WASTE HANDLING STANDARDS
For Commercial Properties and Multi-Family Properties with Shared Service

Environmental Services Division

925-833-6630

Available electronically at www.ci.dublin.ca.us/DocumentCenter/View/17026

Contents

1. Overview

The **Waste Handling Standards** document includes:

A. Information on design, construction and operational phases of multifamily, commercial, industrial, or government projects

B. Waste generation guidelines to help assess the level of garbage, cardboard only, mixed recycling, and organics service required for each project

C. Details on garbage, cardboard only, mixed recycling, and organics container sizes

D. Instruction on the design, dimensions, placement, construction, and maintenance of waste enclosures

Key Terms

A. Solid waste- items discarded from a business including garbage, recycling, and organic material. Hazardous waste and electronic waste are not included in this definition and must be handled separately.

B. Garbage- items such as plastic film, broken furniture, broken dishes, polystyrene, diapers, pet waste, tattered clothing, and other items that are not acceptable for recycling or organics collection.

C. Recycling – items such as cardboard, mixed paper (newspapers, magazines, office paper, junk mail, paperboard boxes, etc.), metal cans and foil, plastic and glass containers (bottles, jars and jugs only).

D. Organics – items such as food (meat, diary, grains, fruits and vegetables), food soiled paper (napkins, paper serve ware, paper towels), plant debris, and wood that is not painted or chemically treated.

E. Dumpster- a metal container used to collect solid waste that can hold at least one cubic yard of material. This container type is sometimes also referred to as a bin. They are most commonly used to collect discards from businesses and multifamily complexes.

F. Cart- a plastic wheeling container used to collect solid waste. Cart capacity ranges from a 32 gallon container to a 96 gallon container. Carts are most frequently used for residential collection service but are also appropriate for use at businesses that generate very little waste.

2. General Garbage, Recycling, and Organics Requirements

A. Garbage, recycling and organics services are provided by Amador Valley Industries[1] (AVI) on an exclusive franchise basis.

B. Weekly garbage removal is required for all commercial and multifamily properties. Businesses may self-haul material directly to a permitted disposal facility using their own vehicle at least once every seven days as an alternative to weekly collection service.

C. Recycling service is required[2] for all commercial properties that generate 4 cubic yards or more of trash weekly and for all multifamily properties regardless of waste generation quantities. Commercial properties that generate less than 4 cubic yards of trash per week are strongly encouraged to establish a recycle program.

D. Organics service is required for restaurants, grocery stores or other facilities that generate 4 cubic yards or more of organic waste per week[3]. In coming years this requirement will expand to all businesses regardless of organics waste generation levels. Adequate space in enclosures to collect all organic waste is required. All food related businesses are strongly encouraged to establish an organics collection program today. AVI's recycle coordinator can help businesses establish a program.

E. Disposal of plant debris in the landfill is prohibited by the Alameda County Waste Management Authority[4] (ACWMA). The material must be composted or delivered to a transfer station and placed with other "clean green material" to be composted. Additional fees may be imposed by the ACWMA if plant debris is placed in the trash dumpster.

F. Overfilling of trash, recycling and organics containers is prohibited. Solid waste may not protrude above the top rim of the container and must allow for the lid(s) to close fully. Establishments that consistently have issues with overflowing containers will be required to increase their service level(s) to meet their needs.

G. All new construction projects and tenant improvements are required to provide space to

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[1] http://www.amadorvalleyindustries.com/

[2] State law AB 341 mandates this recycling. For complete text visit https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201120120AB341.

[3] State law AB 1826 mandates organics diversion. For complete text visit http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB1826.

[4] Per Alameda County Waste Management Authority Ordinance 2008-01, to view the complete ordinance visit http://www.recyclingrulesac.org/docs/Landfill-Ban-WMA-Ordinance2008-01.pdf.

store garbage, recycling, and organics receptacles in an enclosure or inside a building[5]. This space must be commensurate with the number and size of containers needed and take into account the applicant's short and long-term disposal and recycling needs.

H. The Public Works Director, or designee, shall review the design of all enclosures. All enclosures are subject to a site development review permit.

I. Per City Municipal Code 7.30[6], all construction, demolition, and renovation projects within the city, the total costs of which are greater than or equal to $100,000 shall comply with the City's diversion standards. Code stipulates these projects must recycle at least 65% of the waste for remodels or tenant improvements and 75% of the waste for new construction generated on a job site, excluding asphalt and concrete debris of which one hundred percent (100%) must be recycled. All projects less than $100,000 are strongly encouraged to meet these standards. The City's municipal code 7.30 has specific procedures for complying with these requirements.

