



CONSENT CALENDAR
October 27, 2026

To: Honorable Mayor and Members of the City Council

From: Zero Waste Commission

Submitted by: Steven Sherman, Zero Waste Commission Chair

Subject: Research on Proper Space Allocation for Standardizing Compliance
with Source Separated Refuse Collection Procedures

RECOMMENDATION

Recommend that Council refer the matter to the City Manager with direction to:

1. Instruct the Zero Waste Division, in collaboration with the Planning Department and Fire Department, to study, research, and recommend policies that standardize requirements for:
 - a. Tenant-facing materials collection rooms for refuse, dual-stream recycling, and composting
 - b. Central collection rooms or enclosures
 - c. Curbside collection staging areas for all new construction
2. Develop minimum per-unit service requirements, design parameters, and enforcement mechanisms; pursuant to Chapter 12.32.030 and 12.35 of the Berkeley Municipal Code.

SUMMARY

While the Berkeley Municipal Code mandates accessible waste storage, it fails to outline efficient refuse, dual-stream recycling and compost collection areas for tenants and employees, central collection locations or safe curbside staging areas for collection and enforce proper space allocation for said collection processes in the design phase of project lifecycles. Improper space allocation for refuse, dual-stream recycling and compost carts and bins in new commercial construction blueprints increases construction costs while compromising Zero Waste collection services and the safety of City workers.

There is an opportunity to codify refuse collection procedures and facilitate compliance by enforcing proper space allocation across all new commercial developments. In this effort, areas for focused research include, but are not limited to, the development of:

1. Minimum service requirements. Minimum service requirements create a baseline expectancy for refuse volume across all new commercial construction, allowing for the development of baseline design guidelines and a standardization of space allocation in refuse collection procedures.
2. Design parameters. In order to streamline refuse, dual-stream recycling and compost collection in new construction projects, design guidelines that allocate sufficient space to accommodate required collection services in every stage of the collection process are necessary.
3. Enforcement mechanisms. Ensuring adherence to a standardized refuse collection procedure ensures the safety, health, and cleanliness of the city.

FISCAL IMPACTS OF RECOMMENDATION

Staff in the Zero Waste Division of the Public Works Department, in conjunction with the Planning Department, will research the fiscal impacts of the implementation of proposed policies, including the potential for cost-recovery through bill back for staff time and enforcement mechanisms. Assessment of these fiscal impacts will require minimal staff time.

CURRENT SITUATION AND ITS EFFECTS

Under Chapter 12.32.030 of the Berkeley Municipal Code, the City of Berkeley requires “[every] person owning any premises, where garbage or rubbish is produced or accumulated [is to] provide and maintain...in a suitable place readily accessible to personnel of the solid waste and environmental health divisions, containers of sufficient capacity and number to store the accumulations of garbage or rubbish during the intervals between collections or disposal”. Under Chapter 12.35.010 of the Berkeley Municipal Code, the City of Berkeley adopted and codified the Short-Lived Climate Pollutants Organic Waste Reduction Strategy “The purpose of this Ordinance is to comply with certain state laws requiring cities, counties, and special districts providing solid waste collection services to adopt ordinances and take other measures to reduce the amount of organic and recyclable materials deposited in landfills from commercial and residential generators, more specifically the Short-Lived Climate Pollutants Organic Waste Reduction regulations adopted pursuant to Senate Bill 1383 (Statutes of 2016) set forth in the California Code of Regulations (the “SB 1383 Regulations”). Notably, the requirements not only emphasize the importance of establishing sufficient space for waste collection, but also mandate that containers of collected refuse are “readily accessible to personnel”.

The City of Berkeley operates municipal refuse collection in two ways:

1. Curbside Service. Building owners are responsible for placing refuse, dual stream recycling, and compost carts or bins at the appropriate staging locations along the street prior to collection day, and returning them to their enclosures within 24 hours.

2. Push-and-Pull Service: Building owners pay the City an additional fee to transport carts and bins from a central collection area to a curbside collection area and back.

The mandated collection process consists of the following three stages:

1. Occupant Refuse, Dual-Stream Recycling and Compost Collection. The first stage covers occupant access to material collection containers, at either a central collection location or in the case of large multi-family buildings, material collection rooms on each floor. In accordance with the BMC, equal access to all waste streams must be ensured across all building levels.
2. Staging. This stage covers the process of transporting collected materials to their proper staging area for collection. Important technicalities in this stage include, but are not limited to: doorway dimensions, alley widths, and slope gradients.
3. Municipal Refuse Collection. The final stage covers the municipal collection of the material from curbside staging areas for transportation to the Transfer Station. Important technicalities in this stage include, but are not limited to: curb cuts, red or yellow zones for ease of collection truck parking, considerations to avoid bike lanes and staging areas on busy thoroughfares, driveway, approach, and slope gradient.

