theme music starts

KW: Imagine this ... you're coming home from the store with bags of groceries and a handful of mail. You pull a snack from the fridge and put the rest of the food away. Maybe pour yourself a drink before sorting through the mail.

KW: Now you have a handful of junk mail, maybe a few plastic containers and some grocery bags strewn about. You're ready to throw away or recycle them ... but which ones go where? The answer is more complicated than it might seem. And it boils down to where you live. After all ... if your address says Mesa, your rules are different than if it says Tempe ... even if you live just down the street.

KW: Welcome to Valley 101, a podcast from The Arizona Republic and azcentral.com where we answer the questions you ask about metro Phoenix. I'm your host, Kaila White. In today's episode, we're finding out why different municipalities within the Valley have different recycling rules.

bring music up again

KW: Valley 101's newest producer Amanda Luberto has more.

music fades out

AL 1: Hello listeners, nice to meet you. I'm happy to be here. My name is Amanda Luberto and I grew up in the West Valley, in Glendale. It's one of the cities in the Valley where you can't recycle glass. Six minutes down the road in Peoria ... where my dad worked ... you could. As a kid, I remember him bringing our glass items to work so they could be recycled.

AL 2: So I started at the source...at my source at least. I called up Kevin Burke, director of Public Works for the city of Peoria and started off by asking him what you can recycle there.

KEVIN: So generally we are jugs whether they're plastic or glass, know you can recycle all those containers. We also do cans, aluminum cans, tin cans, metal cans. We do newspaper. junk mail office paper, all those things can be recycled here, the cardboard, obviously, that's a big one to see your cardboard boxes . **FADE UNDER** We do the plastic films. There's not a great secondary market for it, but we still take one three seven on the the plastic films. So the different types of plastic water bottles, plastic water bottles, a lot of the traditional things,

AL 3: Paper, plastic, glass, aluminum and cardboard. The 5 main recyclables. There are variations of each type, but essentially that's what you can throw into the green bin outside your house in Peoria.

AL 4: But that level of recycling isn't universal across the Valley. I talked with a city on the east side: Mesa. Mesa changed rules recently, and can't accept as much as they used to. Why is that? How come a city like Peoria offers its residents the ability to recycle a lot ... but another spot in the Valley can't offer the same?

AL 5: The answer is complicated yet simple. Each municipality has different recycling rules because of 4 main reasons: technology, different types of contracts, cost, and the global market. Let's take a look at technology first ...

explainy music

AL 6: To understand how recycling works, you'll have to know what a MRF is. A MRF is a materials recycling facility. It's where your recyclables go to get sorted through and bundled. Municipalities within the Valley either have their own MRF, have a contract with the city of Phoenix to use theirs, or have a contract with a company like Waste Management to use theirs. I'll get to contracts more a little later.

AL 7: Different MRFs have different capabilities and the rules for what can be recycled vary depending on these capabilities. If a city uses an outdated MRF, it's possible that their options for what can be sorted are limited. If a city sends their materials to Phoenix, who has one of the most updated MRFs, their options expand simply because their MRF can handle more. Cities like Peoria and even Flagstaff do this.

AL 8: Some cities can recycle glass because their machine can *handle* glass. It's similar to why, at home, you can't throw plastic grocery bags in your recycling bin, but you can bring them to your local grocery store to be recycled. It's because they have different machinery.

Mark: Grocery bags are hugely recyclable because it's just strictly it's polypropylene, but they're recyclable. And the best way to recycle the plastic grocery bags is you put them all back in a plastic grocery bag and take them back to the store and then they take them back to the bag manufacturers where they get back into new bags again.

AL 9: That is Mark Snedcor. He's director of Recycling Operations for Waste Management for Arizona. Waste Management is the largest integrated, solid waste company in the U-S and handles a lot of municipality contracts when it comes to recycling. Which brings me to answer number 2: contracts.

AL 10: Whether it's contracts with larger cities like Phoenix or with the private sector like Waste Management, they play a big part in what cities can recycle. Let's go back to Mesa for a minute. In October of 2020, the city of Mesa altered what was on their recycling list because of these contracts. Mariano Reyes, communications specialist for the city of Mesa in their Environmental Management and Sustainability Department, explained it to me this way.

