Register (65 Fed.Reg. 31682-31719 (May 18, 2000)), adding 40 Code of Federal Regulations section 131.38. The rule contains numeric water quality criteria for priority toxic pollutants and other water quality standards provisions to be applied to waters in California. USEPA promulgated this rule based on the Administrator's determination that the numeric criteria are necessary in California to protect human health and the environment.

USEPA promulgated this rule to fill a gap in California water quality standards that was created in 1994 when a State court overturned the State's water quality control plans containing water quality criteria for priority toxic pollutants. Thus, California has been without numeric water quality criteria for many priority toxic pollutants as required by the Clean Water Act, necessitating this action by USEPA. These Federal criteria are legally applicable in the State of

California for inland surface waters, enclosed bays and estuaries for all purposes and programs under the Clean Water Act.

### ***National Pretreatment Program for Industrial Discharges***

Pretreatment of industrial discharges is mandated by the Clean Water Act of 1977 (33 U.S.C. §§ 1251–1376). USEPA has established pretreatment standards (40 C.F.R. § 403) for various industrial categories. USEPA created the National Pretreatment Program and first issued pretreatment regulations in 1973, which has been revised numerous times since. The most recent revision of the regulations was promulgated under the pretreatment Streamlining Rule, which became effective in November 2005.

The purpose of the National Pretreatment Program is to regulate the discharge of pollutants to municipal sanitation sewers. The goal is to protect receiving water quality and the environment from pollutants that can pass through a wastewater treatment plant relatively unaffected by the treatment processes. An individual pretreatment program will typically involve several steps:

- Identification of pollutants that could cause upset or bypass (pollutants of concern);
- Development of discharge limitations for nondomestic discharges (local limits);
- Identification of nondomestic discharge sources; and
- Implementation of nondomestic monitoring programs to enforce the local limits.

### ***Drinking Water Source Water Assessment and Protection Program***

The 1996 federal Safe Drinking Water Act amendments require California to develop and implement a Source Water Assessment Program. Section 11672.60 of the California Health and Safety Code requires DHS (precursor to CDPH) to develop and implement a program to protect sources of drinking water, specifying that the program must include both a source water assessment program and a wellhead protection program. This program, which is required by federal and state law, is called the Drinking Water Source Water Assessment and Protection Program. California's program addressed both groundwater and surface water sources. The groundwater portion serves as the state wellhead protection program. In developing the surface water components, DHS integrated existing requirements for watershed sanitary surveys (DHS, 1999, and CDPH, 2007).

The groundwater program includes components intended to fulfill the requirements for state development of a Wellhead Protection Program strategy, as required by section 1428 of the Safe Drinking Water Act amendments of 1986. A Wellhead Protection Area, as defined by the 1986 amendments, is “the surface and subsurface area surrounding a water well or well-field supplying a public water system, through which contaminants are reasonably likely to move toward and reach such water well or well-field.”

CDPH must inventory possible contaminating activities that might lead to release of microbiological or chemical contaminants within the delineated area. An essential element of the program is an inventory of these activities considered potential sources of contamination in designated drinking water source areas and protection zones.

Resolution 88-63, "Sources of Drinking Water" specifies that all surface water and groundwater of the state must be protected as existing or potential sources of municipal and domestic supply, except under specific circumstances. The policy provides for specific and limited circumstances where surface water and groundwater may be excluded from this policy, including cases where existing physical and chemical characteristic of these waters do not meet criteria to be considered a suitable water supply source (i.e., insufficient water yield, high ambient total dissolved solids concentrations or electrical conductivity, presence of pre-existing natural or man-made contamination not amenable to remediation, agricultural drainage waters, and exempt aquifers used to produce geothermal or hydrocarbon-based energy).

### ***Groundwater Management Plan (AB 3030)***

Assembly Bill No. 3030 (AB 3030), known as the Groundwater Management Act, added sections 10750-10756 of the Water Code in 1992, and describes components that may be included in a groundwater management plan developed by a local agency to protect groundwater. In all, 149 agencies have adopted groundwater management plans in accordance with AB 3030 (California DWR, 1994b). Each component would play a role in evaluating or operating a groundwater basin so that groundwater can be managed to maximize the total water supply while protecting groundwater quality. California DWR Bulletin 118-80 defines groundwater basin management as including planned use of basin yield, storage space, transmission capability, and water in storage (California DWR, 2003). Groundwater basin management includes:

- Protection of natural recharge and use of intentional recharge,
- Planned variation in amount and location of pumping over time,
- Use of groundwater storage conjunctively with surface water from local and imported sources, and
- Protection and planned maintenance of groundwater quality.