Although the Zero Waste Division has published *New Construction: Adequate Space Guidelines for Waste Containers* and provides developers with a copy of these guidelines, the City's refuse, dual-stream recycling and compost collection process, as well as the aforementioned space guidelines, are not codified in the Berkeley Municipal Code, rendering enforcement impossible for City staff.

Unfortunately, the consequence of a lack of formalized specifications for new construction design and no enforceable mechanisms for ensuring space is properly allocated for tenant facing trash rooms, central collection rooms or enclosures and proper staging areas that take into account driver and pedestrian safety, staff encounter completed new construction that has failed to accommodate at least one stage of refuse collection, including but not limited to:

- Doors to refuse enclosures with insufficient clearance to accommodate bin collection services requested by the property, necessitating design modifications
- Dumpsters are placed in narrow alleyways. Enclosures and storage areas must have enough space for dumpsters. If moving a dumpster, ensure a curb cut is installed for push-pull service.
- Steeply sloped driveways from enclosures to the street, resulting in staff injuries during push-and-pull service provision;

- Alleyways with insufficient vertical clearance for refuse truck entrance;
- Trash chutes with no collocated chutes for recycling or compost;
- Staging locations that impede biker and pedestrian right-of-way;
- Negligent staging that leads to increased street litter from upended bins.

These issues not only compromise proper waste separation but can result in costly post-construction design modifications. Furthermore, inefficiencies place unnecessary administrative burden on staff, while endangering Zero Waste materials collection workers. In order to streamline refuse collection procedures and prevent aforementioned issues, important design elements that will be considered, categorized under each stage, include but will not be limited to:

1. Occupant Refuse Collection: equal access to all waste streams across all building levels, in accordance with BMC 12.35.
2. Staging: Maintain a minimum 18-inch clearance between dumpsters staged side by side. This required clearance would greatly reduce pinch hazards and prevent hand injuries during handling.
3. Doorway Dimensions: Entrances must provide enough width for containers plus 6 inches on either side to pass through freely without hitting frames. This prevents property damage and ensures smooth transitions between spaces.
4. Alley Widths: Driveways and alleys must be wide enough to allow for safe maneuvering of both containers and collection vehicles. Adequate space is essential to avoid scraping walls or damaging property.
5. Gradients: Gradients of staging areas will be considered and addressed to ensure reduce runaway dumpster hazard does not occur. Steep inclines are prohibited as they significantly increase the risk of injuries and property damage.
6. Surface & Obstructions: Containers must be kept on a smooth, level surface free of any debris or obstacles to reduce physical strain to our staff and reduce tipping accidents or injuries.
7. Public Right-of-Way: Containers and equipment must be positioned so they do not obstruct the public right-of-way or traffic lanes to increase safety of both the collection crew and the general public.

Proper space allocation for refuse collection, which includes instituting minimum service requirements and creating pre-construction design guidelines, is a crucial next step for streamlining compliance with materials collection and waste disposal requirements.

Staff expect that codifying the space allocation requirement will not materially slow development or reduce project feasibility. The guidelines are already informally required and codifying them will offer the opportunity to include an enforcement mechanism and increase compliance with BMC 12.35.

BACKGROUND

All commercial and multi-family (5+ units) properties within the City of Berkeley are subject to State Law SB 1383 and corresponding local Alameda County Organics Reduction and Recycling Ordinance (2021-02). In order to be in compliance with SB 1383, the City of Berkeley must accommodate four waste streams through materials collection procedures:

1. Landfill,
2. Recycling for Glass, Metals, and Plastics,
3. Recycling for Cardboard, Mixed Paper, and
4. Organics collection for Food Waste, Compostable Paper, and Plant Debris.

From 2019 to 2023, the Telegraph Business Improvement District and Downtown Berkeley Association piloted trash corrals— structures designed to contain businesses' waste bins on the street— in order to “make trash collection easier, and provide a more pleasing streetscape¹.” Part of an early effort to introduce trash enclosures by commercial districts, this pilot project exemplifies the need for allocating space for waste receptacles, given the implications of uncorralled receptacles in the public right of way.

At its meeting September 18, 2025, the Zero Waste Commission authorized its Green Building Subcommittee to write and submit this referral to the City Council to authorize the City Manager to refer the Public Works Zero Waste Division, to work in conjunction with the Planning Department to study, research and recommend procedures and enforcement mechanisms to increase proper waste sorting compliance by ensuring all new commercial construction includes the proper allocation of space to accommodate state and city-mandated waste collection requirements.

