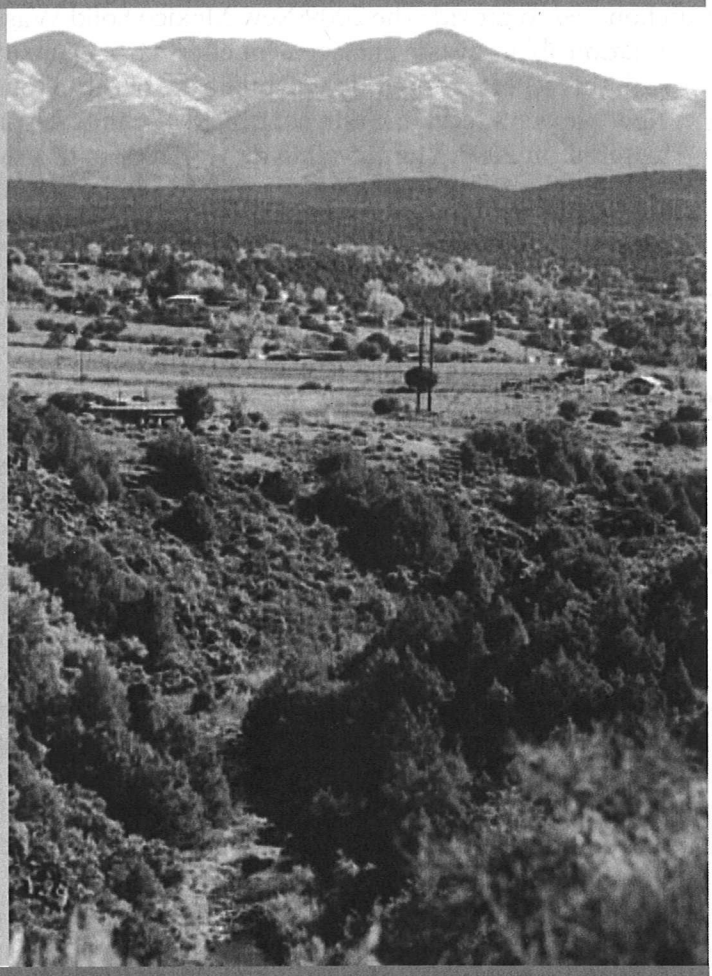
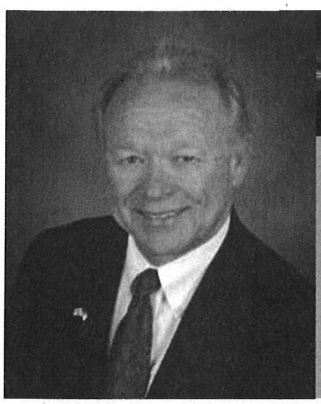
Solid Waste Bureau

2009 New Mexico Solid Waste Annual Report



Protecting the Environment
Preserving the Enchantment



New Mexico Solid Waste Management Report

—August 2009 —

Dear Elected Officials, Solid Waste Professionals, and Residents:

I am honored to provide the 2009 New Mexico Solid Waste Report which presents information about waste management efforts from January 1 – December 31, 2008. As you read through this report, I hope you will take note of the following interesting trends or milestones:

- New Mexico's recycling rate continued to climb, despite the falling prices paid for recycled materials in 2008. The recycling rate for 2008 is 12.4 % up from 11% in 2007 and 9.7% in 2006. Recycling in New Mexico reduced energy consumption by 8,578,169 million BTUs. This is equivalent to one year's energy consumption for all occupied homes in Dona Ana County.
- The total tonnage of waste generated and managed in the state fell from the 2007 total. Waste received from out-of-state also declined. This is attributed to the economic down-turn, and significant reduction in construction.
- 2008 was the first full year of implementation of the Environmental Justice provisions included in 20.9.3.8 NMAC. Any request for a new permitted facility, or a permit modification involving a lateral or vertical expansion must submit a Vulnerable Area Assessment for my consideration. Torrance County Regional Landfill and Northwestern New Mexico Regional Landfill (Red Rocks) submitted Vulnerable Area Assessments.
- As seen in the report, the Department continues to implement the Solid Waste Act and Rules by rigorously completing permit reviews in a timely manner, by taking enforcement action as necessary, and by providing technical assistance and training to owners, operators and Native American entities.
- The new Rules mandate that owners submit permit application or close the remaining 13 open unlined, unpermitted landfills in the state by August 7, 2008. Seven of the 13 landfills have submitted closure plans and the Solid Waste Bureau is undertaking a significant technical assistance effort to bring the remaining six landfills into compliance to protect public health, ground and surface water supplies and the esthetic beauty of our state.

The Department thanks all of the facilities that provided the 2008 data in a timely manner. And to all citizens of the state, thank you for your interest in how we manage our solid waste. Working together we can protect our environment and preserve the enchantment!

Sincerely,

Ron Curry
Secretary

NMED

New Mexico Environment Department

Solid Waste Management Program

Contents:

In accordance with the mandates of New Mexico Solid Waste Act, this report is provided to the Governor and the Legislature as a program status update to improve understanding and to facilitate improvement of solid waste management efforts in New Mexico.

This is the tenth annual report from the Secretary of the Environment Department regarding the current management of solid waste in our State.

Information in this report is provided for calendar year 2008. Data for this report has been compiled from annual reports provided by the owners and operators of New Mexico solid waste facilities.

