INSTITUTE FOR LOCAL GOVERNMENT℠
*Promoting Good Government at the Local Level*

# Model Goals, Policies, Zoning and Development Standards for Composting and Remanufacturing Facilities

# Table of Contents

# Introduction

The Institute for Local Government retained Mintier Harnish and Jacobson & Wack to research, identify options and develop model language for general plan goals and policies and zoning ordinance standards related to composting and remanufacturing facilities using recycled materials. The goals, policies, zoning regulations and standards address composting and remanufacturing facility location, development and operations. The intent of this report is to educate and inform local policy-makers and staff about land use planning approaches and zoning tools to facilitate and encourage the economically beneficial use of recyclable materials generated in California.

# Model Goals and Policies

The sample goals and policies in this section are intended to provide guidance for city and county planners who are updating their general plans and want to address composting, anaerobic digestion, recycled content product manufacturing (RCP) and intermediate processing operations. Adoption and implementation of goals and policies addressing these topics can help local governments achieve their AB 939 waste reduction targets. Every city and county has unique circumstances, some may already have standards more stringent than what is defined below, so any existing local policies should be consulted as well; these examples provide a starting point that can be modified to fit individual circumstances. The model goals and policies are to some extent overlapping; local jurisdictions should select only those goals and policies that are appropriate for them, and modify them according to their own needs.

## Goals

**Efficient Processing and Reduced Landfill Disposal of Solid Waste.** Minimize, treat and safely process solid waste materials in a manner that protects natural resources from pollution and neighboring properties from negative impacts while planning for the eventual reuse or recycling of discarded material to achieve zero waste.

**Solid Waste Management**. Provide safe, cost-efficient and environmentally responsible solid waste management.

**Solid Waste and Recycling**. Maximize diversion of solid waste from disposal through the reduction, reuse, remanufacturing and recycling of wastes to the highest and best use.

**Solid Waste Resource Value.** Recover the resource value of solid waste and foster the establishment of facilities which constructively use and reinvest the resources in the local economy.

**Organic Waste.** Eliminate green and organic waste materials from the landfill disposal stream through composting, biofuels creation or other methods.

**Composting**. Encourage composting and minimize the amount of organic materials disposed of at landfills.

**Remanufacturing.** Encourage businesses that manufacture new products using recycled materials.

## Policies

**Education.** Continue programs to educate industry and the public regarding the need and methods for waste reduction, recycling and reuse.

**Reduce the Solid Waste Stream.** Promote the highest and best use of solid waste through redesign, remanufacturing, reuse, composting and shared producer responsibility. Emphasize a closed-loop system of production and consumption.

**Waste as a Revenue Source.** Treat solid waste as potential revenue sources and maximize the revenue potential associated with the waste stream as new products, economies, needs and technologies emerge.

**Purchase Recycled Products.** Develop and implement a procurement program to purchase products made from recycled or composted materials.

**Industrial Land Use for Recycling**. Encourage the use of industrially-planned land to provide locations for various forms of recycling services (e.g., collection, composting, handling, transfer, processing, remanufacturing, etc.), for the support facilities required by these services (e.g., service yards, truck storage and service) and for companies that manufacture new products out of recycled materials (remanufacturing).

**Remanufacturing Industries.** Encourage the establishment, retention and expansion of industries that use recycled materials in their manufacturing processes by establishing clear, supportive zoning and development standards for these uses.

**Composting Facilities.** Support the development of composting facilities to increase green waste recycling, reduce GHG emissions and reduce the amount of waste entering the waste stream.

**Composting and Vermiculture.** Promote home composting and vermiculture to reduce GHG emissions by reducing the amount of organic waste (e.g., cellulose-based waste, paper, food waste) that is sent to landfills.

**Streamlined Review.** Establish a streamlined review process for properly located recycling facilities and remanufacturing industries that use recycled materials.

# Model Permit Requirements

**A. How to Use this Report.** This report emphasizes policy choices for further consideration at the local level. These model permit requirements are designed to be modified by individual agencies to reflect the unique policies, concerns, and circumstances of the individual city or county. Certain areas of the state that have geographic opportunities/limitations and/or additional government oversite (i.e., steep hillside terrains or sites located within the Coastal Zone) will need a different perspective and require a different approach to the siting and operation of composting and remanufacturing land uses using recycled materials.