The 12 components listed in section 10753.7 of the Water Code form a basic list that includes data collection and operation of facilities that may be undertaken by an agency operating under this act. With respect to protecting groundwater from potential contamination from composting, critical components to be included in local plans include the following:

- Identification and management of wellhead protection areas and recharge areas.
- Regulation of the migration of contaminated groundwater.
- Administration of a well abandonment and destruction program.
- Monitoring of groundwater levels and storage.

Review of land use plans and coordination with land use planning agencies to assess risk of groundwater contamination from various activities.

## LAND USE, PLANNING, AND RECREATION

### ***Federal Land Policy Management Act***

The Federal Land Policy Management Act of 1976 is the principal law governing how the Bureau of Land Management manages public lands. This act requires the Bureau to manage public land resources for multiple use and sustained yield for both present and future generations. The act addresses topics such as land use planning, land acquisition, fees, and payments, administration of federal land, range management, and right-of-ways on federal land. Although local agencies do not have jurisdiction over the federal lands managed by the Bureau, under this act and the Bureau's regulations at 43 Code of Federal Regulations, section 1600, the Bureau must coordinate planning efforts with state and local planning initiatives.

Established by Federal Land Policy Management Act, resource management plans are designed to protect present and future land uses and to identify management practices needed to achieve desired conditions within the management area covered by the plan. Management direction is set forth in the plans in the form of goals, objectives, standards, and guidelines. These, in turn, direct management actions, activities, and uses that affect land management, and water, recreation, visual, natural, and cultural resources.

This act also defines an Area of Critical Environmental Concern as an area within public lands where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazards. The Bureau identifies, evaluates, and designates these areas through its resource management planning process. Allowable management practices and uses, mitigation, and use limitations, if any, are described in the planning document and the concurrent or subsequent plan. These areas are considered land use authorization avoidance areas because they are known to contain resource values that could result in denial of applications for land uses that cannot be designed to be compatible with management objectives and prescriptions.

### ***National Landscape Conservation System***

Created in 2000, the Bureau of Land Management's National Landscape Conservation System encompasses 27 million acres and is composed of 880 units that include national monuments, national conservation areas, wilderness, and wilderness study areas, wild and scenic rivers, national scenic and historic trails, and conservation lands, including lands in the California Desert. In March 2009, Congress passed the Omnibus Public Lands Management Act, providing a statutory basis for the system. The mission of the system is to conserve, protect, and restore nationally significant landscapes recognized for their outstanding cultural, ecological, and scientific values.

### ***California Desert Protection Act of 1994***

Congress enacted the California Desert Protection Act of 1994 (Pub.L. 103-433 (Oct. 31, 1994) 108 Stat. 4471) to establish desert wilderness areas for protection including the Chuckwalla Mountains Wilderness, the Little Chuckwalla Mountains Wilderness, the Palen/McCoy Wilderness, and the Palo Verde Mountains Wilderness. In addition, this act established Death

Valley National Park, Joshua Tree National Park, and the Mojave National Preserve. The act established administration of wilderness lands and addresses land use compatibility issues such as buffers and right of ways.

### ***Wild and Scenic Rivers Act of 1968***

This act established a National Wild and Scenic Rivers System for the protection of rivers with important scenic, recreational, fish and wildlife, and other values. The act contains procedures and limitations for control of lands in federally administered components of the System and for disposition of lands and minerals under federal ownership.

### ***Comprehensive Conservation Plans for National Wildlife Refuges***

The USFWS is directed to develop comprehensive conservation plans to guide the management and resource use for each refuge of the National Wildlife Refuge System under requirements of the National Wildlife Refuge Improvement Act of 1997. Refuge planning policy also directs the process and development of these plans. A comprehensive conservation plan describes desired future conditions and long-range guidance necessary to meet refuge purposes. The plan also guides management decisions and sets forth strategies for achieving refuge goals and objectives within a 15-year time frame.