Introduction—New Mexico Solid Waste Management Program

The Solid Waste Bureau (SWB) continues to implement the elements in the comprehensive solid waste program as required by the Solid Waste and Recycling and Illegal Dumping Acts. Those elements include:

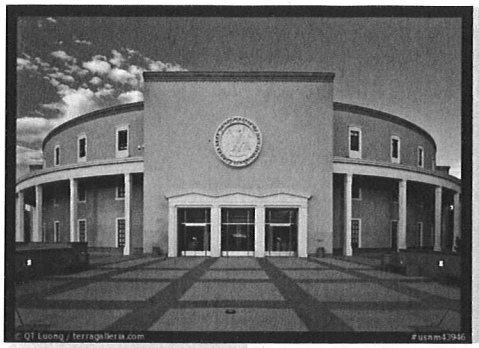
- A program to provide standards for facility construction and operation, to process and issue permits, and to review and approve closure plans;
- A program to ensure protection of groundwater by requiring completion of groundwater monitoring and remediation at solid waste facilities;
- A program to inspect and audit facilities to ensure operating and recordkeeping standards are maintained;
- A program to educate, address, and enforce against illegal dumping and improper handling of waste;
- A program to certify facility operators, publish educational brochures and provide technical assistance to the solid waste community;
- A program to develop regulations, compile and analyze report data, publish an annual report, and produce special reports as required;
- A protocol to review applications for Recycling and Illegal Dumping and Scrap Tire Grant Funds;
- A scrap tire management program; and
- A program that provides technical assistance that includes a statewide recycling directory for the proper handling and disposal of household hazardous waste (HHW).

Solid Waste Management Act Requirements

The New Mexico Solid Waste Act of 1990 charged the New Mexico Environment Department with:

- Preparing an inclusive annual state solid waste management report;
- Overseeing the requirements in the Act; and
- Developing a comprehensive Solid Waste Management Plan and program for New Mexico.

More information is posted on the New Mexico Environment Department's Web site at:
www.nmenv.state.nm.us/sbw/



2009 Recycling and Solid Waste Management Recommendations

To meet the goals of the Solid Waste Management Act in New Mexico provision for sustainable funding is needed for state and local solid waste management, recycling, and diversion programs.

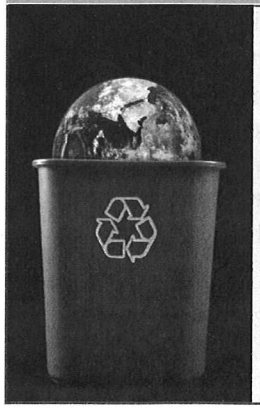
Implementation of solid waste management programs is one of the few state programs for which Federal funding or new stimulus funding is not available. As a result, the Solid Waste Bureau is dependent on the State's General Fund for 59% of our total 2010 budget. As seen in the chart, the bureau obtains less than 2% of our funding from permit fees. Maintaining existing general fund budget levels for the Solid Waste Bureau is crucial to continue the upward momentum of recycling and waste diversion programs, protection of groundwater resources via oversight of groundwater monitoring and landfill closure plans, timely permit application and engineering reviews, completion of public hearings, site inspections, provision of technical assistance and certified operator training, and landfill construction site inspections.

2010 Solid Waste Bureau Budget Sources (Percent)	
General Fund	59%
Corrective Action Fund	26%
Fund (RAID)	13%
Permit Fees	1.6%

While recycling rates continued to rise in the past year, many New Mexicans in both urban cities and rural communities still do not have access to basic residential drop-off recycling centers or residential and commercial curbside recycling programs. As seen on the next page, recycling saves energy, reduces emissions, and saves natural resources. The Legislature can play a key role in helping to increase access to recycling services for all New Mexicans, and in State government by:

1. Approving adequate budget funds for the General Services Department (GSD) for expansion of recycling services at all State office buildings to continue to bring State agencies in compliance with the Act.
2. Establish at a minimum a paper recycling program (office papers, corrugated cardboard, and newspaper) at the Roundhouse and at all State agencies.

Benefits of Waste Prevention and Recycling– Energy Savings and Greenhouse Gas Reduction



Waste prevention is even more effective at saving energy. When people reuse things or when products are made with less material, less energy is needed to extract, transport, and process raw materials and to manufacture products. When energy demand decreases, fewer fossil fuels are burned and less carbon dioxide is emitted to the atmosphere.

Waste prevention and recycling (including composting) diverts organic wastes from landfills, thereby reducing the methane released when these materials decompose.

Recycling saves energy. Manufacturing goods from recycled materials typically requires less energy than producing goods from virgin materials.

New Mexico Recycling Rate Increases

In 2008, New Mexicans recycled at a rate of 12.4%, with 250,490 tons of MSW recycled, mulched, or composted

The EPA's *Measuring Recycling, A Guide for State and Local Governments* is used as the guideline for determining the standard MSW Recycling Rate. Use of this method standardizes the recycling rate and makes it easier to compare New Mexico's recycling rate to those of other states. EPA guidelines define MSW as including all normal household waste, commercial waste, recyclable materials, appliances, scrap tires, lead acid batteries, antifreeze, brush and green waste, food scraps, paper, cardboard, newspaper, office paper, phone books, plastic, glass, steel and aluminum containers, electronic waste, etc. Materials that are **not** included in the MSW generation rate are special waste, construction and demolition waste (C & D), clean fill, motor oil, car bodies, mining waste, heavy equipment, windows, food processing waste, or out-of-state waste.

The recycling rate is calculated by dividing all in-state recyclable materials collected, by all MSW generated in New Mexico. In 2008, the reported total generation of in-state MSW was 2,028,463 tons and the total amount of recyclable materials collected was 250,490 tons.

Recyclable Material = 250,490 tons = .124 X 100 =12.4%
MSW = 2,028,463 tons

New Mexico Recycling Totals and Energy Savings

EPA's Waste Reduction Model (WaRM) incorporates the emissions factors and enables waste managers to analyze their potential to reduce greenhouse gas emissions based on the waste stream. In terms of climate benefits, waste prevention is generally the best management option. Recycling is the next best approach.