**B. Table 1.** The following Table 1 (Allowable Recyclable Uses and Permit Requirements) specifies the general types of land use categories, the allowed types of composting and remanufacturing land uses, and the applicable permit, if any, required to implement the desired land uses. Even where uses are shown to be "permitted by right", all model location, development, and operation standards outlined below shall be followed.

**C. Pre-application Consultation**. A prospective applicant for a proposed composting and/or remanufacturing land use is strongly encouraged to request a pre-application consultation with the applicable city or county director or designated department staff member (and a representative from the Local Enforcement Agency (LEA)) to ensure that the project, as proposed, is appropriately located on a proper site or assist in identifying a more appropriate site for the proposed composting and/or remanufacturing land use before completing and filing a permit application required by the applicable city's or county's zoning ordinance.

1. The purpose of a pre-application consultation is to generally:

    a. Inform the applicant of city or county (and LEA) requirements as they apply to the proposed project;

    b. Discuss the city's or county's review process, possible project alternatives, or modifications; and

    c. Identify information and materials the city or county will require with the application, including any necessary technical studies and information anticipated for the environmental review of the project.

2. Neither the pre-application consultation nor the provision of information and/or pertinent policies should be construed as either a recommendation for approval or denial of the application or project by the city's or county's representative.

3. Failure of the city's or county's representative to identify all required studies or all applicable requirements at the time of pre-application consultation shall not constitute a waiver of those studies or requirements.

# Table 1
# Allowable Recyclable Uses and Permit Requirements

| **ALLOWED RECYCLABLE USES AND PERMIT REQUIREMENTS[1]** | **P** **Permitted By Right**<br>**CUP** **Conditional Use Permit**<br>**MUP** **Minor (Administrative) Use Permit**<br>**—** **Not Allowed** | | | | |
|---|---|---|---|---|---|
| **Type of Composting, Anaerobic Digestion, Recycled Content Product Manufacturing (RCP), and Intermediate Processing Operations[2]** | **Rural Agricultural Zones[3]** | **Urban Fringe Agricultural Zones[3]** | **Rural Heavy Commercial and Industrial Zones[3]** | **Urban Fringe Heavy Commercial and Industrial Zones[3]** | **Urban Heavy Commercial and Industrial Zones[3]** |
| **Composting** | | | | | |
| Type 1[4] | P | P | P | MUP | — |
| Type 2[5] | P | P | MUP | CUP | — |
| Prohibited Feedstocks | — | — | — | — | — |
| **In-vessel / Anaerobic Digestion** | | | | | |
| All in-vessel activities | P | P | P | P | P |
| **Chipping & Grinding** | | | | | |
| All chipping and grinding activities | P | P | MUP | CUP | — |
| **Activities Not Subject To Solid Waste Regulations-** RCP Manufacturing and Intermediate Processing Operations | | | | | |
| Remanufacturing Operations – **All activities[6]** are conducted within a completely enclosed structure, with all doors, windows, and any other structure openings completely closed. | CUP | P | MUP | P | MUP |
| Remanufacturing Operations – **Most activities[6]** are conducted within a completely enclosed structure, with all doors, windows, and any other structure openings completely closed. | CUP | MUP | MUP | MUP | CUP |
| Remanufacturing Operations – **Few activities[6]** are conducted within a completely enclosed structure, with all doors, windows, and any other structure openings completely closed. | CUP | MUP | P | P | P |
| Remanufacturing Operations – **No activities[6]** are conducted within a completely enclosed structure, with all doors, windows, and any other structure openings completely closed. | CUP | MUP | P | MUP | CUP |

[1] See definitions for the descriptions of the different types of Feedstock Categories. See Compost-related Definitions and Feedstock Categories, below
[2] The type of compost method used (see Active Compost, Aerated Static Pile, Enclosed, and Windrow, in the Definitions section below) may also have an effect on recyclable uses and permit requirements.
[3] See Land Use category definitions, below.
[4] Facilities that produce compost from agricultural material and small volume facilities that produce compost from green material and food material.
[5] Facilities that produce compost from mixed solid waste, food material, biosolids, digestate, and large volume facilities that produce compost from vegetative food material and green material.
[6] See the descriptions and definitions of the range of the different types of activities associated with a remanufacturing operation. See Remanufacturing Operations-related Descriptions and Definitions, below.