Mariano: We used to have contracts with three vendors. We had Republic Services, we had Waste Management. And then we also had to have a contract with United Fiber's, which is

located in Chandler. So we had contracts with those. But we have a unique situation going on right now in Mesa. What happened last year in October, Republic Services, the facility we were taking the material to, they actually had a fire at their facility, so it completely took them offline. So they are currently in the process of rebuilding and we hope that they will be up and running later this year.

AL 11: Unfortunately, Waste Management terminated their recycling contract with the city of Mesa affecting what they could and could not offer as recyclables. Mesa recycles independently of Phoenix so contracts with the private sector had a large impact.

Kevin: There's a very robust private sector. And in fact, even the Phoenix MRF, they have a contract with Republic Services to operate the MRF there. So Waste Management and Republic are also very big in this space and they often either run somebody else's MRF or run their own MRF. And so they're involved in this industry as well. But it's not just a municipal issue. It's a private sector issue as well.

AL 12: But you might think "Why doesn't the city of Mesa get their own MRF so they won't run into this problem?" Which brings us to our third answer: cost. An updated facility is very expensive. Waste Management recently finished building one in Salt Lake City, Utah that cost \$17 million and they already had a building to move into. That doesn't even factor in the cost of staffing and maintaining a new facility as well. It's a cost that can add up very quickly.

light music break

AL 13: But there's a really big element that I haven't touched on and that is the global market. It's nice to think that cities offer recycling because it's good for the environment, but plants and technology are expensive and cities need to weigh the cost to the profit. China was the foremost player in this conversation for the longest time, but that all changed recently.

Kevin: China was at one point the biggest purchaser of recycled materials in the world by far. And then, three years ago now, they changed their approach and in fact, as of January of 2021, they're buying almost no recycled material at this point.

AL 14: Mark at Waste Management said it was a necessary policy for China in its ongoing battle against pollution.

Mark: We all saw the Olympics and we all saw that horrible smog and pollution and everything else. They were killing their people and they said, hey, we've got to stop and we've got to get our coal. We've got to get air quality under control. We've got to get some pollution things in here. (...) It went from these municipalities who used to be getting paid for their material regardless of the cleanliness. So now all of a sudden, there's no payments.

AL 15: Peoria was one of those markets...

Kevin: For Peoria, we used to make about three hundred thousand dollars a year on the recycled materials, so it was a net positive in the course of essentially a month it went to you're

now spending two hundred thousand dollars to pay somebody to take your recycling. That number has now jumped closer to about a half a million dollars. So this is almost, you know, a good million dollar swing from one end to the other, just the policy of one nation.

AL 16: But it's also given the United States the push it may have needed to figure out solutions domestically. Mark at Waste Management thinks this could actually lead to a more sustainable fix.

Mark: So, for example, China used to gobble up most of the corrugated cardboard that was produced in the US and there was domestic options, but China was a big player. But with them leaving, now some of that domestic production is moved back in there. There's more boxes being made in the US. There's infrastructure being built. So we're rebuilding our own internal infrastructure that's there to take care of it.

pause

explainy music again

AL 17: So what can we do? Is there a future in which all of the greater Phoenix area can have a single set of rules? It's possible actually! Mark from Waste Management told me he believes it would take for the cities to decide what are the most important materials to recycle and invest in MRFs that can handle those items. He says that this would also give Arizona the ability to share a unified message on what can be recycled.

AL 18: So listeners, the answer is complicated and yet simple. Each municipality has different recycling rules because of technology, cost, different types of contracts, and the global market. But also because each municipality is simply different.

AL 19: Each person I talked with to find the answer to this question reminded me that the 3 Rs we learned in school -- reduce reuse recycle -- are actually in order of best practice. If you can reduce your waste or reuse what you already have, the question of "is this recyclable or not?" becomes lessened.

theme music

KW 5: Thanks for helping us explore that, Amanda!

KW 6: One final hint ... if you're back in your kitchen, unpacking from your day and you're ready to throw things away, but still aren't sure ... you can always use the tools online. If you google "Recycle Right Wizard" you'll be able to select your city, type of material, and it will let you know how to dispose of it. Pretty neat, right?

KW 7: Thanks for listening to this episode of Valley 101 and welcome Amanda to the show! If you have other questions about recycling or about Phoenix in general, visit valley 101 podcast dot azcentral dot com. You can leave your tips for us there. You can also find us on Twitter at valley 101 pod.

KW 8: I'm Kaila White, signing off for this week. Take care.

theme music back up