### ***National Trails System Act of 1968***

The National Trails System Act is intended to promote preservation of, public access to, travel within, and enjoyment and appreciation of the open air, outdoor areas, and historic resources through establishment of a national trail system. The act created a series of trails administered by a federal agency (Bureau of Land Management, United States Forest Service, or National Park Service).

### ***Farmland Protection Policy Act***

FPPA directs Federal agencies to consider the effects of Federal programs or activities on farmland, and ensure that such programs, to the extent practicable, are compatible with state, local, and private farmland protection programs and policies. The rating process established under this act was developed to help assess options for land use on an evaluation of productivity weighed against commitment to urban development.

### ***Federal Aviation Administration Regulations***

FAA regulations address potential aircraft obstruction for structures taller than 200 feet or within 20,000 feet of an airport. Specifically, 14 Code of Federal Regulations section 77, established standards and notification requirements for objects that have the potential to affect navigable airspace. Section 77 standards are intended to: (1) evaluate the effect of the construction or alteration of structures on airport operating procedures; (2) determine if there is a potential hazard to air navigation; and (3) identify measures to enhance safety. Specifically, the FAA requires notification through the filing of FAA Form 7460, Notice of Proposed Construction or Alteration, if a structure is more than 200 feet in height or closer than 20,000 feet to an existing airport or airport under construction.

### ***Natural Communities Conservation Planning Act***

The California Fish and Game Code (§§ 2800–2835) sets forth policies on the conservation, protection, restoration, and enhancement of the California's natural resources and ecosystems. The intent of the legislation is to provide for conservation planning as an officially recognized policy that can be used as a tool to eliminate conflicts between the protection of the State's natural resources and the need for growth and development. In addition, the legislation promotes conservation planning as a means of coordination and cooperation among private interests, agencies, and landowners, and as a mechanism for multispecies and multi-habitat management and conservation.

### ***State Park Units***

Department of Parks and Recreation may acquire title or any interest in real property, "which the department deems necessary or proper for the extension, improvement, or development of the state park system" (Pub. Resources Code, § 5006). Prior to classifying a unit, the department must prepare an "inventory of the unit's scenic, natural, and cultural features, including, but not limited to, ecological, archaeological, historical, and geological features" (Pub. Resources Code, § 5002.1). This inventory is then considered by the department in classifying a unit. There are eight classification categories: State parks, State recreation units, Historical units, State seashores, State reserves, State wildernesses, Natural preserves, and Cultural preserves (Pub. Resources Code, § 5019.53–5019.74). The last three units are subunits of the first five. Management and improvements on State parks must be made in a manner that protects the native environment to the "extent compatible with the primary purpose for which the park was established" (Pub. Resources Code, § 5019.53).

### ***State Conservancies***

The seven California Conservancies (Tahoe, Coastal, Santa Monica Mountains, San Gabriel, and Lower Los Angeles Rivers and Mountains, Coachella Valley and Mountains, San Joaquin River, and Baldwin Hills) were legislatively created to protect and preserve distinct regions of the state. They are empowered to acquire land to preserve and restore habitat and ecosystems, and provide recreational opportunities in these regions.

The state conservancies are given broad powers to conserve land and natural resources in defined geographical regions of statewide significance. Most conservancies have a direct mandate to provide recreation and education activities. Thus, they are engaged in conservation for human use, though they often also seek to conserve natural systems as well.

### ***Wild and Scenic Rivers Act***

This act establishes a Wild and Scenic Rivers System for protection of rivers with important scenic, recreational, fish and wildlife, and other values. It was created in 1972 by the Legislature in an effort to balance traditional water and power development on rivers with preservation of some free-flowing segments for their recreation and wildlife values. In the state, 1,900 miles of river are under Wild and Scenic protection. Pursuant the California Wild and Scenic Rivers Act, no dam or reservoir shall be constructed on any river unless the Secretary determines that the facility is needed to supply domestic water, and that it will not adversely affect the free-flowing condition of the river (Pub. Resources Code, § 5093.55).