# Definitions

## A. Compost-related Definitions

The following compost-related definitions have been taken from California Code of Regulations Title 14, (http://www.calrecycle.ca.gov/laws/regulations/title14/ch31.htm), Section 17852.

1. **Active Compost.** Compost feedstock that is in the process of being rapidly decomposed and is unstable. Active compost is generating temperatures of at least 50 degrees Celsius (122 degrees Fahrenheit) during decomposition; or is releasing carbon dioxide at a rate of at least 15 milligrams per gram of compost per day, or the equivalent of oxygen uptake.

2. **Aerated Static Pile.** A composting process that uses an air distribution system to either blow or draw air through the pile. Little or no pile agitation or turning is performed.

3. **Agricultural Material.** Material of plant or animal origin, which results from the production and processing of farm, ranch, agricultural, aquacultural, floricultural, horticultural, silvicultural, vermicultural, or viticultural products, including manures, orchard and vineyard prunings, and crop residues.

4. **Anaerobic Decomposition.** The biological decomposition of organic substances in the absence of oxygen.

5. **Biosolids.** Solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Biosolids includes, but is not limited to, treated domestic septage and scum or solids removed in primary, secondary, or advanced wastewater treatment processes. Biosolids does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during the preliminary treatment of domestic sewage in a treatment works.

6. **Chipping and Grinding Operations and Facilities.** Facilities that mechanically reduce the size or otherwise engage in the handling of organic material. Chipping and grinding facilities do not produce compost, though some compost facilities also have chipping and grinding activities.

7. **Compostable Material.** Any organic material that when accumulated will become active compost.

8. **Compostable Material Handling Operation or Facility.** An operation or facility that processes, transfers, or stores compostable material. Handling of compostable

materials results in controlled biological decomposition. Handling includes chipping and grinding, composting, screening, and storage activities related to the production of compost, compost feedstocks, and chipped and ground materials.

9. **Enclosed Composting Process.** A composting process where the area that is used for the processing, composting, stabilizing, and curing of organic materials, is covered on all exposed sides and rests on a stable surface with environmental controls for moisture and airborne emissions present.

10. **Feedstock.** Any compostable material used in the production of compost or chipped and ground material including, but not limited to, agricultural material, biosolids, food material, green material, and mixed solid waste. Feedstocks shall not be considered as either additives or amendments. The two types of feedstocks specified in Table 1, above are also defined as follows:

    a. Type 1. Facilities that produce compost from agricultural material and small volume facilities that produce compost from green material and vegetative food material.

    b. Type 2. Facilities that produce compost from mixed solid waste, food material, biosolids, digestate, and large volume facilities that produce compost from vegetative food material and green material.

11. **Food Material.** Any material that was acquired for animal or human consumption, is separated from the municipal solid waste stream, and that does not meet the definition of "agricultural material." Food material may include material from food facilities as defined in Health and Safety Code Section 113785, grocery stores, institutional cafeterias (such as, prisons, schools and hospitals) or residential food scrap collection.

12. **Green Material.** Any plant material that is separated at the point of generation and contains no greater than 1.0 percent of physical contaminants by weight. Green material includes, but is not limited to, yard trimmings, untreated wood wastes, natural fiber products, and construction and demolition wood waste. Green material does not include biosolids, food material, mixed solid waste, material processed from commingled collection, wood containing lead-based paint or wood preservative, mixed construction, or mixed demolition debris.

13. **Handling.** The processing, transfer, and storage of compostable materials. Handling of compostable materials results in controlled biological decomposition. Handling includes composting, screening, chipping and grinding, and storage activities related to the production of compost, compost feedstocks, and chipped and ground materials.

14. **In-vessel/Anaerobic Digestion Composting Process.** A process in which compostable material is enclosed in a bin, drum, reactor, silo, tunnel, or other enclosed/sealed container for the purpose of producing compost, maintained under

uniform conditions of temperature and moisture where air-borne emissions are controlled.

