# New Mexico Organics Recycling Guide





Produced by
New Mexico Recycling Coalition



New Mexico Organics Recycling
Organization



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# New Mexico Organics Recycling Guide

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This guide is also available online at www.recyclenewmexico.com

#### ORGANICS RECYCLING OVERVIEW

#### **Current State of Organics Management in New Mexico**

According to information reported to the New Mexico Environment Department: Solid Waste Bureau in 2012, facilities that accepted brush and green waste managed 63,989 tons for onsite recycling or composting. This is an 19,000 ton increase from 2009 reports. A portion of this material was beneficially used as daily landfill cover. An increasing number of municipalities and businesses are recognizing the real economical and environmental benefits of composted and chipped green waste.

#### **Benefits of Organic Material Diversion from Landfills**

- Extend landfill life span.
- Provide a valuable and locally generated product to the public and local businesses.
   Also useful for landscaping projects at the community level (e.g. parks & recreation facilities and golf courses).
- Produce material effective for: erosion control, roadside and land remediation, and beneficial reuse at the landfill.

#### New Mexico Recycling Coalition (NMRC)

NMRC is a non-profit, statewide, professional membership organization that has a mission to inspire New Mexicans to reduce, reuse, and recycle. This mission is carried out primarily through education and advocacy projects. With over 250 recycling members, the organization supports itself from dues, trainings and conference revenue. Several special projects are funded through grants. We believe in a beautiful New Mexico that values vibrant and sustainable communities for a better quality of life. Members and sponsors of NMRC support these core values.

#### **New Mexico Organics Recycling Organization (NMORO)**

As an ongoing program of the New Mexico Recycling Coalition, NMORO offers organics recycling expertise to help reach our state's goal of increasing diversion. This task force meets to discuss organics-related issues and available resources. NMORO stands to ensure that organics recycling is included in recycling efforts throughout the state and in NMRC's mission.

#### New Mexico Environment Department: Solid Waste Bureau (NMED)

NMED plays a critical role in supporting organics management throughout the state with the development of content and instruction for the *New Mexico Compost Facility Operator Certification Course.* All composting facilities must register with NMED in order to operate.

#### **Compost Facility Operator Certification Course**

- ♦ Three-day training course is held twice a year.
- ♦ Hosted by NMRC and NMED.
- All registered composting facilities are required to have a certified operator who
  has taken and passed the Compost Course test.
- Provides the best organics diversion training in the state.

#### **ORGANICS RECYCLING OVERVIEW**

#### **Introduction to Organics Recycling**

Organics recycling includes several levels of management from simple chipping of yard debris to the more complicated composting program. This guide will help managers to understand the benefits of diverting organic material from our landfills and assist in planning for a successful program. While chipping yard debris for use as mulch is a valuable diversion activity, composting creates a higher value end-product. Composting also helps to divert more material than just yard debris because the process requires sources of both nitrogen and carbon. These elements are found in commonly landfilled things such as: ag waste, biosolids, food waste, manure, and animal bedding.

#### **Costs and Funding to Manage Organics**

Besides start-up costs of equipment purchase (if not already part of the solid waste management program), handling organic material is relatively cost efficient. Operation of a small, yard waste mulching program could be successful with a carefully selected storage area and a rented grinder. When the material is processed and used locally, cost for transportation is minimal. State grant funding is available to help with capital costs of beginning an organics recycling program.

#### **Regulatory Requirements for Organics Programs**

All composting programs are required to file a simple registration form with NMED: Solid Waste Bureau. If your program is only mulching material, there is no registration requirement with NMED: Solid Waste Bureau, but should be explained in your Operations Plan. We recommend reviewing local ordinances, and contacting NMED: Air Quality, EPA, the local Fire Department and OSHA to ensure compliance. NMORO can advise which entities are relevant for your operation.

#### Public Education and Incentives

Promoting organics diversion in your community begins with setting a lower tip fee than regular trash rates. Make sure that the reduced tip fee still covers all operational costs. This encourages customers to sort organic material for diversion, while saving them money, but also ensures a sustainable program. Educating customers on the process, also reinforces clean material. A combination of education and incentives will show increased and cleaner material. Remember! No ban without a plan.