2008 New Mexico Recycling Benefits

Recycling in New Mexico reduced energy consumption by 8,578,169 million BTUs.

This is equivalent to one year's energy consumption for all the occupied homes in Dona Ana County or 69,218,747 gallons of gasoline!

Total Energy Saved:	**8,578,169 Million BTUs**	**789,763 $MTCO_2E$**
This is equivalent to:	• ***69,019,748 Gallons of Gasoline*** • ***1,478,995 Barrels of Oil*** • ***79,976 Household's annual energy consumption***	• ***Removing 143,593 passenger cars for one year***

National Totals Recycling materials reduces greenhouse gas emissions. EPA estimates that current national recycling efforts—nearly 85 million tons of municipal solid waste in 2007—yield annual greenhouse gas emission reductions equivalent to removing over 35 million passenger cars from the road each year.

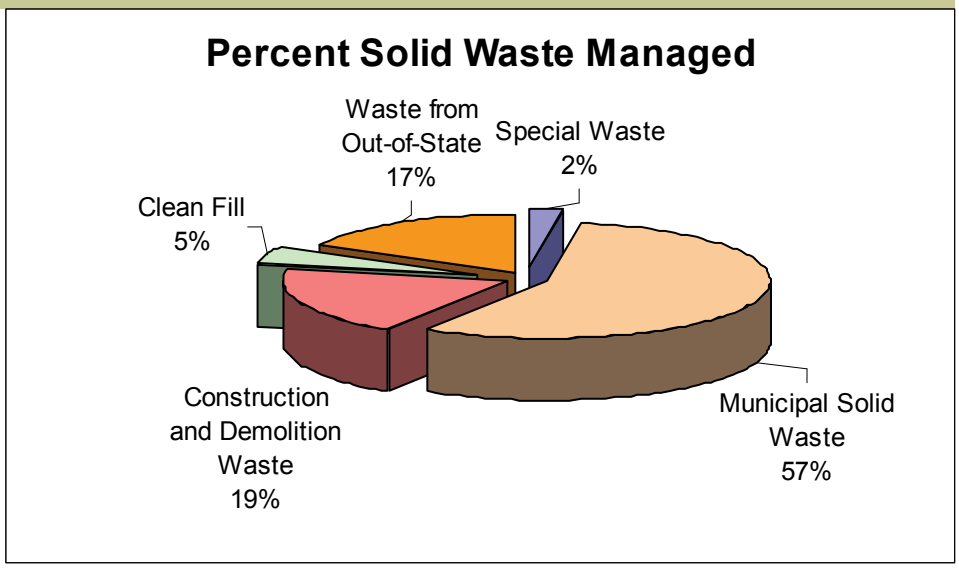
Commodity	Tons Recycled in New Mexico	Total Million BTUs	Total $MTCO_2E$
Aluminum Cans	4,129.71	-851,827	-56,456
Steel Cans	317.91	-6,298	-571
Glass	820.01	-1,616	-229
HDPE	1,939.54	-98,431	-2,722
Corrugated Boxes	61,428.60	-937,644	-191,096
Newspaper	14,793.31	-241,601	-41,399
Office Paper	8,868.58	-88,037	-25,284
Phonebooks	318.94	-3,593	-848
Mixed Paper (general)	7,544.78	-171,927	-26,680
Mixed Metals	80,847.72	-5,995,681	-425,052
Mixed Plastics	593.37	-31,166	-904
Mixed Recyclables	737.11	-12,192	-2,125
Mixed Organics	Composted	43,210	-14,192
Personal Computers	970.35	-41,997	-2,205
Totals		**8,578,169**	**789,763**

Analysis of Solid Waste Generation and Management 2008

Total Tons of Waste Managed in 2008:
3,590,755 Tons

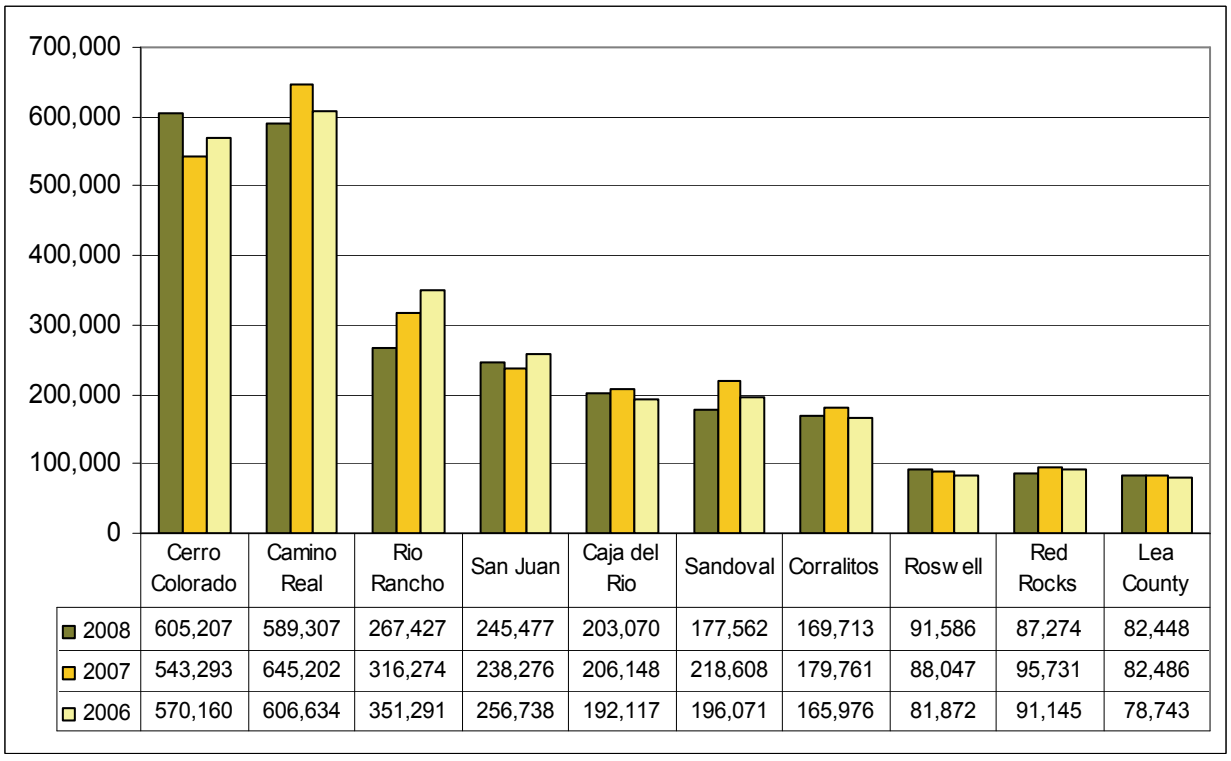
MSW: 2,028,463 Tons
C & D: 685,916 Tons
Clean Fill: 174,778 Tons
Out-of-State: 613,024 Tons
Special Waste: 86,599 Tons