[5] 2016 CALGreen Code 4.410.2 and 5.410.1 https://codes.iccsafe.org/public/document/details/toc/657

[6] Dublin Municipal Code 7.30 Waste Management Plan http://www.codepublishing.com/CA/Dublin/ Additional information and required forms can be found at http://ca-dublin2.civicplus.com/147/Construction-Demolition

3. **Multifamily Residential with Centralized Service Locations** ***Apartments/Condos/Flats***
   - Multifamily garbage, recycling, and organics collection is available in carts and bins. Cart collection is available once per week. Bin collection can be more frequent; garbage service is available up to six (6) days per week (Monday through Saturday), cardboard only and mixed recycling collection is available up to five (5) days per week (Monday through Friday) and organics collection is available four (4) days a week (Monday, Wednesday, Thursday, and Friday). Twice a day pick up is not available. Enclosure design shall maximize container size to limit the number of service days needed. Specific services days and schedules vary according to category of service and container type and are subject to change.

A. <u>Internal Storage Requirements:</u>
   i. All residential units need equal amounts of internal storage space to store garbage, recycling, and organic materials (e.g. under kitchen sink or in pantry).

B. <u>Chutes:</u>
   i. Chute systems must be pre-approved by the Environmental Services Division because of the unique space and access design challenges.
   ii. Applicant must provide two chute systems side by side, one for garbage and one for recycling. There must be a minimum of 6”5” between the center of the trash chute and the center of the recycling chute and a minimum of 6” between the chute opening and the trash room floor. Chutes are not required or recommended for organics. Extra space inside the chute room is required to accommodate collection of residents’ food scraps using a 32 gallon organics cart or a collection container of the property’s choosing. Organic discards collected in alternate containers will need to be placed in an AVI organics container and moved to an agreed upon location for service.
   iii. Chute vestibule rooms must

Figure 1: Trash and Recycle Chutes

be distributed to prevent any resident from traveling more than 250 feet to dispose of discards.

iv. Chute vestibule rooms must observe requirements of the current California Building Code regarding accessibility to solid waste collection receptacles for persons with disabilities (CCR Title 24, Part 2).

v. Chute systems must comply with current building codes for 2014 fire sprinkler requirements.

C. External Storage Requirements:

i. Multifamily residential garbage, mixed recycling, and organics receptacles must be stored in an enclosure.

ii. Bins are recommended for collecting mixed recycling so that the large quantities of cardboard typically generated at multifamily complexes can be easily recycled by residents. Cardboard only bins in addition to mixed recycle service are often appropriate in a multifamily setting. AVI provides standard front end loader bins for collection service. Any modifications to AVI's bins, including hitches for towing individual or multiple bins are the responsibility of the property owner or manager and must be approved by AVI beforehand. Complexes also have the option of purchasing and using their own customized or standard front end load bins at their own cost as long as they are compatible with AVI's standard front end load trucks and fork configurations.

iii. Unless other arrangements are made in advance, property management is responsible for transporting (by an agreed upon time) all AVI-serviced bins from indoor trash rooms to a mutually agreed upon staging area accessible to AVI trucks.

iv. Trash enclosures must be distributed throughout larger complexes so that no resident will have to travel more than 250 feet to reach an enclosure.

v. Trash enclosures must observe requirements of the current California Building Code regarding accessibility to solid waste collection receptacles for persons with disabilities (CCR Title 24, Part 2).

D. Estimating Service Needs

i. To ensure adequate space for solid waste a safe rule is 50 gallons or ¼ cubic yard of solid waste for every three residents. Of that 40% for trash, 40% for recycling, and 20% for organic material. This does not include plant debris

from landscaping, account for additional space if landscaping debris is disposed of on the property.

i. For example, a 60-unit multifamily complex with average occupancy of three people per unit would require 15 cubic yards of total capacity (1/4 CY x 60), which, following the 40-40-20 rule, equates to 6 cubic yards each for trash and recycling and 2 cubic yards for organics.
ii. Another approach is to estimate the number of occupants by multiplying the number of bedrooms by 2, and allowing 15 to 18 gallons per occupant, then applying the 40% - 40% - 20% proportions cited above.
iii. It is good practice to provide 20% to 35% excess capacity for seasonal variation and other surges in volume.
iv. Use estimated container needs to calculate space needs for your enclosure(s).
v. See Trash Enclosure Design Requirements section (pg15) for cart and dumpster dimensions.

4. Commercial and Industrial Requirements

Individual or centralized shared commercial service locations

- Commercial garbage collection is available up to six (6) days per week (Monday through Saturday). Cardboard only and mixed recycling collection is available up to five (5) days per week (Monday through Friday). Organics collection in carts is available once a week and in bins four (4) days a week (Monday, Wednesday, Thursday, and Friday). Twice a day pick up is not available. Enclosure design should maximize container size to limit the number of service days needed. Specific services days and schedules vary according to category of service and container type and are subject to change.