#### **Greenhouse Gas Emissions and Composting**

Some have expressed concern that composting organic material generates greenhouse gas emissions. The EPA WARM calculator even shows an increase in emissions with organic material diversion. However, it is important to understand that the emissions from organic material placed in a landfill (methane) is different and much more potent than the emissions created in the composting process (CO<sub>2</sub>).

Simply explained, one of the natural byproducts of decomposition is CO<sup>2</sup>. That CO<sup>2</sup> is then absorbed by the trees and plants that need it for life, creating a "carbon neutral" situation. When the same amount of yard waste enters the landfill it decomposes under different conditions, producing methane, which is 21 times more potent than CO<sup>2</sup>.

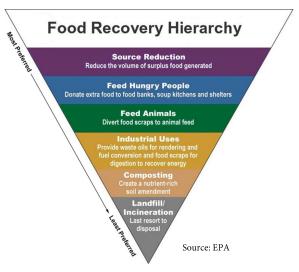
#### **ORGANICS RECYCLING OVERVIEW**

#### **Food Waste Diversion and Composting**

The EPA defines food waste as "any food substance, raw or uncooked, which is discarded or intended or required to be discarded." An astonishing 40% of food is wasted between farm production and consumption each year. This food waste represents about 14% of the U.S. waste stream.

With only 2% of food waste currently being diverted nationally, both local and federal agencies are increasing outreach and funding for food waste diversion programs. New Mexico's Recycling and Illegal Dumping (RAID) Alliance set new recycling funding priorities to include management of organics projects.

While the focus of this manual is on composting food waste, there are other "more preferred" methods for handling food waste including, Source Reduction, Food Donation, and Feeding Animals. Any food recovery program adopted by your community will ultimately contribute to reducing methane production and food waste in the US. Other NMRC published food waste guides can be found here <a href="https://www.recyclenewmexico.com/resources/">www.recyclenewmexico.com/resources/</a>



Food waste composting is a great addition to a mature recycling program that already offers easy and convenient recycling of traditional household recyclables and yard waste. Food waste collection can occur in both rural and urban settings. A community drop-off opportunity for food waste is a perfectly acceptable option for rural areas.

Before accepting food waste, it will be crucial to attend the Compost Facility Operator Certification Course and to update your Operations Plan with the NM Environment Department: Solid Waste Bureau. Training dates and information can be accessed here <a href="https://www.recyclenewmexico.com/cert\_classes/">www.recyclenewmexico.com/cert\_classes/</a>

#### **ORGANICS PLANNING WORKSHEET**

Step 1 - Assess Current Ope Many of a program's economic	erations al benefits can be explained with avoided costs.
	to Landfill Organic Material? \$/ton equipment, and any applicable tip fee. labor, equipment, overhead, insurance, compliance, and
What is Your Cost to Manage	Biosolids/Waste Water Sludge? \$/ton
Determine All Organic Materia	· ·
<ul> <li>Estimating annual tonnag decisions.</li> </ul>	e/cubic yards of each material will help drive many
decisions.	Tons/Cubic Yards
A aricultural Masta	Tons/Cubic Tards
☐ Agricultural Waste	<del></del>
<ul><li>☐ Animal Mortality</li><li>☐ Biosolids</li></ul>	<del></del>
☐ Food Waste	<del></del>
	<del></del>
☐ Forest Slash	
☐ Manure	
☐ Untreated Lumber	
☐ Yard Waste	<del></del>
Will You Mulch or Compost th Regardless of the method you ch regulations for site requirement	noose, check New Mexico Environment Department
<b>Evaluating Site Needs for Mulc</b>	ching
ē	inder or chipper? Can your entity purchase or rent one?

- Mulch can be created with an exclusive yard waste/scrap lumber/forest slash collection program.
- ♦ How will you ensure quality, uncontaminated, chipped material?

#### **Evaluating Site Needs for Composting**

- ◆ Does site have water source? Can water be trucked in?
- ♦ Do you have appropriate feedstocks and a nitrogen source (biosolids, food waste, or manure?)
- ♦ Does your entity own a front loader?
- ◆ Do you have space to collect the material safely?
- ♦ Do you have space for windrows or other method? Assume 10 ft² of windrow area for every cubic yard of material to be composted.
- ♦ Have you planned outreach to neighbors? Information sharing and forum for citizen questions prior to implementation can help stop complaints before they start.