15. **Manure.** An agricultural material and means accumulated herbivore or avian excrement. This definition shall include feces and urine, and any bedding material, spilled feed, or soil that is mixed with feces or urine.

16. **Mixed Solid Waste.** Any material that is part of the municipal solid waste stream, and is mixed with or contains non-organics, processed industrial materials, or plastics. A feedstock that is not separated or contains 1.0 percent or more physical contaminants by weight is mixed solid waste. Compostable material that contains mixed demolition or mixed construction debris shall be considered mixed solid waste.

17. **Physical Contamination or Contaminants.** Human-made inert products contained within feedstocks, including, but not limited to, glass, metal and plastic.

18. **Prohibited Feedstocks**. Any feedstock not listed in the definition of “Feedstock” above. More specifically, feedstocks which include asbestos-containing wastes; biomedical wastes; hazardous wastes; radiological or toxic wastes; and any other prohibited wastes defined in state law.

19. **Putrescible Waste.** Solid waste that contains organic matter capable of being decomposed by microorganisms and of such a character and proportion as to cause obnoxious odors and to be capable of attracting or providing food for birds or animals.

20. **Stabilized Compost.** Any organic material that has undergone the Process to Further Reduce Pathogens (PFRP) and has reached a stage of reduced biological activity as indicated by reduced temperature and rate of respiration below that of active compost.

21. **Windrow Composting Process.** The process in which compostable material is placed in elongated piles. The piles or "windrows" are aerated and/or mechanically turned on a periodic basis.

**B. RCP Manufacturing and Intermediate Processing Operations-related Descriptions and Definitions - Activities Not Subject To Solid Waste Regulatory Requirements.**

1. **Three-Part Test.** RCP Manufacturing and Intermediate Processing Operations may not be subject to solid waste regulatory requirements if they meet one or more of the following:

    a. Receive material that has been separated from other waste materials;

    b. Receive material that contains less than one percent of putrescible waste; or

c. No more than ten percent of the material received is discarded as waste.

2. **Remanufacturing operations.** Remanufacturing operations that produce consumer products with recycled content could include, for example, facilities that manufacture cardboard boxes made from recycled paper or facilities that produce picnic tables made of recycled plastic pellets. Remanufacturing operations that produce consumer products using recycled content are generally treated as and located among other manufacturing operations in the heavy commercial and industrial zones of a community.

3. **All activities are conducted within a completely enclosed structure, with all doors, windows, and any other structure openings completely closed.** These remanufacturing operations conduct **all** of the operations and related activities within a completely enclosed structure, with all doors, windows, and any other structure openings completely closed. This includes the off-loading of recycled and processed materials, the storage of the recycled and processed materials, the manufacturing of the finished product(s), the warehousing of the finished product(s), and the loading of the finished product(s) on the selected means of transport. The **only** exceptions to the "…**all** of the operations…" requirement stated above would be for the circulation and parking of motor vehicles, the delivery of office-sized products via common delivery services such as FedEx, UPS, or other similar delivery services, and normal building maintenance.

4. **Most activities are conducted within a completely enclosed structure, with all doors, windows, and any other structure openings completely closed.** These remanufacturing operations conduct **most** of the operations and related activities within a completely enclosed structure, with all doors, windows, and any other structure openings completely closed. This includes the storage of the recycled and processed materials, the manufacturing of the finished product(s), the warehousing of the finished product(s), and the loading of the finished product(s) on the selected means of transport. The **only** exceptions to the "…**most** of the operations…" requirement stated above would be for the off-loading of recycled and processed materials, the circulation and parking of motor vehicles, the delivery of office-sized products via common delivery services such as FedEx, UPS, or other similar delivery services, and normal building maintenance.

5. **Few activities are conducted within a completely enclosed structure, with all doors, windows, and any other structure openings completely closed.** These remanufacturing operations usually conduct **few** of the operations and related activities within a completely enclosed structure, with all doors, windows, and any other structure openings completely closed. This includes the manufacturing of the finished product(s) and the warehousing of the finished product(s). The **only** exceptions to the "…**few** of the operations…" requirement stated above would be for the off-loading of recycled and processed materials, the storage of the recycled and processed materials, the loading of the finished product(s) on the selected

means of transport, the circulation and parking of motor vehicles, the delivery of office-sized products via common delivery services such as FedEx, UPS, or other similar delivery services, and normal building maintenance.