A. <u>Internal Storage Requirements:</u>

i. Design space inside the building for the storage of all materials including racks, crates, boxes, pallets, and other items that require storage space. Storage of any materials outside the building is prohibited.

ii. CA Green Building Code Section 5.410.1 – Building Maintenance and Operation: Recycling by occupants: Provide readily accessible areas that serve the entire building and are identified for the depositing, storage, and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive.

iii. Design space inside the building for in-store grease containers rather than external communal containers. External grease containers stored in enclosures will be considered only as a last resort when in-store storage is not feasible. In-store grease container design must comply with Alameda County Health Department[7] requirements for grease storage.

B. <u>External Storage Requirements</u>

i. Roofed trash enclosures are required for storing external garbage, recycling, organics, and used oil/grease containers when there is not capacity to store them

[7] https://www.acgov.org/aceh/food/plancheck.htm

inside the business.

ii. Trash enclosures are to be used only for the storage of garbage, recycling, organics and used oil/grease receptacles. No ongoing storage or temporary staging of any materials outside of these designated receptacles is allowed inside the enclosure. Trash enclosures must be large enough to store all appropriately sized collection containers for trash, recycling and organics generated at the site, based on the size and use of the business(es). If a used oil or grease receptacle is located inside the enclosure, the receptacle must be sized and located to not interfere with user or driver access to the trash, recycling, or organics collection containers. All grease receptacles must have a mechanism for secondary containment of spilled oil/grease, per approval from Dublin San Ramon Services District[8] and the City of Dublin.

iii. Each parcel must have a minimum of one trash enclosure. A commercial and industrial development may require multiple trash enclosures to meet the required capacity needs.

iv. Trash enclosures must comply with regulations from the City of Dublin, the Alameda County Health Department and Dublin San Ramon Services District when applicable.

[8] http://www.dsrsd.com/do-business-with-us/planning-and-permitting

5. Compactor Requirements

General Requirements:

A. Compactors must be pre-approved by the Public Works Director and are subject to site plan and architectural approval.

B. Compactors for garbage must be serviced by AVI at a minimum of once per week. Applicant must provide written agreement from AVI to the Public Works Director that the compactor may be serviced.

C. Compactors are not recommended for garbage service, except in certain large commercial, industrial, institutional or other large scale applications. Compactors are not recommended for organic collection in any circumstances.

D. Use of a compactor or baler for one type of recyclable material such as cardboard only or paper only is encouraged.

E. Compactors may require additional space and electrical connections, as well as separate building permits.

F. Compactors are required to be covered with a roof and shall include plumbing to capture possible leaks and spills.

G. Requirements for possible compactor approval:

   i. A backup distance of three times the length of the 35 foot truck is required (minimum 105 feet) to allow adequate space to hook and unhook the compactor from the roll-off truck. This distance must extend straight ahead from the end of the compactor.

   ii. Minimum of 30 feet in front of compactor must be a flat level surface.

   iii. Width of access leading up to the compactor must be at least 14 feet to allow room to maneuver and to provide clearance from objects/structures/vehicles on either side of the backup length.

   iv. Adequate room for backing-up and turning shall be provided on-site and shall not require use of the public right-of-way.

   v. When a compactor is proposed, indicate waste stream for compactor (e.g. trash or cardboard), and provide specs and size of compactor (e.g. stationary, top-load, etc.).

   vi. A business or residential development using an approved trash compactor must

still recycle as required by all applicable State and local mandatory recycling laws.

vii. Recyclable materials must be stored within a trash enclosure or on a shipping, receiving, or loading dock area that is readily accessible and convenient for building occupants, facility maintenance personnel, and the collection service provider.

viii. Site plans must show the location of all compactors and indicate truck routes, including turning templates.

ix. Compactors shall comply with trash enclosure standards for location, access, screening, and design requirements.

x. Late or unplanned addition of a compactor requires additional approval prior to installation. Additional space and electrical connections, as well as separate building permits may be required.

H. Dimension requirements:

i. Compactors require a minimum overhead clearance of 30 feet for truck servicing.

Table 1: Typical Compactor Dimensions

Commercial Compactors*	Length (feet)	Width (feet)	Height (feet)
20 cubic yards	14 – 18	8	6 -8
30 cubic yards	20 – 25	8	7 – 8
40 cubic yards	22 - 26	8	7.5

*Compactor box lengths vary by manufacturer and size; dimensions listed are most common by size. Compactors are not provided by AVI, though they must be serviced by AVI.

