

manufacture of established products, they require small quantities for testing, sometimes including experimentation with customized compounds that may combine rubber and plastics along with other specialized additives required to meet customer specifications. Because of the initially small volumes and the need to invest in equipment and adjust operations, crumb rubber producers have sometimes been reluctant to work with these firms to provide needed raw materials. In some cases, California manufacturers have chosen to use crumb rubber produced in other states as far away as Georgia. To address this, CalRecycle could consider a one-time change in its current policy of not providing grants for tire recycling equipment by soliciting proposals from crumb rubber producers for development of production capacity. Any funding provided could be tied to a binding commitment to supply California manufacturers in need of such material, and to participate in ongoing CalRecycle efforts to proactively work with compounders, manufacturers, product consumers, and CalRecycle to expand this diverse market segment.

- **Promote use of buffings and crumb rubber equally.** CalRecycle programs vary on whether the use of retreader buffings is eligible for funding. Buffings are initially thin slices of tire rubber produced as casings and prepared for retreading. These raw buffings are then often size-reduced to produce various grades of crumb rubber that is similar to, but also have distinct properties from, crumb rubber produced from waste tires at dedicated production facilities through an ambient, crambient, or cryogenic process. Both types of crumb rubber are used by manufacturers, compounders, and installers as a tire-derived recycled material feedstock in the production of molded rubber products, pour-in-place applications, or fillers in some product applications. Other buffing specifications are also used directly in landscaping mulch or playground surfacing applications. Each type of buffing and crumb rubber specification has its own beneficial properties and uses. Allowing buffings to “count” in all CalRecycle programs may help to streamline program administration and attract new manufacturers who otherwise may not consider use of recycled tire rubber, and who could help boost customer demand for recycled tire rubber overall.
- **Promote expanded retreading and recycling of off-the-road tires.** While a mature, highly competitive industry, retreaders may have room to expand operations in some cases or to use crumb rubber in the retreading process. Moreover, the trend of lower-tier Chinese tires could potentially damage their operations in coming years. Related to this, some have indicated that there may be an opportunity to expand diversion of off-the-road (OTR) tires through increased retreading and/or processing to produce crumb rubber/buffings. OTR tires have a very high disposal cost and contain a high percentage of natural rubber, which improves the economics of recycling them. CalRecycle could consider expressly including or targeting retreaders and OTR tires in all tire market development programs.