

*Exceptional service in the national interest*



## Reduce – Reuse – Recycle – Compost

*It all works together to achieve Zero Waste*

Sandia/New Mexico's host, the City of Albuquerque, has a long-term goal of Zero Waste to the Landfill by 2030. Zero Waste is generally accepted to mean greater than 90% of waste generation is diverted for an alternate purpose. In the last five years, SNL/NM has reduced its commercial solid waste by 23% and increased its recycling and composting from 46% to 67%. Building upon this recent success in waste diversion, SNL/NM is seeking to achieve Zero Waste to the Landfill by 2025.



**Waste Minimization** is an alternate term for **reduce**. Practical examples of this concept are: refining your process to be more efficient, and therefore needing fewer inputs; to buy only what you need for the near future; to not stock up on bulk materials that you have no current use for or are not able to store safely; and to purchase sustainable materials and products.

Sandia is migrating away from personal and small networked printers to using multifunction copiers that can print, scan and fax documents. This will reduce electronic scrap in the future, and provide immediate savings on equipment, electricity, and supplies such as paper through default duplex printing.

Once you have materials or products on hand, **reuse** is the next best option. The closer a new user is the better! So offer your excess supplies and equipment to those nearby or that you often interact with.

Internally, Sandia has a website for personnel to post ads for excess or wanted items. Other themed websites post excess tracked assets or property, chemicals, lead for radiological shielding, and office supplies such as printing toner. These efforts save Sandia hundreds of thousands of dollars per year in purchases, and greatly reduce waste.





An outdoor recycling bin on Sandia's campus

When your materials or products are no longer usable, find out if they can be **recycled**. The net result of recycling is that the constituent materials are broken down and used as the feedstock in new material or product manufacturing. This gives all of us the ability to purchase materials and products with post-consumer recycled content, such as this recycle bin made of 97% recycled plastic!

Sandia recycles as much of its commercial solid waste and hazardous waste as possible. Over 50 material diversion or recycling streams currently exist, and new recycle streams are created each year as material markets grow. To make the recycling program sustainable, revenues from valuable materials recycled are used to pay for the recycling of materials with a net cost.

Anything that used to be alive can be **composted**. This includes paper, plant trimmings, and food. To retain the most material value, paper that can be recycled into new paper should be. However, should paper no longer be recyclable, composting is the next best option. Some plastics are plant-based, but if you want to compost these plastics, make sure they are ASTM certified to break down in a commercial composting operation, and find such a facility in your area. Backyard compost piles often do not reach and maintain the necessary temperature for plastic decomposition.



Coffee ground composting

Sandia partners with Kirtland Air Force Base to grind tree branches and stumps into mulch for reuse around the campus. Three other local vendors are used to compost gypsum cuttings from new construction, green waste that cannot be chipped, and food waste from our two cafeterias. Several "Zero Waste Events" are held at outdoor catered events that capture food waste for composting and almost all other waste for recycling.



Gypsum cuttings for compost