6. Roll-off Box Requirements

A. General Requirements:

i. Roll-off boxes for on-going uses are generally not permitted and are more appropriate for construction and demolition debris or one-time large clean-ups.

ii. Roll-off containers shall be placed directly behind a building where space is available at a loading dock to allow loading from above.

iii. Roll-off containers shall be placed on a level surface, unless roll-away protection is required. Placement of roll-off boxes shall be subject to approval by the Public Works Director.

iv. Loading docks shall be equipped with bumper pads of 8-inch-high curbs to avoid undue dock damage from heavy containers.

v. A minimum of 132 feet is needed to approach and service the container.

vi. All projects shall provide clearance for roll-off vehicles as follows:

a. Vertical (approach and exit): 14 feet high

b. Vertical (rails raised with bins): 30 feet high

c. Lateral: 10 feet wide

d. Service Area Length Minimum: 75 feet long

Table 2: Typical Roll-Off Box Dimensions

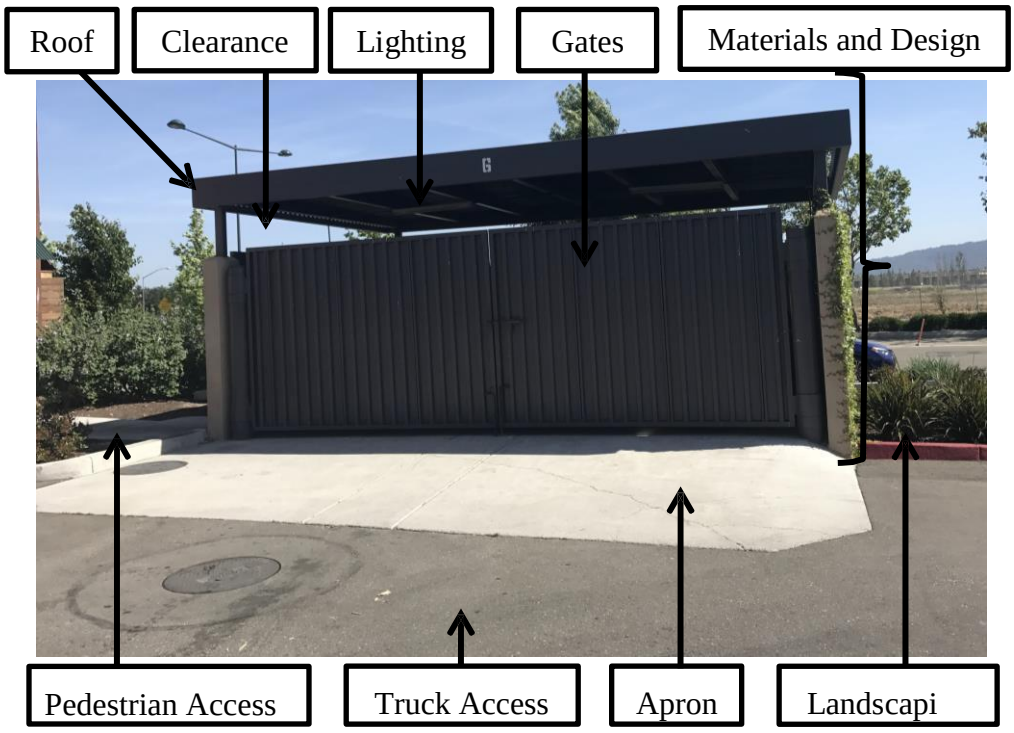
Roll-Off Boxes*	Length (feet)	Width (feet)	Height (feet)	Footprint (Sq. ft.)	Max Tonnage
6 cubic yards	12	8	2	96	3
15 cubic yards	12	8	5	96	3
20 cubic yards	16	8	5	128	4
30 cubic yards	22	8	5	176	6
40 cubic yards	22	8	7.5	176	6

*Dimensions above based on roll-off boxes provided by AVI

Figure 2: Roll-Off Servicing

7. Trash Enclosure Design Requirements

All solid waste enclosures must be enclosed on four sides and meet the requirements below.



A. Location

i. Must be readily accessible to AVI.

ii. Trash enclosures shall not be located:

a. Along any frontage streets or roadways or in any location so as to cause a nuisance.

b. In front of fire hydrants or within 5 feet of a combustible building wall, opening, or combustible roof eave line.

c. Behind parking spaces.

d. Adjacent to a storm drain in which grading will result in drainage of stormwater into the storm drain. See Stormwater requirements below.

e. Trash enclosures must be located on the property so a residential tenant will not have to travel more than 250 feet to reach a trash enclosure

B. Access / Clearance

iii. Trash enclosures for garbage, recyclables, and organics at multifamily and condominium housing shall observe the requirements of the California Building Code and the requirements of CCR Title 24, regarding accessibility to garbage, recycling, and organics collection receptacles for persons with disabilities (CCR Title 24, Part 2).

iv. A pedestrian entrance shall be provided for all enclosures. All pedestrian doors shall open outward to avoid interfering with placement of and access to containers.