September 18, 2025 Zero Waste Commission Meeting- Item 7: Voting on Moving the Space Allocation Referral to Council

Action Taken: M/S (Dargahi/Singh) to move Space Allocation Ordinance Referral to Council.

Aye: Dennis Uyat, Philip Monrad, Barun Singh, Sandra Curtis, Swasti Johri, Steven Sherman, Layla Dargahi, Claire Wilson; Nays: none; Abstentions: none; Absent: none;

Motion carried 8-0-0-0

ENVIRONMENTAL SUSTAINABILITY AND CLIMATE IMPACTS

Compromised refuse collection processes frequently expose waste to the environment and its natural processes, adversely impacting environmental health. Improperly staged

refuse bins are subject to being knocked over or left uncovered, and rainwater runoff from unenclosed waste creates leachate containing microplastics such as polyethylene, polystyrene, and polypropylene². As leachate enters Berkeley's stormwater drainage systems, these microplastics inevitably contaminate the Bay. Clogged drainpipes are a consequential causative factor of water logging in urban areas³, thus unenclosed waste and litter that result in clogged storm drains increase flood risks amidst already intensifying storms. Furthermore, 80% of global marine litter originates from land⁴. The City of Berkeley's contribution to this number could be significantly reduced by establishing effective refuse collection policies and processes. Beyond these impacts, inadequate materials collection infrastructure in multifamily developments significantly limits resident and business participation in proper refuse, recycling, and composting. When collection areas are inconvenient or poorly designed, participation declines, contamination increases, and diversion goals are undermined. Improving access and usability of tenant-facing collection spaces is therefore critical to increasing participation and achieving environmental outcomes.

Successful allocation of waste receptacles can benefit all local communities. Proper management is projected to conserve resources, reduce greenhouse gas emissions, save energy, and decrease pollutants⁵. Studies have shown that proper programs for waste management not only reduce environmental harm but improve the physical and mental health of citizens⁶.

RATIONALE FOR RECOMMENDATION

The absence of code requirements on space allocation for efficient material collection and enforcement of minimum service requirements in the City of Berkeley, has restricted staff's ability to enforce compliance with our recommendations for proper space allocation in the pre-design and construction phases of the project lifecycle. This has led to development of properties that complicate the material collection process, elevating health and environmental risks. Problems at all levels of the refuse collection process occur without explicit standards for appropriate space allocation, and a lack of enforcement allows for these conditions to persist.

ALTERNATIVE ACTIONS CONSIDERED

The alternative action to the proposed recommendation would be taking no action.

CITY MANAGER

See companion report.

CONTACT PERSON

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¹ As written in former Councilmembers Rigel Robinson and Kate Harrison's letter to the Mayor and Berkeley City Council requesting fee waivers for the referenced trash corral pilot project in 2019. <https://records.cityofberkeley.info/PublicAccess/api/Document/AZTt6TtX96Uhgjoldp0qAorvaUCTpo4EUlf%C3%8934BX%C3%81YDKAnTLsKgSiZ5K40mqKqaWXIfSWV0GlzxDieBQy6w%C3%89DNQ%3D/>

² Kabir, M. S., Wang, H., Luster-Teasley, S., Zhang, L., & Zhao, R. (2023). Microplastics in landfill leachate: Sources, detection, occurrence, and removal. *Environmental Science and Ecotechnology*, 16, 100256. <https://doi.org/10.1016/j.esse.2023.100256>

³ Wang, X., Xia, J., Feng, J., & Dong, B. (2025). Numerical modelling of the impact of drainage system clogging on urban flood processes. *Journal of Environmental Management*, 388, 125969. <https://doi.org/10.1016/j.jenvman.2025.125969>

⁴ Rossi, A., Wu, M., Wolde, B. T., Zerbe, K. W., David Hsu, T.-T., Giudicelli, A., & Da Silva, R. (2023). Understanding the factors affecting the quantity and composition of street litter: Implication for management practices. *Heliyon*, 9(3), e14245. <https://doi.org/10.1016/j.heliyon.2023.e14245>

⁵ United States Environmental Protection Agency. (2025, May 14). Recycling Basics and Benefits. [Www.epa.gov; EPA. https://www.epa.gov/recycle/recycling-basics-and-benefits](https://www.epa.gov/recycle/recycling-basics-and-benefits)

⁶ Wilson, C. (2024). Down in the Dumps: Exploring San Francisco's Approach to Illegal Dumping and Recommendations for Optimization. City and County of San Francisco's Office of Refuse Rate Administration. https://media.api.sf.gov/documents/Illegal_Dumping_Final_Report.pdf