6. **No activities are conducted within a completely enclosed structure, with all doors, windows, and any other structure openings completely closed.** These remanufacturing operations usually conduct **none** of the operations and related activities within a completely enclosed structure, with all doors, windows, and any other structure openings completely closed. Exceptions may include indoor display, office, and public counter space, and employee lounges and other employee-related areas.

C. **Land Use Categories.** The following definitions are designed to further clarify the land use categories specified in Table 1 (Allowable Recyclable Uses and Permit Requirements), above.

1. **Rural Agricultural Zones.** Rural Agricultural Zones provide for agricultural production and associated processing, sales and support uses. These zones generally apply to land located outside of areas planned for urban development, where soils are capable of producing a wide variety of crops and/or support grazing. These areas typically have transportation access, but little to no public infrastructure.

2. **Urban Fringe Agricultural Zones.** Urban Fringe Agricultural Zones provide for small-scale and specialty agricultural production and associated processing, sales, and support uses. These areas are generally located outside city limits and inside city spheres of influence, but can also refer to incorporated areas located on the periphery of the urban area. While Urban Fringe Agricultural Zones are transition areas between urban and rural areas and are typically designated for interim agriculture uses, they will likely be designated for other types of development in the future as cities expand.

3. **Rural Heavy Commercial and Industrial Zones.** Rural Heavy Commercial and Industrial Zones provide for a variety of retail, service and industrial uses serving regional markets, residents in rural areas, and surrounding agricultural operations/employees. Commercial developments in these areas may include a mix of uses, recognizing that separation of uses is not generally practical in a rural setting. Industrial developments in these areas include employment-generating uses that may produce loud noise or vibration, high heat, glare, or noxious odors, and tend to have a high volume of truck traffic.

4. **Urban Fringe Heavy Commercial and Industrial Zones.** Urban Fringe Heavy Commercial and Industrial Zones provide for a variety of retail, service and industrial uses serving both urban and rural areas. These areas may be located outside city limits and inside city spheres of influence, but can also refer to

incorporated areas located on the periphery of the core urban area. Commercial development in these areas may include shopping centers, hotels/motels and other activities serving the regional population. Industrial developments in these areas include large-scale manufacturing, production facilities, and other uses that may not be appropriate in an urban setting.

5. **Urban Heavy Commercial and Industrial Zones.** Urban Heavy Commercial and Industrial Zones provide for a variety of retail, service, and industrial uses serving and employing residents from the region. These areas are generally located within core urban areas, but are not typically integrated with residential uses. Commercial development in these areas may include shopping centers, hotels/motels and other activities serving the regional population. Industrial development in these areas may include contractor yards, lumber yards, light and/or heavy manufacturing and/or assembly, research and development operations, vehicle repair shops and warehouses.

# Model Location, Development, and Operation Standards

**A. Standards for Composting Operations**

1. **General Design Requirements.** All compostable materials handling operations and facilities shall meet all of the following requirements:

   a. Compostable materials handling operations and facilities shall be designed and constructed in a manner as to enable the operations and facilities to comply with the operational requirements.

   b. The design of compostable materials handling operations and facilities shall utilize advice, as appropriate, from persons competent in air quality control, engineering architecture, landscape design, traffic engineering and design of structures.

2. **General Operating Standards.** All compostable materials handling operations and facilities shall meet all of the following requirements:

   a. All handling activities are prohibited from composting any prohibited materials.

   b. All handling activities shall be conducted in a manner that minimizes odor impacts so as not to cause a nuisance.

   c. All handling activities shall be conducted in a manner that minimizes hazards, litter, noise, nuisances and vector impacts; and minimizes human contact with, ingestion, inhalation, and transportation of dust, particulates and pathogenic organisms.

   d. The operator shall conduct random load checks of feedstocks, additives and amendments for contaminants.

   e. Contamination of compostable materials that have undergone pathogen reduction with feedstocks, compost, or wastes that have not undergone pathogen reduction, or additives shall be prohibited.