Used Oil: 1,974 Tons



Solid waste facilities throughout the state managed a total of 3,590,755 tons of waste in 2008. Compared to the 2007 data, the total tonnage of waste generated in the state fell by 248,213 tons, while waste received from out-of-state declined by 52,603 tons. Fifty-seven percent of the total waste managed is classified as in-state MSW, which includes residential and commercial waste and recyclable materials. C & D waste accounts for 19 percent of the total tonnage, while 17 percent of the waste managed by New Mexico solid waste facilities originated from out of state (Texas, Colorado, Arizona and Mexico). Two percent of the total tonnage was special waste. Special waste includes materials such as petroleum contaminated soils, chemical spills, infectious waste, sludge, asbestos, ash, etc. The remaining five percent of the waste is clean fill (concrete blocks, brick, etc.). A total of 3,122,215 tons of material was buried in New Mexico landfills.

Same Landfills Manage the Most Tons of Solid Waste in 2006, 2007, & 2008



	Cerro Colorado	Camino Real	Rio Rancho	San Juan	Caja del Rio	Sandoval	Corralitos	Rosw ell	Red Rocks	Lea County
2008	605,207	589,307	267,427	245,477	203,070	177,562	169,713	91,586	87,274	82,448
2007	543,293	645,202	316,274	238,276	206,148	218,608	179,761	88,047	95,731	82,486
2006	570,160	606,634	351,291	256,738	192,117	196,071	165,976	81,872	91,145	78,743

Seven of the ten largest landfills saw a reduction in the total amount of waste managed in 2008 compared to 2007

Analysis of Solid Waste Generation and Management

County	MSW Totals	Recycling Totals	% Recycling Rate	Total of all Materials that could be Diverted	Beneficially Used	Diversion Totals	% Diversion Rate
Bernalillo	663,957	142,488	21.5	877,233	35,580	178,092	20.3
Catron	5,163	0	0.0	5,321	0	1	0.0
Chaves	60,853	8,942	14.7	92,837	9,489	19,681	21.2
Cibola	17,016	38	0.2	17,244	4	42	0.2
Colfax	14,520	770	5.3	15,676	232	1,004	6.4
Curry	39,729	7,654	19.3	73,461	3,363	11,052	15.0
De Baca	3,449	1,758	51.0	6,618	1,082	2,841	42.9
Dona Ana	162,478	8,959	5.5	250,426	5,246	14,426	5.8
Eddy	82,538	20,964	25.4	90,371	399	21,376	23.7
Grant	23,757	1,285	5.4	23,789	128	1,432	6.0
Guadalupe	3,520	273	7.8	4,263	3	279	6.6
Harding	185	12	6.5	185	0	12	6.5
Hidalgo	4,081	80	2.0	4,155	132	212	5.1
Lea	70,180	2,519	3.6	102,262	11	2,575	2.5
Lincoln	34,133	11,970	35.1	41,903	500	12,475	29.8
Los Alamos	23,367	4,823	20.6	42,141	14,978	19,831	47.1
Luna	25,091	721	2.9	34,495	960	1,692	4.9
McKinley	41,947	373	0.9	62,021	1,335	1,709	2.8
Mora	19,587	52	0.3	22,698	63	115	0.5
Otero	54,821	4,710	8.6	117,260	46,071	50,920	43.4
Quay	1,972	403	20.4	12,834	6,830	7,238	56.4
Rio Arriba	30,539	2,512	8.2	30,564	61	2,598	8.5
Roosevelt	2,145	128	6.0	2,207	0	128	5.8
San Juan	170,832	1,206	0.7	212,247	162	1,394	0.7
San Miguel	18,634	723	3.9	19,329	81	804	4.2
Sandoval	186,534	8,724	4.7	421,906	179	8,904	2.1
Santa Fe	157,554	13,516	8.6	236,967	326	13,870	5.9
Sierra	9,618	276	2.9	10,736	163	440	4.1
Socorro	12,443	222	1.8	22,764	18	244	1.1
Taos	30,763	1,463	4.8	38,520	2,614	4,149	10.8
Torrance	13,994	1,289	9.2	17,281	735	2,041	11.8
Union	276	25	9.1	276	0	25	9.1
Valencia	42,786	1,609	3.8	63,278	81	1,690	2.7
Totals	2,028,463	250,490	12.4	2,973,268	130,826	383,289	12.9

Recycling Rate

The recycling rate is calculated by dividing all in-state generated recycled materials, by all in-state generated MSW totals. Included in the MSW stream is the normal household waste and commercial waste, glass, lead-acid batteries, white goods, paper, plastics, textiles, tires, wood, yard trimmings, and other waste. MSW does **not** include out-of-state waste, C & D, clean fill, industrial waste, infectious waste, and other special waste.

