

## 2019 Compostable Bag FAQ

1. **What are compostable bags?** Compostable bags are made from compostable-polymers or other renewable resources and decompose naturally like other organic materials. Regular plastic bags take over 1000 years to break down. Compostable bags begin decomposing in as little as three (3) months and leave no harmful residue behind.
2. **Why does the City require the use of compostable bags for yard waste collection?** Each year, the city disposes of thousands of tons of yard clippings in area landfills, spending several million dollars to do so. Yard trimmings take up valuable landfill airspace and contribute to the production of methane. Switching to compostable bags has allowed the city to divert the yard clippings away from landfill disposal and sell it to a local composter.
3. **How will the approval of these two contracts improve the resident's use of the compostable bags?** Responding to customers' complaints, the contracts require the following:
  - a. a thicker bag than currently used
  - b. a manufacture and use-by date be printed on each box of bags
  - c. a minimum 12-month shelf life post distribution
  - d. adding packaging in multiple languages
  - e. establishing dedicated customer service contacts for each manufacturer
4. **What happens if the bag manufacturer's fail to meet the provisions of the contract?** The City has the right to terminate the bag vendor's contract for failure to contract provisions/performance standards.
5. **Is 1.2mil sufficient or did we consider a thicker bag (e.g. 1.5mil)?** 1.2 mil thickness is sufficient. A thicker bag was considered at 1.25 mil thickness, however based on feedback from the manufacturers, this would have driven both manufacturing and customer costs higher. Within the marketplace, available options for sale of compostable yard waste bags range from .85-1.1 mil.
6. **What testing is done on the bags? What are the standards?** The bags were tested by the City's contracted composting partner, Living Earth, to test how well the bags held up with material in them, in Houston, over a period of 10 days. The bags were then further tested to see how well they would break down in the commercial composting process. The bags were filled with up to 30 pounds of yard trimmings and left exposed for 10 days in typical Houston spring weather with sustained conditions of high humidity, rain and average temperature of 86 degree Fahrenheit. After ten days, the bags were lifted and checked for splits and tears. The bags were intact and passed the 10-day curbside test. Both bags

being recommended for approval in the City's program performed well in the tests completed by Living Earth.

The bags must also meet the ASTM D6400 Standard for Labeling of Plastics Designed to be Aerobically Composted in Municipal or Industrial Facilities. These items must break-down in a 90-day period under standard commercial compost conditions, and thinner bags are often preferred. The City aimed to find a thickness of bag that would hold up for the resident, but also completely break-down in the commercial compost setting. See attached pdf of ASTM D6400 Standard Protocol.

To further help address durability concerns the City has also required that the new bags be labeled with both a manufacture date and a use-by date. This will give residents more information on the expected life of the particular box of bags being purchased. In addition, per contract the bags are to have a minimum 12-month life expectancy post distribution. This will help mitigate bags sitting in distribution warehouses for months before hitting the retailers' shelves.

7. **How much do the bags cost?** A box of 10 bags is about \$8.00.
8. **Do I have to use the bags to have my yard waste (grass & leaves) collected?** Yes. If yard waste is not placed at the curb in city-approved biodegradable bags, the non-approved bags will be left at the curb and the homeowner may receive a warning or citation for improper placement of material.
9. **When is the start date for this requirement?** The new bags will not be required for use by residents until 6-months after contract approval. There will be a phase-in to allow existing bag vendors to remove or sell inventory (90 days), and then residents will have an additional time (90 days) to use any old bags before being required to use the two newly approved vendors' bags. Notifications will be sent to every customer of the solid waste management department explaining the collection requirement.
10. **Do other cities or states do this?** Yes, more than 20 states have already banned yard trimmings from landfills to extend landfill life. Also, the bans help cities reduce the cost of waste disposal from operating budgets. See: <https://earth911.com/business-policy/landfill-bans/>
11. **How much money does the city expect to save by diverting yard trimmings from area landfills?** Since switching to the use of compostable bags in FY10, the disposal savings from the tons collected for composting, plus the avoided tons from the reduction in average yard waste tonnage from 60,000 tons per year to 15,000 tons per year adds more

than \$16M in savings to the City. In addition, the City has received nearly \$1M in revenue from Living Earth for yard trimmings.

**12. What if my yard cutter leaves my bags at the curb for collection by the city?** Hired yard mowers are contractors and must take grass clippings with them as required by city ordinance 39-50 (e).

**13. During the RNA Committee meeting, the question was asked if there are other facilities in the Houston area that accept compostable bags?** There are other composting companies in the Houston area. The other bidder for the City's contract for yard and wood waste processing services was not as cost effective and only had two locations available, both outside of Houston city limits. Living Earth was found to be the bidder with the lowest price and most locations available for City's use to haul collected yard waste.

**14. What happens if these two contracts are not approved by Council?** If the proposed contracts are not approved, then the program will continue to use the bags currently available and approved for the yard waste program. The solicitation process will start over.