   f. Unauthorized human or animal access to the facility shall be prohibited.

   g. Traffic flow into, on, and out of the composting operation or facility shall be controlled in a safe manner at all times.

h. All compostable materials handling operations and facilities, which are open for public business, shall post legible directional signs at all public entrances.

i. 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.

j. The operator shall provide telephone or radio communication capability for emergency purposes.

k. Physical contaminants and refuse removed from feedstock, compost, or chipped and ground material shall be removed from the site within seven days and transported to an appropriate off-site facility.

l. Enclosed operations and facilities shall provide ventilation to prevent adverse public health effects from decomposition gases.

m. The operator shall ensure that leachate is controlled to prevent contact with the public.

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

o. An attendant shall be on duty during regular business hours if the operation or facility is open to the public.

**3. Site Restoration.** All compostable materials handling operations and facilities shall meet all of the following requirements:

a. The operator shall provide the Enforcement Agency written notice of the intent to perform site restoration, at least 30 days prior to beginning site restoration.

b. The operator and owner(s) shall provide site restoration necessary to protect public health, safety, and the environment.

c. The operator shall ensure that all of the following site restoration procedures are performed upon completion of operations and termination of service:

1.) The operation and facility grounds, ponds, and drainage areas shall be cleaned of all residues including, but not limited to, compost materials, construction scraps, and other materials related to the operations, and these residues legally recycled, reused, or disposed of.

2.) All machinery shall be cleaned and removed or stored securely.

3.) All remaining structures shall be cleaned of compost materials, dust, particulates, or other residues related to the composting and site restoration operations.

**B. Standards for Remanufacturing Operations.** Remanufacturing operations shall comply with all of the following location, development and operation standards.

1. **Minimum parcel size.** The minimum parcel size for a site containing a remanufacturing operation shall be ____ acres.

2. **Zone-driven development standards.** The remanufacturing operation shall be in full compliance with the applicable development standards (e.g., height, parcel coverage, setbacks, etc.) for development and uses within the subject zone.

3. **Site Planning and Design Standards.** All heavy commercial and industrial development projects shall comply with all of the following standards:

   a. **Landscaping.** The required front and street side setback areas abutting a public street shall be continually maintained with landscaping in compliance with Subsection 4. (Heavy Commercial and Industrial Buffer Areas), below and adopted landscaping standards.

   b. **Parking.** The number of parking spaces and parking lots shall be provided and properly maintained in compliance with adopted parking standards. For sites with multiple parcels, a reciprocal access and parking agreement shall be required.

   c. **Private easements.** All on-site circulation shall occur on private access easements. If the site consists of multiple parcels, a reciprocal access and parking agreement shall be required.

   d. **Setbacks.** Except for signs, all other structures, fences/walls, and parking areas abutting a public street shall be set back at least 20 feet from any front or street side property line.

   e. **Signs.** A comprehensive sign program shall be provided in compliance with adopted sign standards. Monument signs shall be allowed within the landscaped front and street side setback area, subject to a minimum setback of ten feet and compliance with other applicable sign standards.

   f. **Projects located adjacent to residential zones.** In addition to the adopted heavy commercial and industrial standards, all heavy commercial and industrial projects located adjacent to a residential zone shall comply with all of the following:

      1. **Separated by a public street.** The heavy commercial or industrial site or integrated heavy commercial or industrial park shall, as a minimum, be

separated from a residential zone or noise-sensitive use by a public street. An exception may be granted by the planning director or planning commission, as applicable, for sites whose location or configuration would not allow a public street setback. The setback for any structure adjacent to a residential zone shall equal the height of that structure, but in no case shall the setback be less than 15 feet.

**4. Heavy Commercial and Industrial Buffer Areas**

a. **Buffer Areas Defined.** A heavy commercial or industrial buffer area is an area of plantings and walls that shield neighboring properties from the negative impacts created by heavy commercial or industrial land uses.

b. **When Required.** A heavy commercial or industrial buffer area is required for any development located adjacent to any land use which is customarily sensitive to the impacts associated with a remanufacturing operation.

c. **Buffer Area Standards.**

1.) Heavy commercial and industrial buffer areas shall be located along the outer perimeter of a property line abutting a land use which is customarily sensitive to the impacts associated with a remanufacturing operation.