In 2008, the total generation of in-state MSW was 2,028,463 tons, and the total amount of material recycled was 250,490 tons, for a recycling rate of nearly 12.4 %.

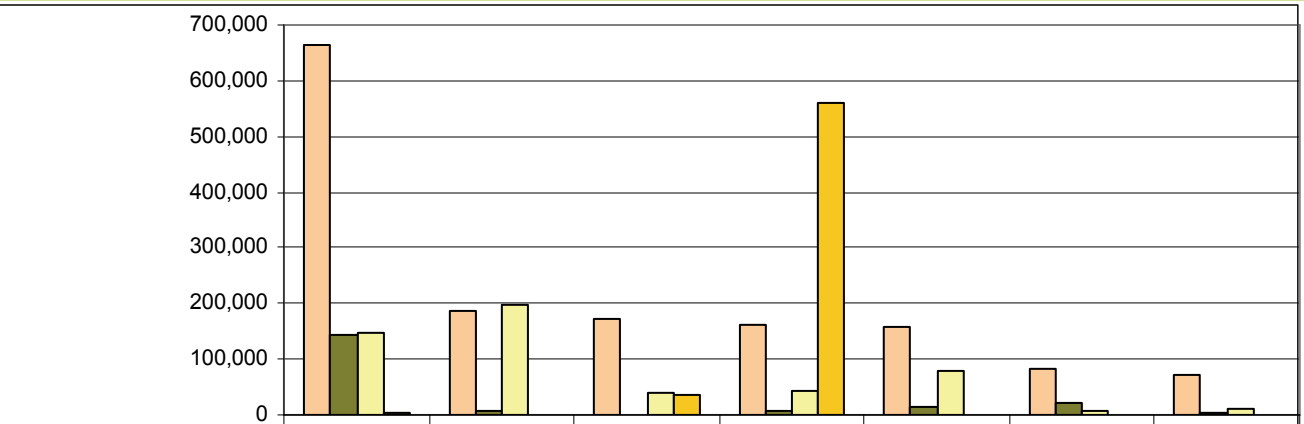
Diversion Rate

The diversion rate in New Mexico includes all materials recycled plus materials beneficially used. The diversion rate is calculated by dividing all in-state generated recycled and beneficially used material, by all in-state generated MSW, C & D, clean fill, and divertible special waste (Sludge, Offal, PCS, etc.) totals.

In 2008, the total generation of in-state MSW, C & D, clean fill, and beneficially used special waste was 2,973,268 tons with a total amount of material diverted from the landfill at 383,289 tons. This gives New Mexico a total diversion rate of 12.9 percent.

Analysis of Solid Waste Generation and Management

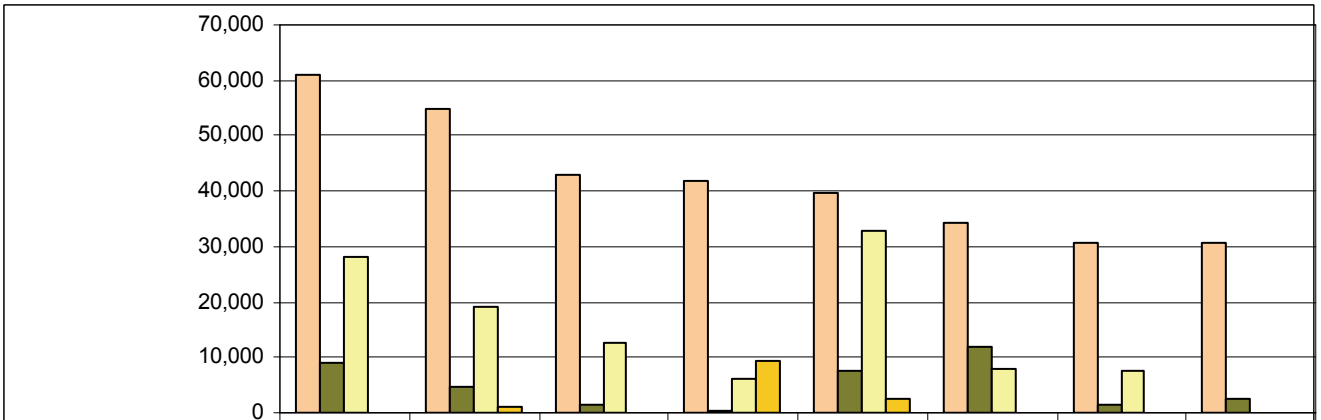
Figure A. Counties Managing Greatest Tonnage of MSW



	Bernalillo	Sandoval	San Juan	Dona Ana	Santa Fe	Eddy	Lea
MSW (Before Recycling)	663,957	186,534	170,832	162,478	157,554	82,538	70,180
MSW Recycled	142,488	8,724	1,206	8,959	13,516	20,964	2,519
C & D	147,184	199,212	37,835	43,741	79,383	7,392	11,781
Waste from Out-of-State	3,104	0	34,575	560,029	0	0	920

According to the 2008 US Census Bureau estimates, the seven counties in Figure A account for nearly 67.3 percent of the population in New Mexico. Information provided to the Bureau indicates these counties managed 73.7 percent of all the solid waste in the state. Bernalillo County and Eddy County were among the five counties with the highest recycling rate, accounting for 182,155 tons of recycled MSW.