### **ORGANICS PLANNING WORKSHEET**

#### **Step 2 - Determine Costs**

To ensure that you cover all costs of an organics program, it is necessary to use full-cost accounting. In this way, you will consider start-up, operating and on-going costs.

#### **Start-Up Costs:**

\$	Planning, Designing, Reporting and Registration of a Certified Composting Facility (Administration)
\$	Property Improvement to Handle Organic Material Recycling
\$	Grinder /Chipper Purchase
\$	Grinder Rental (Consider quarterly or semi-annually)
\$	Grinder Borrowing (Estimate fuel and maintenance costs)
\$	Screen Purchase or Rental
\$	Front Loader
\$	Water Line Installation or Water Trucked In
\$	Consider Compliance Costs (Zoning, OSHA, Fire, EPA)
\$	Outreach, Education (Administration & Materials)
Ongoing Costs:	
\$	Cost of labor to operate composting or mulching program
\$	Fuel costs for machinery
\$	Ongoing maintenance, repair, and supply costs for machinery
\$	Consider Replacement Cost for Equipment Per Life Span
\$	Cost of water and other supplies
\$	Depreciation & Overhead
\$	Outreach, Education (Administration & Materials)

#### Only after calculating actual and avoided costs, can you calculate appropriate fees.

- ♦ Will you charge a reduced fee for clean green waste in order to incentivize customers to bring in properly sorted green material? Ensure that your lowest fees still cover the organics operations' cost.
- ◆ Will you sell the material? If so, for how much?

#### **ORGANICS PLANNING WORKSHEET**

#### **Step 3 – Program Education and Benefits**

There are a variety of benefits to diverting organic material from landfills. The key to a successful program is getting staff and citizens engaged early on.

- Set attainable goals for diversion and production of mulch or compost.
- Consider a reduced tip fee for clean materials to encourage separating and participation.
- ◆ Landfill life can be greatly extended by diverting bulky, heavy items.
- When kept free of contamination, compost and mulch are valuable end products for community projects.
- Lesser quality product can still be used at the landfill in place of purchasing new material.

Some benefits are difficult to measure locally. First discuss avoided costs, then look to national organics recycling organizations and the EPA for other valuable data.

- ◆ By reducing organic material in our landfills, a major source of methane is reduced. Methane is a greenhouse gas 21 times more potent than CO2.
- ◆ Current national averages predict the following % of Total MSW before recycling: 13.5% Yard Trimmings 6.2% Wood Scrap 14.6% Food Waste

#### **Local Diversion Benefits:**

% of Divertable Material = Total Organic Material divided by Total MSW

How Much of This Material Do You Expect to Divert with Your Organics Program?



#### **City of Las Cruces**

#### **Project Details**

Project Name: Foothill Landfill Yard Waste/

Compost Program

**Contact Person:** Jim Maese **Phone/Email:** 575-528-3532 or

rjmaese@las-cruces.org

Materials Accepted: Grass, leaves and tree trimmings (less than 5' long, less than 5" wide) End-Products: Compost is used by residents and

businesses. Mulch is used for erosion control



Photo courtesy of City of Las Cruces

**Drop-Off Cost:** Free for residents, \$20/ton for businesses

Material Pricing: Non-screened composted material and mulch are free to residents. Equipment: CAT 966 Loader or John Deere 444j; Water truck; Morbark Wood Hog Model 3600 or Universal Tub Grinder; Rental of a screen once a year: Orbits Screener Model 68AD or McCloskey 616

Staff: 4 FTE

**Annual Organic Material Volume Handled:** 25,535 Tons (2014) 2,979 Tons (2009), 4,087 Tons (2008), 3,928 Tons (2007)

#### **Collection and Processing**

Yard waste has been collected for 15 years, but composting started about 8 years ago. All material accepted at the yard waste facility is weighed and scanned for contaminants. Yard waste is chipped and set in rows approximately 8 feet wide, 8 feet high, and in various lengths for composting. Water is added and temperatures are monitored with appropriate probes until the composting process is completed. Optimum temperature is approximately 140°, which takes approx. 3-6 months. Loaders are used to turn the material and to load finished product for customers. A water truck is used to maintain moisture. Loader buckets are used to estimate the cu. Yds. for charging at scale house.