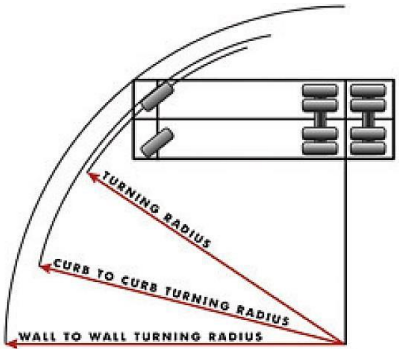
v. An accessible path of travel shall be provided from the main building to the pedestrian entrance door described above.

vi. Bins/enclosures are required to have reasonable access for collection trucks during normal collection days and hours, and shall provide direct access whenever possible. Direct access means the collection truck can drive straight up to the front of the enclosure for servicing. If a good location cannot be identified that provides direct access, a well located enclosure that provides side access to the bins is acceptable. Provide a driveway that is a minimum straight approach of 50 feet from the enclosure on asphalt or concrete built to withstand up to 62,000 pounds Gross Vehicle Weight(GVW). The driveway shall be built in accordance with City standard plans and specifications.

vii. Provide a turnaround with a minimum radius of 45 feet or separate exit that allows the truck to move forward rather than backwards. Maximum back-up distance is 50 feet and shall be in a straight line and not on to a major street or thoroughfare.

Figure 3: Front End Load Truck Turning Dimensions

Dimension(ft)	Description
32.85	TURNING RADIUS
67.79	CURB TO CURB TURNING DIAMETER
73.97	WALL TO WALL TURNING DIAMETER



C. Dimensions

i. Standard enclosures shall have a minimum inside usable floor and wall dimensions of 18 feet wide by 10 feet deep. In some instances, enclosures will need to be larger to accommodate the appropriate makeup, number, and size of bins to match each property's discards. If multiple enclosures are needed, adequate space for each waste stream within each enclosure is required.

ii. Enclosures used by food-related facilities must provide adequate space for a used oil/grease bin if a grease collection receptacle cannot be stored in-store. If stored in the enclosure, used oil/grease receptacles must be placed in such a manner so as to not interfere with the collector's ability to service the dumpsters, either by blocking

access or as a result of leaking oil that creates a slip hazard.

iii. A minimum of 12- inches between the wall and each container and 18- inches between two containers is needed to accommodate container removal for servicing. A minimum 36- inch wide pathway is required along the front (loading side) of all bins and from the pedestrian entrance to the bins to insure ease of use.

iv. Adequate protective buffers (minimum 6 inches concrete curbs, bollards, or wood/rubber wall bumpers) are required around all interior walls, including partial walls on the gated side to prevent damage to the enclosure, electrical fixtures, and plumbing fixtures during servicing. Curb stops placed away from the wall shall not be installed without City approval. Please note the side fork pockets of front end load bins extend 5 inches or more past the side body of the bin. A 6 inch curb will protect the wall but not any fixtures extending out from the wall.

v. The required interior dimensions shall not include space required for protective curbs or bumpers and shall allow for pairing of trash, recycling, and organics containers in the same enclosure. All bins must be configured inside the enclosure so as to ensure full access to the entire front area of the bins.

vi. All enclosures walls shall be at least 6 feet tall. When the open space between the top of the wall and the base of the roof is 2 feet or greater, a screen or other appropriate barrier shall be affixed to prevent illegal dumping.

vii. All enclosures that are not located inside a building shall have roofs to prevent contaminants from washing out of enclosures. The lowest part of the ceiling or any fixtures/rollup doors cannot be lower than 10.5 feet high so that they are high enough to allow for the full opening of bin lids. The roof shall extend past any open sides but shall not overhang the front gate so as not to interfere with the provision of service.

viii. See Section 6, Compactor Requirements, for compactor dimensions.

ix. See Table 1 for wheeled cart dimensions and Table 4 below for front end load bin dimensions.