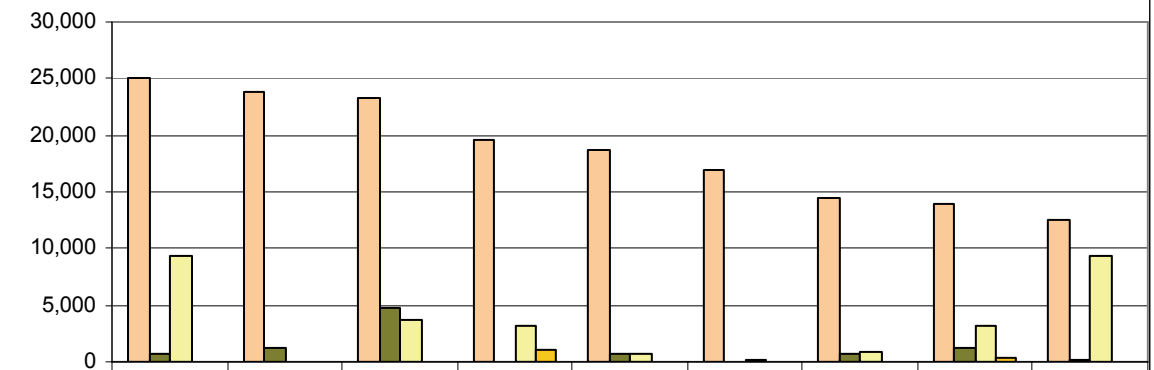
Figure B. Counties Managing Mid-Range Tonnage of MSW



	Chaves	Otero	Valencia	McKinley	Curry	Lincoln	Taos	Rio Arriba
MSW (Before Recycling)	60,853	54,821	42,786	41,947	39,729	34,133	30,763	30,539
MSW Recycled	8,942	4,710	1,609	373	7,654	11,970	1,463	2,512
C & D	28,110	19,103	12,613	6,066	32,887	7,763	7,684	0
Waste from Out-of-State	0	997	0	9,380	2,515	0	0	0

According to the 2008 US Census Bureau estimates, the eight counties in Figure B account for 20.4 percent of the population in New Mexico. Information provided to the Bureau indicates these counties managed 16.5 percent of all the solid waste in the state. Chaves County was among the five counties with the highest recycling rate, accounting for 14,729 tons of recycled MSW.
(*Lincoln County and Rio Arriba County export waste for disposal in other counties.)*

Figure C. Counties Managing 12,000—20,000 Tons of MSW

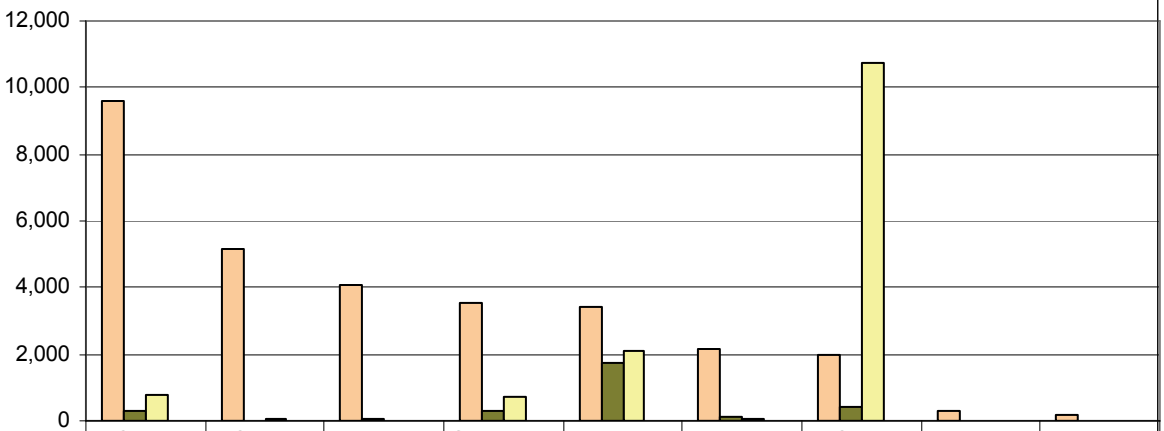


	Luna	Grant	Los Alamos	Mora	San Miguel	Cibola	Colfax	Torrance	Socorro
MSW (Before Recycling)	25,091	23,757	23,367	19,587	18,634	17,016	14,520	13,994	12,443
MSW Recycled	721	1,285	4,823	52	723	38	770	1,289	222
C & D	9,393	0	3,755	3,111	695	228	901	3,210	9,373
Waste from Out-of-State	0	0	0	1,066	0	0	0	438	0

According to the 2008 US Census Bureau estimates, the nine counties in *Figure C* account for nearly 9.3 percent of the population in New Mexico. Information provided to the Bureau indicates these counties managed 8.3 percent of all the solid waste in the state.