#### **Lessons Learned**

With current equipment, the city cannot create a product which meets the strict NM Department of Transportation requirements for use on state highway projects. They are able to give away all the composted material they make and satisfy their main goal to divert material from the landfill.

To discourage citizens from leaving the plastic bags used to collect debris, containers are now located at the site for residents to drop off small volumes of trash.

Screened material is no longer produced or sold. The NM Dept. of Agriculture notified the city that since they were charging for this material it would be classified as a soil conditioner under the NM Fertilizer Act and would require registration and fees.

#### **Soilutions Inc. and New Mexico Compost Products**

#### **Project Details**

**Project:** Private Business Entity **Contact Person:** Walter Dods

Phone/Email: 505-877-0220 or walter@soilutions.net

Materials Accepted: Clean green waste, food waste, sod and soil, construction waste,

horse manure. Web site has specifics at www.soilutions.net

**End-Products:** High quality compost, topsoil, potting soils and mulches.

**Drop-Off Cost:** \$6/cu. yd. for green waste, bulk food waste, soil and sod. \$10/cu yd. for construction material. Clean horse manure accepted for free. Residential food waste is \$2/container, up to 96 gallons.

Material Pricing: \$25-\$51 per cu yd depending on end product, level of screening, etc.

See website Pricing List for details.

**Equipment:** Front Loaders, Dump Truck, Shaker Screen

Staff: 6 FTE

#### **Collection and Processing**

Soilutions is a green waste recycler established in 1997. It was created to produce quality materials that would help resolve environmental and ecological issues in the Albuquerque area. Mulches are made from the ground feedstocks, composted to kill pathogens and weed seeds, then screened and sold.



Photo courtesy of Soilutions

#### Wood U Recycle!

#### **Project Details**

**Project Name:** Tiny T'Embers Wood Heating

Pellets Manufacture

**Contact Person:** Brett or Jason Kramer

**Phone/Email:** 505-877-0890

**Materials Accepted:** Clean dry wood waste including construction wood scrap

**End-Product:** Wood Pellets

**Drop-Off Cost:** Depends on the material, but are

normally half the cost of the land-fill fee

Material Pricing: \$210/ton

**Equipment:** Wood Grinders, Wheel Loaders, Pelleting Equipment, Semi Tractors and Walking

Floor Trailers

Annual Organic Material Handled: About

5,000 dry tons

**Program Staff:** 8 FTE



Photos courtesy of Mt. Taylor Machinery/ Wood U Recycle!

#### **Collection and Processing**

Wood U Recycle! converts waste material into renewable, clean burning energy. Recycling of clean wood waste and the production of wood pellets has been in effect for eight years. This program has prevented over 24 million pounds of wood waste from being landfilled.

Clean wood waste is ground to sawdust and chips, transported to the pellet plant where it is extruded into wood heating pellets. They are currently expanding by building a pellet mill at their yard.

#### **Lessons Learned**

Originally accepted OSB, plywood and particleboard, but ceased accepting this material because the glues in these products produced a hard brick ash that some customers did not like. The business has been very expensive to operate.

#### **City of Albuquerque**

#### **Project Details**

Project Name: Solid Waste Management Composting Project

**Contact Person:** Jake Daugherty

 $\textbf{Phone/Email:}~505\text{-}761\text{-}8324~or~\underline{ddaugherty@cabq.gov}$ 

**Materials Accepted:** Green waste collected at Eagle Rock and Don Reservoir Convenience Centers and at the landfill. Horse bedding is also accepted.

End-Products: Mulch and compost

Drop-Off Cost: Standard \$30/ton tip fee at landfill and \$5.25 per load for businesses

and for residents at convenience centers

**Material Pricing:** \$15/ton for compost and mulch for commercial customers at landfill. \$7.50/cu yd for compost and \$5.00/cu yd of mulch at Montessa Park convenience center for residential customers.

