

Pasadena Citizens' Advisory Council

Overview of Recycling in PCAC Plants

September 26, 2023

Seeking an overall understanding of recycling in Pasadena Citizens' Advisory Council (PCAC) member plants, PCAC community members heard nearly 30 examples of activities taking place in local plants to recycle or recover materials ranging from chemicals to steam to plastic scrap to paper. In a rapid-paced round robin format, plant representatives shared items without repeating something already mentioned by another manager. This gave members a broad sense of what plants recycle. Community members were then asked if they wanted to learn more about any of the activities listed. Suggestions included learning more about plans for the future and about a process that creates an oil out of plastic waste that can then be used to make more polyethylene. Here are a few of examples of recycling in PCAC plants or companies:

- Found customers for off-spec materials and materials once disposed of as waste.
- Bought a jug chipper to shred 5-gallon containers in which a raw material is packaged so the plastic can be recycled.
- Recover solvents and reuse them several times.
- Regenerate catalysts.
- Found an asphalt supplier that can use plastic waste.
- Inject waste steam back into the process.
- Send vent gases to the boiler to use as fuel to make steam.
- Collect used oil from equipment like pumps, compressors, and gear boxes and send it to be recycled.
- Use a customer's spent caustic to neutralize incoming wastewater that is acidic.
- Found ways to recycle construction waste while building a new plant.
- As a fuel distribution company, take part in an EPA Renewable Natural Gas initiative that harvests gas from landfills that then may be used as fuel instead of natural gas.
- Designed a new plant that will not need a boiler and will be net zero for nitrogen oxides and carbon dioxide because steam will be obtained from a neighboring facility that had excess capacity.
- Recycle commonly used materials like paper, plastic, cardboard, fluorescent bulbs, tires, computers, and electronic equipment.