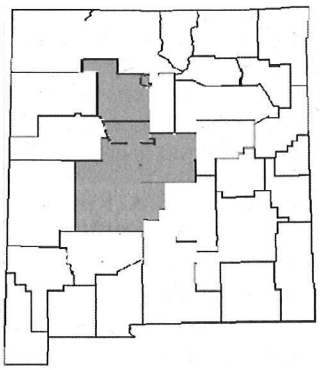
Los Alamos County was among the five counties with the highest recycling rate, accounting for 4,279 tons of recycled MSW.
(*Cibola and San Miguel Counties export waste for disposal in other counties.)*

Figure D. Counties Managing Less than 10,000 Tons of MSW



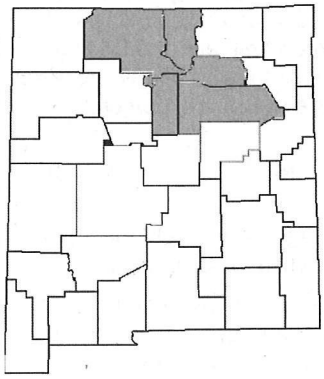
	Sierra	Catron	Hidalgo	Guadalupe	De Baca	Roosevelt	Quay	Union	Harding
MSW (Before Recycling)	9,618	5,163	4,081	3,520	3,449	2,145	1,972	276	185
MSW Recyced	276	0	80	273	1,758	128	403	25	12
C & D	780	58	0	740	2,115	62	10,742	0	0
Waste from Out-of-State	0	0	0	0	0	0	0	0	0

According to the 2008 US Census Bureau estimates, the nine counties in *Figure D* account for nearly three percent of the population in New Mexico. Information provided to the Bureau indicates these counties managed 1.5 percent of all the solid waste in the state. DeBaca County was among the five counties with the highest recycling rate, accounting for 1,758 tons of composted and recycled MSW.
(*Harding, Hidalgo, Roosevelt and Union Counties export waste for disposal in other counties.)*



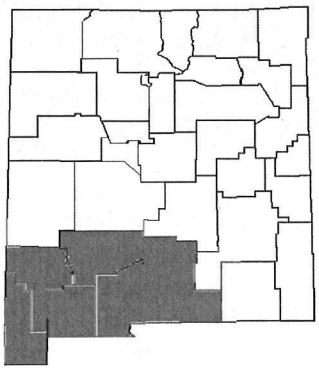
Enforcement Area I includes Bernalillo, Sandoval, Socorro, Torrance, and Valencia Counties. In 2008, this area had an estimated population of 864,093. At the present disposal rates, the potential remaining disposal life of the five permitted landfills (Cerro Colorado Landfill, Rio Rancho Landfill, Sandoval County Landfill, Torrance County Landfill, and Valencia Regional and Recycling Facility) range from 5 years to greater than 100 years. The City of Socorro was denied a permit to continue to operate the City of Socorro Landfill and must stop accepting waste by December 31, 2009. The Southwest Landfill (C & D landfill) estimates a remaining capacity of 26.8 years, while Keers Asbestos Landfill projects nine years of capacity remaining. Solid waste facility operators in this district reported recycling 154,333 tons of MSW and green waste. Bernalillo County achieved one of the top five recycling rates in New Mexico.

The solid waste generation rate was 5.8 lbs /person/day, with a recycling rate of 1 lbs/person/day and a MSW disposal rate of 4.8 lbs/person/day.



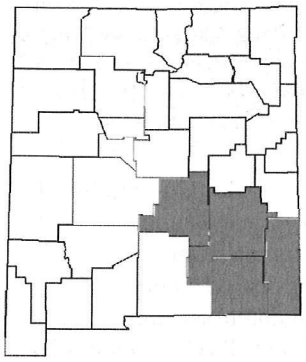
Enforcement Area II includes Los Alamos, Mora, Rio Arriba, Santa Fe, San Miguel, and Taos Counties. This area has an estimated population of 267,935. At the present disposal rates, the potential remaining disposal life of the five permitted landfills (Caja del Rio Landfill, Northeastern New Mexico Regional Landfill, and Taos Regional Landfill) range from 11 years to 94 years. The Closure/Post Closure Care Plan for Los Alamos County Landfill was approved in 2006. Los Alamos County is in the process of closing the landfill, with final closure anticipated in 2010. Operators in this district reported recycling 23,089 tons of MSW and green waste. Los Alamos County achieved one of the top five recycling rates in New Mexico.

The solid waste generation rate was 5.3 lbs /person/day, with a recycling rate of 0.5 lbs/person/day and a MSW disposal rate of 4.8 lbs/person/day.



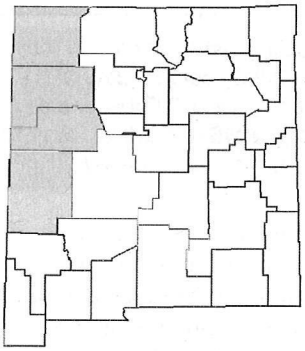
Enforcement Area III includes Dona Ana, Grant, Hidalgo, Luna, Otero, and Sierra Counties. This area has an estimated population of 338,797. At present disposal rates, the remaining disposal life of the four permitted landfills (Camino Real Landfill, Corralitos Landfill, Southwest New Mexico Regional Landfill, and Otero/Lincoln County Regional Landfill) ranges from 39 years to 75 years. The NM Solid Waste Rules require the three registered landfills Deming Landfill, Sierra County Landfill, and Truth or Consequences Landfill to submit a Permit Application or a Closure/Post Closure Care Plan . The Deming Landfill has an approved closure plan. Sierra County and Truth or Consequences are in the process of finalizing and submitting the closure plans for their landfills. The City of Deming in Luna County was granted a permit for the new Butterfield Trail Regional Landfill (BTRL) in 2007 and anticipates opening in 2009. The existing registered Deming Landfill will be closed once BTRL is operational. Operators in this area reported recycling 16,146 tons of MSW and green waste.

The solid waste generation rate was 4.5 lbs /person/day, with a recycling rate of 0.3 lbs/person/day and a MSW disposal rate of 4.2 lbs/person/day.