**Equipment:** 2002 Vermeer Brush Grinder, 2005 Caterpillar Wheel Loader, 2008 Wild Cat Trommel Screener, plus miscellaneous equipment at landfill

Staff: 2 FTE

**Annual Organic Material Handled:** 2,475 tons collected at landfill and convenience centers. 1,059 tons collected twice a year via residential curbside collection. 45 tons of horse bedding.



Photo courtesy of City of Albuquerque

#### **Collection and Processing**

Green waste is chipped into mulch product. Mulch (carbon source) is also mixed with the horse bedding (nitrogen source) and composted in windrows. Water is frequently added to maintain moisture content. Compost is tested periodically with a specialized composting digital thermometer and moisture indicator, and the windrows are turned as needed. The total process can take 3 to 6 months.

The composting project was started in 2005 as an effort to divert material from the landfill. The program has been beneficial in many ways: diversion, creation of a valuable end-product for public use, and as a final cover for landfill cell closures.

#### **Lessons Learned**

Most important aspects have been ensuring moisture content and proper product mixture.

#### **Estancia Valley Solid Waste Authority**

#### **Project Details**

**Project Name:** Mortality Composting

Contact Person: Joseph Ellis

Phone/Email: 505-705-5101 or evrl@lobo.net

Materials Accepted: Green waste, large and small animals, butcher waste, cow and

horse manure

**End-Products::** Compost for use at the landfill

Drop-Off Cost: Free for green waste, \$30 for large animals, \$10 for small animals, and

\$25/ton for manure

Material Pricing: Not for sale. Used beneficially at landfill. Equipment: Caterpillar Loader and Compost Thermometer

**Program Staff:** 1/2 FTE

#### **Collection and Processing**

The program was launched November 2009 to save landfill airspace. Green waste is mulched and laid into a bed 12' X 50' and 18" deep. Animals are laid in place as they come into the landfill for disposal, and are covered with more mulch. Two tiers of animals are laid in and covered to form a static pile. Water is added as needed to facilitate the composting process. It is anticipated that finished compost will be generated in about a year.







Photos courtesy of Estancia Valley SWA

#### **Estancia Valley Solid Waste Authority**

#### **Project Details**

Project Name: Septage Composting Contact Person: Joseph Ellis

Phone/Email: 505-705-5101 or evrl@lobo.net

Materials Accepted: Septage

End-Products:: Compost for use at the landfill

**Drop-Off Cost:** \$7/ton

**Material Pricing:** Not for sale. Used beneficially at landfill. **Equipment:** Caterpillar Loader and Compost Thermometer

**Program Staff:** 1/2 FTE

#### **Collection and Processing**

Untreated Septage is pumped into a lined lagoon filled with wood chips. The lagoon is pumped out using a series of sprinklers onto the Mortality Compost piles which hastens the compost process. The wood chips added to the lagoon are replaced on a regular basis.



Photo courtesy of Jessi Just

## Albuquerque Bernalillo County Water Utility Soils Amendment Facility

#### **Project Details**

**Project Name:** Compost del Rio Grande

**Contact Person:** Joe Bailey **Phone/Email:** 505-205-5721/

jbailey@abcwua.org

Materials Accepted: Green waste, food

waste (min. 15 cu.yd)

untreated wood products, horse bedding.

**Biosolids** 

from waste water treatment.

**End-Products:** Compost and mulch

**Drop-Off Cost:** No tip fee.

**End-Product Pricing:** Depending on

product type, \$25/ton

and \$18.50/ton. Customers are mostly large volume users,

but products are sold to public, as well.