### ***State Planning and Zoning Law***

Government Code section 65300 et seq. establishes the obligation of cities and counties to adopt and implement general plans. The general plan is a comprehensive, long-term, and general document that describes plans for physical development of the city or county. The general plan addresses a broad range of topics, including at a minimum, land use, circulation, housing, conservation, open space, noise, and safety. In addressing these topics, the general plan identifies goals, objectives, policies, principles, standards, and plan proposals that support the city or county's vision for the area. The general plan is also a long-range document that typically addresses the physical character of an area during a 20-year period. Although the general plan serves as a blueprint for future development and identifies the overall vision for the planning area, it remains general enough to allow for flexibility in the approach taken to achieve the plan's goals.

The State Zoning Law (Gov. Code, § 65800 et seq.) establishes that zoning ordinances, which are laws that define allowable land uses within a specific district, must be consistent with the general plan and any applicable specific plan.

### ***Farmland Conservation***

The CDOC's Division of Land Resource Protection administers two important incentive programs for the preservation of agricultural land. The California Land Conservation Act, also known as the Williamson Act (Gov. Code, § 51200) was passed in 1965 to preserve, through tax incentives, farmland pressured by spiraling land valuation and tax increases associated with suburban growth. Farmland enrolled in the program is assessed at farmland value, as opposed to the Proposition 13 valuation; and, through the Open Space Subvention Act, counties are substantially reimbursed for lost property tax revenue. Approximately 16 million acres of farmland (about 50 percent of the State's total farmland) are enrolled in the program. Amendments to the Budget Act of 2009 reduced Williamson Act Subvention payments budget to \$1,000, essentially suspending the subvention payments to the counties.

The Farmland Security Zone is additional agricultural land conservation legislation that allows local governments and landowners to rescind a Williamson Act contract and simultaneously place the farmland under a Farmland Security Zone contract for an initial term of at least 20 years. A Farmland Security Zone contract offers landowners greater property tax reduction than the Williamson Act by valuing enrolled real property at 65 percent of its Williamson Act valuation, or its Proposition 13 valuation, whichever is lower.

Government Code section 51238 states that unless otherwise decided by a local board or council, the erection, construction, alteration, or maintenance of electric and communication facilities, as well as other facilities, are determined to be compatible uses within any agricultural preserve. Also section 51238 states the board of supervisors may impose conditions on lands or land uses to be placed within preserves to permit and encourage compatible uses in conformity with section 51238.1.

Further, Government Code section 51238.1 allows a board or council to allow as compatible a use that without conditions or mitigations would otherwise be considered incompatible. However, this may occur only if the use meets the following conditions:

- The use will not significantly compromise the long-term productive agricultural capability of the subject contracted parcel or parcels or on other contracted lands in agricultural preserves.
- The use will not significantly displace or impair current or reasonably foreseeable agricultural operations on the subject contracted parcel or parcels or on other contracted lands in agricultural preserves. Uses that significantly displace agricultural operations on the subject contracted parcel or parcels may be deemed compatible if they relate directly to the production of commercial agricultural products on the subject contracted parcel, parcels, or neighboring lands, including activities such as harvesting, processing, or shipping.
- The use will not result in the significant removal of adjacent contracted land from agricultural or open-space use.

The California Farmland Conservancy Program was created in 1996 (Pub. Resources Code, § 10200) and provides grant funding for agricultural conservation easements. Although the easements are always written to reflect the benefits of multiple resource values, there is a provision in the statute that prevents easements funded under the program from restricting husbandry practices. This provision could prevent restricting those practices to benefit other natural resources.

The CDOC also administers the FMMP (Gov. Code § 65570; Pub. Resources Code, § 612). The program was established in 1982 to assess the location, quality, and quantity of agricultural lands and conversion of these lands over time. Agricultural designations used by the department include the following:

- Prime Farmland: Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- Farmland of Statewide Importance: Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- Unique Farmland: Farmland of lesser quality soils used for the production of the State's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.
- Farmland of Local Importance: Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.
- Grazing Land: Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit for Grazing Land is 40 acres.

- **Urban and Built-Up Land:** Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, institutional, public administrative purposes, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.
- **Other Land:** Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines and borrow pits; and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

### **California Coastal Act of 1976**

The California Coastal Act contains provisions to protect agricultural productivity in the coastal zone. The act has specific guidance measures to avoid the conversion of prime agricultural land.

