

**Plastics #3 - #7 Diversion Request for Proposals**

This report provides the Transportation and Infrastructure Subcommittee with an update on the Plastics #3 - #7 Request for Proposals (RFP).

THIS ITEM IS FOR INFORMATION ONLY.**Summary**

In 2013, the City adopted the goal of diverting 40 percent of trash from the landfill by the year 2020. In April 2016, this goal was expanded to achieve Zero Waste by 2050. As part of the Reimagine Phoenix Initiative to achieve these goals, the Public Works and the Community and Economic Development departments have been collaborating to create public-private partnerships to build the City's circular economy by redirecting materials back into the economy instead of sending them to the landfill.

Plastics #3 - #7 include polyvinyl chloride (PVC), low-density polyethylene (LDPE), polypropylene (PP), polystyrene (PS), and other plastics, which are found in things such as shrink wrap, plastic toys, frozen food bags, yogurt cups, and Styrofoam containers. Recent changes in commodities recycling markets have impacted how the City handles plastics #3 - #7. Previously, plastics #3 - #7 were bundled and sold on the open market, whereas today most of these materials are being sent to the landfill. Currently, the operator of the City's materials recovery facilities (MRFs) separates plastics #5 from the mix and sells the material as a commodity. The City's 2015 waste characterization study estimated 13,038 tons of plastic are in the Citywide garbage and recycling streams annually.

On March 9, 2015, the City issued a Call for Innovators (CFI) to request information from private sector innovators with technologies and manufacturing processes that transform trash into energy and new products. Through this CFI, the City sought to better understand the industry and identify specific business opportunities for future competitive processes. As reported on Nov. 10, 2015, to this Subcommittee, respondents to the CFI for Recycled Plastics #3 - #7 indicated an interest in remanufacturing these plastics into liquid fuel.

The Plastics #3 - #7 Diversion RFP will seek one or more entities to provide plastics #3

- #7 diversion services to redirect one or more of those materials currently in the municipal waste and recycling streams, and divert them for waste-to-product or waste-to-liquid fuel technologies. At this time, the City will not consider incineration or combustion technologies.

Proposers may bid on one or more solutions for plastics #3 - #7 reuse, repurpose, remanufacture, and/or research and development. The successful proposer for the Plastics #3 - #7 Diversion RFP will be required to have demonstrated experience reusing, repurposing or remanufacturing plastics #3 - #7 and the RFP evaluation criteria will include qualifications and experience, proposed technology, the proposer's business plan, and the financial return and benefits the proposal provides to the City. The RFP will give preference to respondents who propose to locate a facility at the Resource Innovation Campus, but will also allow proposers to transport plastics #3 - #7 to another facility.

Contracts resulting from this RFP are anticipated to have a term of 10 years with two 10-year renewal options, to be exercised at the sole discretion of the City, dependent on the nature of the proposals received.

Responsible Department

This item is submitted by Deputy City Manager Karen Peters and the Public Works Department.