Equipment: 2 Front Loaders, 4 Compost Mixers, 1 SCARRB Auto Temp System,

6 Total Semi- and Dump Trucks, 2 Trommel Screeners, Grinder

**Staff:** 5 FTE with 2 PTE Operations Managers

Daily Organic Material Handled: 115 tons/day average green waste, bedding 10 tons/

day, plus biosolids. Total processed is 171 wet tons/day

Cost to Operate Program: \$19.50/ton

#### **Collection and Processing**

The program was established in 1982 with the original purpose of managing biosolids from the City of Albuquerque Sewer Plant and utilizing biosolids to develop a useful product. Since the beginning they have increased production rates to utilize 30% of the total volume of biosolids in their compost. Leftover biosolids that are not needed for compost are land-applied on site. Food wastes are collected only in bulk from large producers. Mixing 4 waste streams, they use a recipe developed by Dr. Steven Glass, applying the material in a windrow (300 cu yds/windrow), and then cooking 4-6 weeks at a temperature above 145 degrees. The windrow is turned every 3 days. At the end of the cooking time they test and hold the windrow for another 2-3 weeks. At this time, a screener removes all the larger mulch pieces that were not broken down from the compost (1/4" minus). Moisture in the compost is maintained at 40% to 68%. They produce an average of 120 tons/month (264 cu.yds) of compost product. Products will have a useable temperature of 95 to 105 degrees.

#### **Lessons Learned**

Keep looking for opportunities to use the compost and to improve performance.

#### **De Baca County**

**Project Details** 

**Project Name:** De Baca County

Composting

Contact Person: Tauna Rogers Phone/Email: 575-355-2000/dbctransfer@plateautel.net



Photo courtesy of De Baca County

Materials Accepted: Green waste, food waste, animal carcasses, and offal

**Drop-Off Cost:** Green and food waste: No cost; Small animal carcasses (<100 lbs):

\$4.00; Large animal carcasses (>100 lbs): \$7.00; Offal: \$0.01/lb

**End-Product:** Compost **End-Product Pricing:** \$0

**Equipment:** Bandit Wood Chipper 250, John Deere 644 H Loader, Water Truck **Annual Organic Material Handled:** About 219 tons/year total consisting of 7 tons of food waste, 120 tons of green waste, 87 tons of offal, and 4 tons of animal carcasses.

**Program Staff: 3** FTE

#### **Collection and Processing**

De Baca County receives 1,500-1,800 pounds of offal per week at their collection center in Fort Sumner from a meat packing plant. This is combined with chipped green waste deposited at the collection center by county residents and food waste from local restaurants to create compost. The green waste is chipped onsite with a hand-fed chipper, and the compost is kept in rows and turned as needed with a front loader. The work is predominately performed by one or two employees. Animal carcasses are also composted onsite.

An 18-24 inch layer of green waste is applied as a base layer. Carcasses and offal are deposited on top of this layer and covered with chipped green waste, manure, or stable bedding to create a windrow approximately 6-8 feet in height. Ambient precipitation provides moisture, and the onsite water truck is used as needed.

When the process is completed in approximately 4-6 months, the bones are removed and re-composted. The finished compost is used to enhance the final cover at a closed landfill and is made available for agricultural and landscape purposes for no cost. This program saved the county roughly \$6,570 in tip fees in 2015 in addition to the avoided cost of transportation to the landfill, approximately 60 miles away.

#### **Lessons Learned**

More staff members are needed to conduct the composting operation because the same 3 FTE operate the collection center, recycling facility, and C&D landfill.

#### **RESOURCES LIST**

#### **General Information**

New Mexico Organics Recycling Organization:

www.recyclenewmexico.com/nmoro/

NMED Solid Waste Bureau:

www.nmenv.state.nm.us/swb/compostingmulch.htm

EPA:

http://www.epa.gov/sustainable-management-food

#### **National Composting Organizations**

US Composting Council compostingcouncil.org/

Mulch & Soil Council www.mulchandsoilcouncil.org/

#### **Guides & Strategy**

On-Farm Composting: Available for purchase as a participant of NM Compost Certification class. Or, purchase online at <a href="https://www.nraes.org">www.nraes.org</a>

City of Albuquerque Climate Action Plan Strategies, *page 45 of Plan*: www.cabq.gov/cap

#### **Technical Assistance**

Sarah Pierpont, NMRC Sarah@recyclenewmexico.com 575-224-2630

Walter Dods, NMORO NMOrganicsRecycling@gmail.com 575-224-2630

Joan Snider, NMED - Solid Waste Bureau JoanM.Snider@state.nm.us 505-827-2780

#### **Trainings**

New Mexico Compost Operators Certification Course www.recyclenewmexico.com/trainings/