The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the area's agricultural economy, and conflicts shall be minimized between agricultural and urban land uses through all of the following:

*"...(e) By assuring that public service and facility expansions and nonagricultural development do not impair agricultural viability, either through increased assessment costs or degraded air and water quality (§30241 California Public Resources Code)."*

Further, the Coastal Act calls for the protection of the long-term productivity of soils and timberlands. (Pub. Resources Code, § 30243.)

### **Airport Land Use Compatibility Planning**

The State Aeronautics Act (Pub. Util. Code, § 21001 et seq.) establishes statewide requirements for airport land use compatibility planning and requires nearly every county to create an Airport Land Use Commission or other alternative.

The California Department of Transportation Airport Land Use Planning Handbook establishes guidance on land use planning near airports in California. The Handbook also outlines the legal authority (and limitations thereof) possessed by a commission when establishing noise and safety corridors around airports that potentially restrict land use development. The intent of the Handbook is to make recommendations for establishing land use development policies based upon FAA regulations, rather than specifying precise statutes or means of interpreting FAA regulations (Caltrans, 2011).

The purpose of a commission is to establish policies that intend to make land use development around airports compatible with airport-related noise and safety corridors. As applicable, these policies must follow established FAA regulations and other federal, state, and local statutes. However, the Caltrans Handbook provides guidance on the scope of authority that a commission has to restrict land use development. Caltrans guidance suggests that land use restrictions are legitimate when they prevent harm to the surrounding area rather than confer a benefit to the airport.

### ***Natural Community Conservation Planning Act (1991)***

The Natural Community Conservation Planning program of DFW is an unprecedented effort by California, and numerous private and public partners that takes a broad-based ecosystem approach to planning for the protection and perpetuation of biological diversity. The act identifies and provides for the regional or area wide protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity.

The program is a cooperative effort to protect habitats and species. The program, which began in 1991 under the State's Natural Community Conservation Planning Act, is broader in its orientation and objectives than the California and Federal Endangered Species Acts. These laws are designed to identify and protect individual species that have already declined in number significantly.

The primary objective of the program is to conserve natural communities at the ecosystem level while accommodating compatible land use. The program seeks to anticipate and prevent the controversies and gridlock caused by species' listings by focusing on the long-term stability of wildlife and plant communities and including key interests in the process.

### ***Local Agency Formation Commissions***

The Cortese-Knox-Hertzberg Act of 2000 (Gov. Code, § 56000 et seq.), establishes the process through which local agency boundaries are established and revised. Each county must have a local agency formation commission, which is the agency that has the responsibility to create orderly local government boundaries, with the goal of encouraging "planned, well-ordered, efficient urban development patterns," the preservation of open-space lands, and the discouragement of urban cities, and one member of the public. Many commissions also include one special district representative.

While commissions have no land use power, their actions determine which local government will be responsible for planning new areas. The commissions address a wide range of boundary actions, including creation of spheres of influence for cities, adjustments to boundaries of special districts, annexations, incorporations, detachments of areas from cities, and dissolutions of cities. A city's sphere of influence is an indication of the city's future boundaries. Since 1992, state law requires that incorporation of a new city must not financially harm the county and must result in a positive cash flow for the new city, a requirement that has slowed the rate of new city incorporation.

### ***The California Land Conservation Act (Williamson Act)***

The California Land Conservation Act, better known as the Williamson Act, was enacted by the California State Legislature in 1965 to encourage the preservation of agricultural lands. The Williamson Act program permits property tax adjustments for landowners who contract with a city or county to keep their land in agricultural production or approved open space uses for at least 10 years. Lands covered by Williamson Act contracts are assessed based on their agricultural value instead of their potential market value under nonagricultural uses. In return for the preferential tax rate, the landowner is required to contractually agree to not develop the land for a period of at least 10 years. Williamson Act contracts are renewed annually for 10 years unless a party to the contract files for nonrenewal. The filing of a non-renewal application by a

landowner ends the automatic annual extension of a contract and starts a 9-year phase-out of the contract. During the phase-out period, the land remains restricted to agricultural and open-space uses, but property taxes gradually return to levels associated with the market value of the land. At the end of the 9-year non-renewal process, the contract expires and the owner's uses of the land are restricted only by applicable local zoning. The Williamson Act defines compatible use of contracted lands as any use determined by the county or city administering the agricultural preserve to be compatible with the agricultural, recreational, or open space use of land within the preserve and subject to contract. (Gov. Code, § 51202(e).) However, uses deemed compatible by a county or city government must be consistent with the principles of compatibility set forth in Government Code section 51238.1.