Table 3: Wheeled Cart Dimensions

Wheeled Carts	Depth	Width	Height	Height w/ Lid Open	Footprint (Sq. ft.)
32 gallons	24.25”	19.25”	38.50”	5’	3
64 gallons	30.00”	27.50”	41.75”	5.5’	5
96 gallons	34.50”	29.25”	43.50”	6.5’	7.5

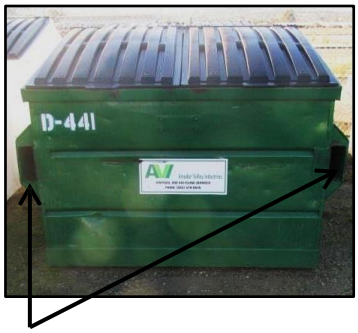
Table 4: Front End Load/Bin Dimensions*

Front End/Bin Loader	Width	Depth	Height	Height w/ Lid Open	Footprint (Sq. ft.)
1 cubic yard (200 gallons)	81”	30”	36”	5.5’	17
2 cubic yards	81”	41”	52”	8’	23
3 cubic yards	81”	47.5”	60”	8.5’	27
4 cubic yards	81”	56”	66”	10.5’	32
6 cubic yards (no wheels)	81”	70”	72”	11’	40
7 cubic yards (no wheels)	81”	73”	77”	11.5’	43

*1-4 cubic yard bins have wheels and can be maneuvered for service. 6 and 7 yard bins require direct access by the truck for service as they have no wheels.

Figure 4: 3 Yard Bin on Wheels

Figure 5: 6 Yard Bin without Wheels



Side Fork Pocket

Figure 6: Carts

D. Stormwater

i. Stormwater is prohibited from entering the enclosure. See Roof requirements.

ii. Grading around the trash enclosure shall be designed to drain stormwater away from the enclosure.

iii. The enclosure pad shall be designed to prevent run-on from outside the trash enclosure from entering the enclosure and liquids from inside the trash enclosure leaving the enclosure.

iv. The enclosure shall be built to contain litter and garbage and prevent scattering by wind or stormwater runoff.

v. Enclosures for food service establishments shall include a hose bib and a drain connected to the sanitary sewer. The applicant must contact the Dublin San Ramon Services District (DSRSD) and the Alameda County Environmental Health Department for specifications and requirements. Sanitary sewer connections and inclusion of a grease or sand/oil interceptor shall be in accordance with DSRSD standard specifications.

vii. In accordance with DSRSD discharge regulations, solid waste and recycling enclosures

servicing industrial businesses are prohibited from draining into the sanitary sewer system and shall be directly taken to the appropriate waste facility.

Figure 7: Hot/Cold Hose Bib

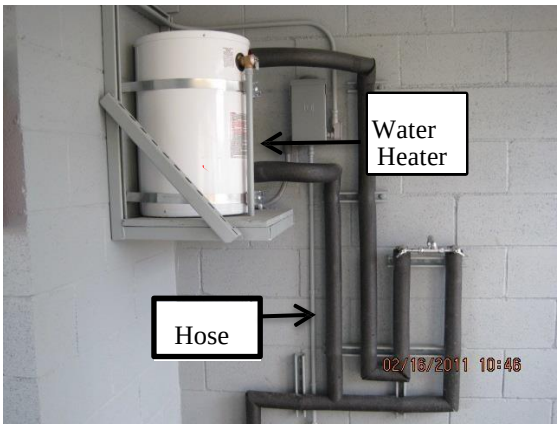


Figure 8: Sanitary connection with sump

E. Apron

i. The apron surface shall be the same elevation as the enclosure pad threshold and the surrounding surfaces, with a minimum slope of 1/8 inch (1% grade) per foot away from the enclosure pad to drain run off or storm water away from the enclosure. The maximum slope shall be 2%.

ii. The apron shall extend 10 feet from the enclosure pad and be the width of the enclosure opening.

iii. The apron shall be designed to withstand up to 20,000 pounds of direct force from a single truck axle. A sufficient strength of concrete shall be used to prevent chipping.

iv. Do not place a lip/berm at the entrance that would impede container placement and removal.

F. Pad Interior

i. The enclosure pad shall be engineered to withstand up to 20,000 pounds of direct force from a single truck axle for any portion of the pad that is subject to vehicle traffic.

ii. The enclosure pad surface shall be the same elevation as the apron threshold.

iii. On the open side of the enclosure, a grade break line shall be constructed at the inside edge of wall with the slab sloping inwards toward the center of the enclosure with a slope of 1-1.5%.

iv. If there is a sanitary sewer drain inside the enclosure, the pad shall slope draining toward the interior drain in the enclosure with a slope of 1-1.5%. Drain shall be flush with enclosure pad to prevent catching of bin wheels on drain.

