

Material Observation Protocol

In order to gain further insight into the disposal practices of Austin businesses, a qualitative review will be performed of material placed in waste, recyclable and organics containers at commercial facilities. This will consist of a field observation study at the generator level to assess the composition of materials set out at individual properties. This procedure is estimated to take place over a three-week period or 15 working days. Two teams will be deployed with two people per team. The goal is to observe a minimum of 50 locations per team per day or 1,500 observations during this portion of the study.

Equipment needed:

- PPE – gloves, hard hats, steel-toed boots, safety vest, safety goggles, long sleeve shirt
- Camera
- Tablet and/or paper forms
- Letter from City
- City Badges
- Step stool or selfie stick for taller containers
- Backup batteries and/or charging device for camera and tablet
- Zone maps with boundaries and expected business point locations

Business point locations will be mapped and zones will be identified which contain 80-150 businesses each. Zones will then be randomly selected by CB&I for field observation. Each team will be given a set of individual zone maps identifying the boundaries of the zones they are to target during the observation period. The zone maps will be provided in the sequence that corresponds to the random selection; reordering of the zones will not be allowed.

Depending on the accessibility of containers for observation, each team may complete one zone or multiple zones on a given day. The object will be to observe as many accessible containers as possible for each day. Teams will canvass an entire zone before moving to the next zone.

Upon the start of work each day, each team will park in a convenient location for access to the properties in the first zone. Zones covering a larger geographic area may be best served by periodically relocating the vehicle. It is important to watch for traffic at all times and to maintain

contact with your team members. The team will proceed to the first observation point and input the property address and GPS coordinates on the tablet. Note the physical location of the container(s).

If the containers are publicly accessible, observe the number and type of containers and the size of each and input in the tablet (or on paper forms as appropriate). Be on the lookout for the possible presence of guard dogs/animals/rodents that may be nearby, as well as materials that may be protruding from or piled around containers. If possible, note whether multiple businesses use the containers or if they are dedicated to a single location.

Carefully approach the container(s) and look inside. If the containers are closed, carefully open the side door or top lid (using gloves) and observe the approximate amount of material in each container (i.e. percent full), and the top two major visible components. If visible, also note if there is material in the container that does not belong there (i.e. trash in the recyclables container or recyclables in the waste container). Do not attempt to reach inside the container(s) to see what is underneath the top layer or within bags. If the containers are locked, move on to the next location. When opening and closing containers, watch for pinch points and insects and/or vermin (or homeless that could be taking shelter there).

The team will take one photograph of the outside and one photograph of the contents of each container observed. Picture numbers must be recorded on the tablet or form provided. Return all container doors/lids to the original position.

If the containers at an initial location are not publicly accessible, proceed to the next location available. For every property that is observed to be a business by either its point location on the zone map or by visual characteristics in the field, attempt to perform an observation.

If the property owner or occupant asks questions, show them the letter from the City and be prepared to move on to the next location. Always be courteous, explaining the purpose of the study.

Stay hydrated, even though the weather will be cooling off, it will still be warm and a lot of walking will be involved. Download data at the end of the day or beginning of the next day to prevent data loss.