### ***State Lands Commission Significant Lands Inventory***

The State Lands Commission is responsible for managing lands owned by the state, including lands that the state has received from the federal government. These lands total more than four million acres and include tide and submerged lands, swamp and overflow lands, the beds of navigable waterways, and state school lands. The State Lands Commission has a legal responsibility for, and a strong interest in, protecting the ecological and Public Trust values associated with the State's sovereign lands, including the use of these lands for habitat preservation, open space, and recreation.

### ***General Plans***

The most comprehensive land use planning is provided by city and county general plans, which local governments are required by state law to prepare as a guide for future development. The general plan contains goals and policies concerning topics mandated by state law or which the jurisdiction has chosen to include. Required topics are: land use, circulation, housing, conservation, open space, noise, and safety. Other topics that local governments frequently choose to address are public facilities, parks and recreation, community design, or growth management, among others. City and county general plans must be consistent with each other. County general plans must cover areas not included by city general plans (i.e., unincorporated areas).

### ***Specific and Community Plans***

A city or county may also provide land use planning by developing community or specific plans for smaller, more specific areas within their jurisdiction. These more localized plans provide for focused guidance for developing a specific area, with development standards tailored to the area, as well as systematic implementation of the general plan. Specific and community plans are required to be consistent with the city or county's general plan.

### ***Zoning***

The city or county zoning code is the set of detailed requirements that implement the general plan policies at the level of the individual parcel. The zoning code presents standards for different uses and identifies which uses are allowed in the various zoning districts of the jurisdiction. Since 1971, state law has required the city or county zoning code to be consistent with the jurisdiction's general plan, except in charter cities.

### ***Housing Element Law***

State law requires each city and county to adopt a general plan containing at least seven mandatory elements including housing. Unlike the other general plan elements, the housing element, required to be updated every five to six years, is subject to detailed statutory requirements and mandatory review by a State agency, the California Department of Housing and Community Development. Housing elements have been mandatory portions of local general plans since 1969. This reflects the statutory recognition that housing is a matter of statewide importance and cooperation between government and the private sector is critical to attainment of the State's housing goals. The availability of an adequate supply of housing affordable to workers, families, and seniors is critical to the State's long-term economic competitiveness and the quality of life for Californians.

## **NOISE**

### ***Noise Control Act of 1972***

The federal Noise Control Act of 1972 (Pub.L. 92-574 (Oct. 27, 1972); codified in 42 U.S.C. § 4901 et seq.) established a requirement that all federal agencies administer their programs to promote an environment free of noise that would jeopardize public health or welfare. The USEPA was given the responsibility for:

- Providing information to the public regarding identifiable effects of noise on public health and welfare;
- Publishing information on the levels of environmental noise that will protect the public health and welfare with an adequate margin of safety,
- Coordinating federal research and activities related to noise control, and
- Establishing federal noise emission standards for selected products distributed in interstate commerce.

The Noise Control Act also directed that all federal agencies comply with applicable federal, state, interstate, and local noise control regulations. Although the USEPA was given a major role in disseminating information to the public and coordinating with other federal agencies, each federal agency retains authority to adopt noise regulations pertaining to agency programs. The USEPA can, however, require other federal agencies, such as those listed below, to justify their noise regulations in terms of Noise Control Act policy requirements.

### ***California Office of Noise Control***

The California DHS Office of Noise Control studied the correlation of noise levels and their effects on various land uses and published land use compatibility guidelines for the noise elements of local general plans. The guidelines are the basis for most noise element land use compatibility guidelines in California.

The land use compatibility for community noise environment chart identifies the normally acceptable range for several different land uses, as shown in Figure 13-1 below. Persons in low-density residential settings are most sensitive to noise intrusion, with noise levels of 60 dBA

CNEL and below considered “acceptable”. For land uses such as schools, libraries, churches, hospitals, and parks, acceptable noise levels go up to 70 dBA CNEL. Industrial areas (including solid waste facilities) are land uses that can tolerate higher ambient noise level, with conditionally acceptable noise levels being up to 80 dBA CNEL.