2.) The minimum width of a heavy commercial or industrial buffer area shall be 50 feet.

3.) Heavy commercial and industrial buffer areas shall include a solid masonry or equivalent wall no less than six feet in height.

4.) Heavy commercial and industrial buffer areas shall be planted with a mix of deciduous and evergreen trees and shrubs of suitable type, size and spacing to achieve screening year-round. The size of plants selected to meet these standards shall be large enough to ensure proper screening within five years.

5.) All plantings within a heavy commercial and industrial buffer area shall be maintained in a manner consistent with the subject community's landscaping requirements.

6.) Paved surfaces shall be prohibited within heavy commercial and industrial buffer areas. These buffer areas shall not be used for building areas, driveways, parking, trash enclosures, or any other activity associated with the primary use on the subject property.

# Compliance with Other State, Regional and Local Regulations

In addition to obtaining required land use and building permits, composting and remanufacturing operations shall comply with all of the following and applicable state, regional and local regulations. The following types of permits may need to be obtained, as applicable to the operation.

A. **Air Quality Permit.** An Air Quality Permit from the Regional Air Quality or Air Pollution Control District.

B. **Rendering License.** A license from the California Department of Food and Agriculture for facilities that process waste material required to be handled only pursuant to the Food and Agricultural Code or regulations adopted pursuant thereto, usually at industrial processing and rendering plants.

C. **Solid Waste Facility Permit.** A Solid Waste Facility Permit from the Local Enforcement Agency (usually the city or county), depending upon the size and type of operation and the materials used in the process.

D. **Water Quality Permit.** A Water Quality Permit from the Regional Water Quality Control Board.

E. **Hazardous Waste Permit.** A Hazardous Waste Permit from the State Department of Toxic Substances Control for facilities that generate, store or transport hazardous wastes.

F. **Environmental Health Permit.** An environmental health permit from the county Department of Environmental Health.

## Resources to Learn More

**ILG Recycling Resource Center** www.ca-ilg.org/recycling-resource-center
The ILG Recycling Resource Center includes documents, webinars and case examples to help local governments finance and site recycling projects and programs in their communities. The commercial recycling section includes resources to help local officials increase commercial recycling in their communities.

Key resources include:

- *Connecting the Dots: Recycling, Climate and Economic Development* offers an explanation of the connections between recycling, climate and economic development.
- *Financing Recycling Programs and Facilities: Understanding Options and Resources* offers an overview of the current methods that local agencies use to fund their recycling programs and how the public and private sectors are financing recycling facilities.
- *A Primer on Recycling Facilities* offers a basic description of recycling collection and processing systems, types of recycling facilities and the potential benefits to the communities where they are located.

# Acknowledgements

A special thank you to Jim Harnish and Bruce Jacobson whose expertise contributed to the completion of this publication. Harnish is the Principal/Owner of Mintier Harnish a consulting firm specializing in planning, development, land use, and environmental issues. Jacobson is a Partner in Jacobson & Wack a specialized firm providing planning consulting services exclusively to California cities and counties.

The Institute gratefully acknowledges the following individuals who reviewed this document and offered their comments prior to publication:

- Christopher Bria, Senior Environmental Scientist, CalRecycle
- Kaoru Cruz, Supervisor, Local Assistance and Market Development Branch, CalRecycle
- John Davis, Administrator, Mojave Desert and Mountain Recycling Authority
- Ken Decio, Supervisor, Permitting and Assistance Branch, CalRecycle
- Robert Holmes, Manager, Permitting and Assistance Branch, CalRecycle
- Dr. Howard Levenson, Deputy Director, CalRecycle
- Martin Perez, Senior Environmental Scientist, CalRecycle
- Paul Philleo, Director, Department of Waste Management and Recycling, County of Sacramento
- Chris Stephens, Director, Resource Management Agency, County of Ventura
- Lisa Wood, Planner, City of San Diego

Prepared as part of CalRecycle contract number DRR12063, Total Contract Amount $200,000, pursuant to Government Code Section 7550.