Figure 9: Pad Interior Drainage to Sanitary Sewer (plan view)

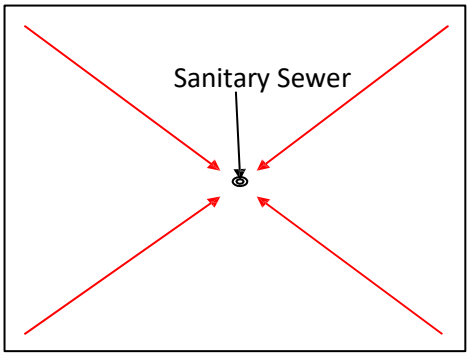
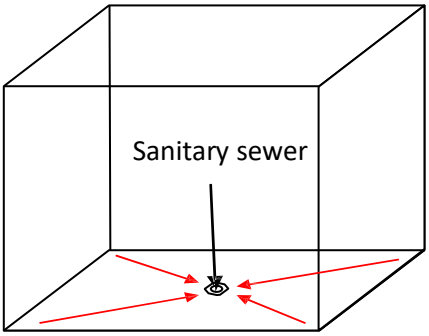


Figure 10: Pad Interior Drainage to Sanitary Sewer (section view)



Drainage Flow

G. Gates

i. Double gates are required for all enclosures. The maximum length for each gate is 12 feet. A single set of gates must be used for gate openings 24 feet and under, unless otherwise approved by the City.

ii. Gates shall be free hanging with no center pole. The gates/doors shall be designed to ensure access and removal of each bin from the enclosure without having to move another bin.

iii. Gates shall be solid metal painted to incorporate the overall design theme of the development with outside handles on each door and a slide latch to secure the doors. The containers should not be visible through the gates.

iv. The gated opening for a standard 18-foot-wide enclosure shall be a minimum of 12 feet wide, depending on enclosure layout and dimensions, with required opening width at the discretion of the City. Gate posts shall be placed outside this span. Center walls are not allowed, except for very wide enclosures where double sets of gates alone are insufficient. Bolts shall be used to secure the gate to the poles or walls.

v. The gate doors must be constructed with a mechanism that will provide a means of securing the gate doors in both an opened and closed position.

vi. All gates must be lockable using a standard padlock.

H. Roof

i. Roofs are required for all enclosures.

ii. The roof shall extend past any open side of the enclosure, except the front gates to allow access to the bins by garbage trucks.

iii. The lowest part of the ceiling/light fixtures/rollup doors cannot be lower than 10.5 feet high to allow for complete opening of a 4-cubic yard container lid.

iv. All metal roofs, including galvanized roofs, must be coated with rust-inhibitive paint.

v. Roofs shall be sloped to drain to available landscaping. Landscaping shall be designed with adequate energy dissipation (e.g. splash blocks, cobbles, etc.) to prevent erosion from roof runoff. If landscaping is not available, the roof may be sloped to drain away, avoiding run-on into the enclosure.

I. Materials

i. The design of the enclosure shall incorporate the same materials and architectural interest used in the design of the primary building for a coordinated look and feel to the development.

ii. Enclosures constructed from chain link fencing with wooden/plastic slats enclosures or wooden enclosures are prohibited.

iii. A graffiti resistant coating is required on the exterior walls of the enclosure.

iv. Roofs shall be painted with rust-inhibitive paint.

Figure 11: Enclosure Designed with Unacceptable Material

J. Fire Code

i. Waste receptacles exceeding 1.5 cubic yard capacity shall not be stored in buildings or placed within 5 feet of combustible walls, openings, or combustible roof eave lines.

ii. A trash enclosure is considered a building structure, and must follow these Automatic Fire Extinguishing System (AFES) requirements:

   a. All enclosures are required to be made of CMU, Type I or Type II fire resistive construction.

   b. Enclosure less than 500 square feet:

      1. Do not require an AFES.

      2. Shall be located at least 10 feet from other buildings or building openings.

a. Enclosure between 500 and 1,500 square feet shall:
    1. Have a fire alarm system.
    2. Be located at least 5 feet away from the property line and 10 feet from any building.

K. Landscaping
    i. When the enclosure is visible from roadways or other public spaces, an irrigated 5-foot wide landscape strip running the length of the three non-gated enclosure walls shall be provided to allow for vines or large shrubs to shield the walls and discourage graffiti.

L. Lighting
    i. The area around and inside the enclosure must be lit with a minimum of 1.0 foot candle.
    ii. A motion sensor is required.

Optional Design Considerations

A. Signage
    i. All new enclosures should be equipped with effective signage guiding users how to properly sort discards between the trash, cardboard only, recycling, and organics container.
    ii. Signage should be placed in locations easily viewable by patrons.
    iii. Signage can be obtained through AVI for free.

Figure 12: Sample Enclosure Signage

Enclosure Plans Submitted to the City Must Show the Following:

A. Site Plan
    i. Proposed enclosure location and orientation relative to access and egress streets, driveways and drive aisles.

ii. Proposed truck entry and exit points and proposed routes for servicing garbage and recycling to and from public streets and within the site. Site plan must show all public streets immediately surrounding the project site.

a. Widths of streets, entrances, drive aisles and driveways for service truck access.

b. Dimensions and slope(s) of reinforced concrete staging area outside enclosure gate.