The State of California also establishes noise limits for vehicles licensed to operate on public roads. For heavy trucks, the State pass-by standard is consistent with the federal limit of 80 dB at 15 meters. The State pass-by standard for light trucks and passenger cars (less than 4.5 tons, gross vehicle rating) is also 80 dBA at 15 meters from the centerline. These standards are implemented through controls on vehicle manufacturers and by legal sanction of vehicle operators by State and local law enforcement officials.

The State has also established noise insulation standards for new multi-family residential units, hotels, and motels that would be subject to relatively high levels of transportation-related noise. These requirements are collectively known as the California Noise Insulation Standards. (Cal. Code Regs., tit. 24, § 3501 et seq.) The noise insulation standards set forth an interior standard of DNL 45 dBA in any habitable room. They require an acoustical analysis demonstrating how dwelling units have been designed to meet this interior standard where such units are proposed in areas subject to noise levels greater than DNL 60 dBA. Title 24 standards are typically enforced by local jurisdictions through the building permit application process.

### ***Local Jurisdictions***

In California, most cities and counties have noise ordinances serve as enforcement mechanisms for controlling noise. Jurisdictions also have General Plan Noise Elements may be used as planning guidelines to ensure that long-term noise generated by a source is compatible with adjacent land uses. Both the noise ordinances and General Plan Noise Elements may include limits for industrial areas and limits for sensitive receptor noise levels.

## **POPULATION AND HOUSING**

### ***Federal Housing Administration***

The Federal Housing Administration (FHA) was created by Congress in 1934, and became part of the United States Department of Housing and Urban Development’s (HUD) Office of Housing in 1965. The FHA made it possible for potential homebuyers to get the financing they needed to own a home. The FHA accomplished this by providing mortgage insurance on loans made by FHA-approved lenders throughout the United States. The insurance is intended to reduce the risk on lenders in the event that a homeowner defaults on a mortgage. The FHA also has various programs and regulations in place to help provide affordable and equal housing opportunities throughout the United States.

### ***Tenement House Act of 1909***

The State Tenement House Act of 1909 was the first housing regulation passed in California. The law only applied to apartment houses and hotels within cities. Later laws such as the State Dwelling House Act and the State Housing Law (formerly the State Housing Act) were applied to a wider range of housing types, and eventually lead to formation of the Department of Housing and Community Development in 1965. This department is responsible for developing and

enforcing statewide minimum construction regulations for all types of housing, and to promote and maintain adequate housing and decent living environments for all of California's citizens.

The State Housing Law Program was established to assure availability of affordable housing and uniform statewide code enforcement; to protect the health, safety, and general welfare of the public and occupants of housing and buildings accessory thereto. To fulfill this obligation the program may propose legislation and regulations. The program oversees application of state laws, regulations, and code enforcement by a city, county, city and county building, housing, health, and fire department or fire district.

The program develops statewide building standards for new construction of hotels, motels, lodging houses, apartments, dwellings, and buildings accessory thereto. The building standards are published in the California Code of Regulations, title 24, known as the California Building Standards Code.

The program adopts regulations for maintenance, use, occupancy, repair, alteration, moving, and demolition of existing hotels, motels, lodging houses, apartments, dwellings, and buildings accessory thereto. The regulations are published in the California Code of Regulations, title 25, division 1, chapter 1.

## **PUBLIC SERVICES AND UTILITIES**

### ***California Composting and Transfer/Processing Regulations***

Composting operations could be regulated under CalRecycle's existing composting and transfer/processing regulations. The application of permitting requirements must be applied on a case-by-case basis. The determination as to the type of facility would be based on the nature of the feedstock and the temperature of on-site processes. If the feedstock reach a temperature of at least 50 degrees Celsius/122 degrees Fahrenheit (50°C/122°F) on site, then the facility could be regulated as a compostable material handling facility. If the feedstock does not reach the temperature of 50°C/122°F on site, then the facility could be regulated as a transfer/processing facility. Composting operations covered within the Order typically also must obtain a Compostable Material Handling Facility Permit unless exempted under California Code of Regulations, title 14, section 17855.