Bernalillo County Extension Master Composter John Zarola JohnZarola@comcast.net

#### **APPENDIX A: POSITION STATEMENT**

#### New Mexico Organics Recycling Organization (NMORO)

#### **Organics Position Statement**

April 27, 2010

Also adopted by the New Mexico Recycling Coalition

#### Issue Background

Organic materials comprise a significant portion of our waste stream and are one of the most readily diverted materials, with little processing expense and the ability to manage the material on a local level as two immediate benefits. According to the 2009 New Mexico Environment Department Solid Waste Annual Report, 45,279 tons of brush and green waste were composted as well 6,488 tons of that material also being beneficially used (wood was chipped and used as daily landfill cover or landscaping). Using U.S. EPA figures, 12.4% of waste generated comes from yard trimmings, wood waste represents another 5.5% and 12.9% comes from food scraps. Yard trimmings typically take up a large volume of space with tree and limb trimmings. This of course varies slightly by site and state.

As stated in a 2010 report in response to Senate Memorial 60, a memorial requesting the investigation of increased woody material utilization by state agencies, there are a myriad of benefits to diverting organic material waste.

"Enormous landfill and atmospheric benefits can be realized through utilizing wood chip resources by saving landfill space and reducing quantities of methane produced by the uncontrolled decomposition of the wood in landfills. Methane is an explosive gas and is 21 times more potent as a greenhouse gas than is CO2. Numerous watershed health benefits can also be reaped by wood chip utilization.

Each organics recycling alternative approach offers benefits beyond the diversion of solid waste away from landfills. Horticultural reuse of stabilized organic matter improves soil stability, inhibiting erosion, and enhances soil fertility, reducing requirements for costly water, pesticides and fertilizers. Mulch is a commodity that can also be marketed with very limited processing costs for erosion control, weed control, water retention, or beautification to generate direct revenue."

#### **APPENDIX A: POSITION STATEMENT**

#### **Organics Position Statement Cont.**

The New Mexico Organics Recycling Organization encourages local communities to develop cost-effective programs to divert organic material (including yard, food, manure, mortality, agricultural and biosolids waste) from landfills. Removing organics from the waste stream has the following benefits: conserves landfill space, enables utilization of a valuable resource, and avoids greenhouse gas (methane) creation. These programs should consider the following components:

- ♦ Develop Local Ordinances to Encourage a Soft Ban of and Provide Price Incentives to Reduce and Divert Organics From Landfills. A soft ban requests customers to voluntarily comply with a material ban. The ban can be written into local ordinance or simply added to signage and does not have penalties or enforcement. Price incentives would provide a reduced tip fee for sorted organic material.
- Don't "Ban without a plan," e.g. have a stable organics diversion program in place first, before setting local organics diversion policies
- Reduce Organic Material Tipping Fees at Disposal Sites as an Incentive to Divert
- Collaborate with public and private sector stakeholders to develop regional organics diversion plans that may include the following:
- ♦ Identify Targeted Organics Types. Estimate Current Generation and Diversion Rates. Use the percentages previously described as baseline percentages of your waste stream to identify targeted organic materials.
- Encourage Homeowner Diversion Type Options (e.g. backyard composting). Refer to New Mexico Environment Department: Solid Waste Bureau brochure (online), Bernalillo County Extension Office Master Composter program (online)
- Identify and Develop Community Collection and/or Processing Centers (a complete list of currently registered Composting Facilities is located at NMED:SWB website)
- ♦ Identify and Develop Surrounding Composting Facilities (private and/or public)
- ♦ Identify and Develop Public/Private Partnerships
- Develop Local End Use Programs

### **Notes**

New Mexico Recycling Coalition PO Box 24364, Santa Fe, NM 87502 575-224-2630 www.recyclenewmexico.com

Special thanks to the New Mexico Environment Department: Solid Waste Bureau and to the program managers of case study communities for their support and input to produce this guide. Many thanks to Keep New Mexico Beautiful for funding the printing of this guide.

Cover photo courtesy of San Ysidro, showing land remediation using compost.