B. Enclosure Drawings

i. Description of materials used for enclosure construction.

ii. Provide detailed drawings of enclosure interior layout showing:

i. Sanitary sewer drain location.

ii. Slope(s) of enclosure pad.

iii. Interior layout and dimensions of enclosure including all curb stops, wall bumpers and bollards.

iv. Interior enclosure pad dimensions, including length of each interior wall.

v. Location and width of pedestrian door entrance.

vi. Location of all plumbing and electrical fixtures.

A. Size and layout of all trash, recycling, organics and grease containers showing distances between containers and distances between the containers and walls/openings (e.g. pedestrian entrance, gateways, etc.).

B. Location of the enclosure gate and its operational dimensions when fully closed and fully opened. NOTE: If a roll up door is to be used instead of a gate, the distance between the enclosure floor and the lowest point of the door and tracks when in the fully rolled up position must be shown.

C. Estimated waste generation

Provide anticipated weekly collection service needs in cubic yards for garbage, recycling, and organics. There are 200 gallons in one cubic yard.

i. Yards of weekly garbage. This includes items such as plastic film, broken furniture, broken dishes, polystyrene, diapers, pet waste, and clothing, along with other items that are not acceptable for recycling or organics collection.

ii. Yards of weekly recycling. This includes items such as cardboard, paper, metal cans and foil, plastic and glass containers.

iii. Yards of weekly organics. This includes items such as food scraps, food soiled paper, and plant debris.

9. Ongoing Enclosure Operations

A. Garbage, recycling and organics services are provided exclusively by Amador Valley Industries.

B. CA Green Building Code Section 5.410.1 – Building Maintenance and Operation: Recycling by occupants: Provide readily accessible areas that serve the entire building and are identified for the depositing, storage, and collection of nonhazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive.

C. Maintenance and cleaning of the trash enclosure is the day-to-day responsibility of the occupant or owner of the premises.

D. Trash enclosures are required to be maintained in good working condition and in the condition that they were approved. Gates must open and close properly. The enclosure floor must remain free of debris and any other substances (e.g. spilled food, used cooking oil or other liquids) that can attract rodents or other scavengers, create slipping hazards for those using or servicing the receptacles, and possibly become a source of illegal storm water pollution. When a spill or other mess occurs that interferes with use or servicing of the containers, the occupant or owner of the premises must clean up the mess in a timely manner (e.g. within 48hrs), including power washing the enclosure floor when necessary. All wash water must be contained such that it does not enter the storm drain system.

E. The enclosure is only for storage of solid waste, recycling, cardboard, organics and used oil/grease receptacles. Storage of hazardous waste any other items inside the enclosure, either temporarily or permanently, is prohibited.

F. All receptacles are required to remain or be returned to and stored inside the trash enclosure. The storage of anything outside the trash enclosure is prohibited.

G. All solid waste and used cooking oil must always be contained within the appropriate water-tight, covered external container including secondary containment. A supply of spill response materials designed to absorb oil and grease shall be kept near the container.

H. Overfilling trash, recycling and/or organics containers is prohibited. Solid waste may not protrude above the top rim of the container and must allow for the lid(s) to close fully. Establishments that consistently have issues with overflowing containers will be required to increase their service level(s) to meet their needs and local storm water

pollution regulations.

I. Landscaping and plant debris should be separated for composting, not thrown in the garbage (this is mandatory for sites that generate 4 cubic yards or more of trash per week). If no food waste/organics bin or cart is available on site, the landscaper must take the plant debris to a facility for composting.

J. Washing out the trash enclosure to a storm drain system is prohibited. Wash water must be collected and discharged to the sanitary sewer only.

K. Compactors containing putrescible municipal solid waste must be serviced at least once per week. If compactors are found leaking, alternative service may be required to prevent ongoing storm water violations.

L. Use of equipment to compact or bale cardboard, office paper, plastic shrink wrap and other recyclable materials is encouraged. Sharing balers for recycling material among tenants within an office, commercial or retail center is also encouraged.

M. Weight of a roll-off container cannot exceed 10 tons when full (legal street limit). Customers may incur overweight charges when the container exceeds 5 tons.

N. If gates with locks limit access to the enclosure or to the property gate codes must be provided to AVI. If a customer uses their own lock on an enclosure or gate it must be unlocked by 3 am for commercial customers and 6 am for residential customers. Alternatively, customers can request a lock from AVI for a monthly fee. All gates shall be maintained in good working order and should remain closed except when in use.

O. Push / Pull Services: AVI will only push out a commercial front -load bin under the following circumstances:

    i. max distance 100- feet, one way
    ii. slope 0-3%
    iii. smooth path of travel required
    iv. additional fees apply