CalRecycle's compostable material handling, design and operations regulatory requirements are located at California Code of Regulations, title 14, division 7, chapter 3.1, section 17850 et seq. The transfer/processing regulatory requirements are located at title 14, division 7, chapter 3, article 6.0 (§ 17400 et seq.) Specific sections related to public services and utilities are provided below:

Section 17867. General Operating Standards as follows:

*(a) All compostable materials handling operations and facilities shall meet the following requirements:*

*(8) The operator shall provide fire prevention, protection, and control measures, including, but not limited to, temperature monitoring of windrows and piles, adequate water supply for fire suppression, and the isolation of potential ignition sources from*

*combustible materials. Fire lanes shall be provided to allow fire control equipment access to all operation areas.*

*(9) The operator shall provide telephone or radio communication capability for emergency purposes.*

*(10) Physical Contaminants and refuse removed from feedstock, compost, or chipped and ground material shall be removed from the site within 7 days and transported to an appropriate facility.*

*(13) The operator shall prevent or remove physical contaminants in compost and chipped and ground materials that may cause injury to humans.*

Section 17867.5. Training as follows:

*(a) Compostable materials handling operations and facilities shall meet the following requirements:*

*(1) Operators shall ensure that all personnel assigned to the operation shall be trained in subjects pertinent to operations and maintenance, including the requirements of this article, physical contaminants and hazardous materials recognition and screening, with emphasis on odor impact management and emergency procedures. A record of such training shall be maintained on the site.*

### **Local Jurisdictions**

Local agencies that regulate public services and publicly-owned utility systems include county fire departments and fire districts, county water departments and water districts, county environmental health departments for wells and septic systems, and county flood management departments and drainage districts for flood protection and drainage services. Local agencies regulate facilities within their jurisdiction by enforcing State and local laws and ordinances. Local agencies currently adopt and enforce the 2007 California Fire Code. (Cal. Code Regs., tit. 24, pt. 9 (2010) (Building Standards).) Local jurisdictions also provide goals, objectives, and policies related to public services and utilities in the jurisdiction's general plan.

## **TRANSPORTATION**

### ***California Department of Transportation (Caltrans)***

Caltrans is responsible for planning, designing, constructing, operating, and maintaining all State-owned roadways. Caltrans also implements Federal highway standards for interstates in California. Caltrans' construction practices require temporary traffic control planning "during any time the normal function of a roadway is suspended". In addition, Caltrans has discretionary authority to issue special permits for the movement of vehicles/loads exceeding statutory limitations on the size, weight, and loading of vehicles contained in Division 15 of the California Vehicle Code. Requests for such special permits require completion of an application for a Transportation Permit. The California Highway Patrol is notified about transportation of oversize/overweight loads.

State highway weight and load limitations are specified in the California Vehicle Code, sections 35550 to 35559. The following general provisions would apply to the project:

- The gross weight imposed upon the highway by the wheels on any axle of a vehicle shall not exceed 20,000 pounds, and the gross weight upon any one wheel, or wheels, supporting one end of an axle, and resting upon the roadway, shall not exceed 10,500 pounds.
- The maximum wheel load is the lesser of the following: (a) the load limit established by the tire manufacturer, or (b) a load of 620 pounds per lateral inch of tire width, as determined by the manufacturer's rated tire width.

For vehicles with trailers or semi-trailer, the following provision applies:

- The gross weight imposed upon the highway by the wheels on any one axle of a vehicle shall not exceed 18,000 pounds, and the gross weight upon any one wheel, or wheels, supporting one end of an axle and resting upon the roadway, shall not exceed 9,500 pounds, except that the gross weight imposed upon the highway by the wheels on any front steering axle of a motor vehicle shall not exceed 12,500 pounds, according to California Vehicle Code section 35551.5.

These weight and load limitations for state highways would also apply to county or city roadways if no limitations are specified by the local jurisdiction.

### **County and City Land Use Regulations and Ordinances**

Local regulations and ordinances vary widely from area to area. Typically, local jurisdictions adopt building, grading, and erosion control ordinances. In addition, local jurisdictions typically require a traffic safety / traffic management plan for any project that includes lane closures, partial road closures, and road closures with detours. An encroachment permit is required for any work to be performed in the roadway right-of-way.