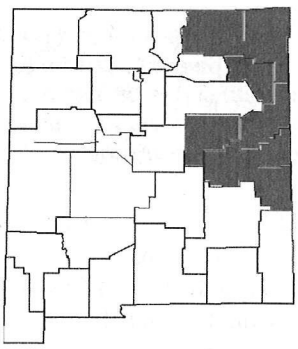
Enforcement Area IV includes Chaves, Eddy, Lincoln, and Lea Counties. This area has an estimated population of 194,368 and encompasses a total area of 19,476 square miles. At present disposal rates, the remaining disposal life of the three permitted landfills (Roswell Municipal Landfill, Sand Point Landfill and the Lea County Landfill) ranges from 16 years to 63 years. This district also has an "industrial waste only" landfill (Lea Land, Inc. Industrial Landfill) with an anticipated life of more than 100 years and a C & D landfill (Mesa Verde) with a projected life of 12 years. Operators in this district reported recycling 45,639 tons of MSW and green waste. This area includes two of the top five counties with the best recycling rate in New Mexico (Lincoln County and Eddy County).

The solid waste generation rate was 7.0 lbs /person/day, with a recycling rate of 1.3 lbs/person/day and a MSW disposal rate of 5.7 lbs/person/day.



Enforcement Area V includes Catron, Cibola, McKinley, and San Juan Counties. This area has an estimated population of 223,914 and encompasses a total area of 22,429 square miles. At present disposal rates, the remaining disposal life of the two permitted landfills (Reds Rocks Regional Landfill and San Juan County Regional Landfill) ranges from 20 years to 56 years. The NM Solid Waste Rules require the three registered landfills in Catron County (Reserve Landfill, Pie Town Landfill and Glenwood Landfill) to submit a Permit Application or a Closure/Post Closure Care Plan. Operators reported that 1,617 tons of MSW and green waste were recycled. Catron County is the only county in New Mexico reporting no recycling activities. Consequently, this area has the lowest recycling rate in the State.

The solid waste generation rate was 5.7 lbs /person/day, with a recycling rate of 0.04 lbs/person/day and a MSW disposal rate of 5.7 lbs/person/day.



Enforcement Area VI includes Colfax, De Baca, Curry, Guadalupe, Harding, Quay, Roosevelt, and Union Counties. This district has an estimated population of 95,249 and encompasses a total area of 21,796 square miles. There are two permitted landfills in this area; Clovis Regional Landfill with 7.2 years of disposal capacity remaining and the new Tucumcari Landfill (not built yet). The NM Solid Waste Rules require the four registered landfills in the area to submit a Permit Application or a Closure/Post Closure Care Plan. The De Baca County Landfill closure plan has been submitted and approved. Raton Landfill has submitted a closure plan that is under review. The old Tucumcari Landfill has an approved closure plan. The Vaughn Landfill must submit a Permit Application or a Closure/Post Closure Care Plan. Operators in this area reported recycling 11,023 tons of MSW and green waste. De Baca County chipped and composted 1,557 tons of green waste to be used as soil amendment and slope stabilizer for the final cover when the De Baca County Landfill closes in near future.

The solid waste generation rate was 3.8 lbs /person/day, with a recycling rate of 0.6 lbs/person/day and a MSW disposal rate of 3.2 lbs/person/day.

2008 Recycling and Illegal Dumping Grants

NMED awarded $260,000 in grants to ten communities and pueblos for recycling and illegal dumping reduction initiatives

$260,000 in Grants Awarded to Assist Communities in Recycling and Illegal Dumping Abatement Initiatives

The department awarded the 2008 Recycling and Illegal Dumping Grants to the Village of Angel Fire, Lincoln County Solid Waste Authority, McKinley County, Mora County, Santa Ana Pueblo, Taos County, the City of Tucumcari, Guadalupe County, and Valencia County.

The projects, that received funding in July 2008, range from local illegal dumping education and cleanup programs to purchasing recycling collection containers for businesses, special events, and drop-off centers. (See complete list on the next page.) The department received an unprecedented 25 grant applications in its 2008 grant cycle, which included more than $630,000 in requests.

The grants provide annual funding to support projects that protect the health and welfare of the environment and residents of New Mexico by preventing and abating illegal dumpsites; promote environmentally sound methods for reuse and recycling; and encourage economic development, community development and collaboration that promotes the efficient and sustainable use of resources, sustainable recycling and a cleaner and healthier environment.

The grant program is authorized under the Recycling and Illegal Dumping Act, which were adopted in December 2006.

Entities eligible for grant funds include municipalities, counties, tribes, land grant communities, cooperative associations and solid waste authorities.

In 2008, the Village of Angel Fire applied for and received a Recycling and Illegal Dumping (RAID) grant to purchase a large capacity horizontal baler that was installed at the villages' transfer station. The baler will allow the village to offer their recycling services to the surrounding communities in northeastern New Mexico. The Village of Angel Fire will use the equipment to make bales of cardboard, plastic, and newspaper. This will keep the shipping and storage costs to a minimum.

The Solid Waste Bureau applauds the Village of Angel Fire for their forethought and efforts to become a recycling hub in the northeastern portion of the state. The Village of Angel Fire could be a model for other small communities in the state.

Staff of the Angel Fire Recycling Facility standing in front of the large capacity horizontal baler purchased with funds from the RAID Grants

RECYCLING PROJECT AWARDS – 2008

Applicant	Project Title	Project Summary	Amount Awarded
Angel Fire, Village of	Community Recycling Expansion	Purchase a multi-material, large capacity, horizontal baler for their transfer station. This will increase their capacity to process materials, and offer their services to surrounding communities.	$71,425
Lincoln County Solid Waste Authority	Expand Recycling in the Ruidoso Retail Business Community	Purchases 1,725 plastic recycling containers for 575 businesses. Each business will receive three indoor recycling containers and an informative recycling brochure.	$8,625
McKinley County	McKinley County Recycling Expansion Project	To advance their recycling activities through the creation of a recycling plan, marketing campaign, and setting out recycling bins.	$20,000
Mora County	Motor-Oil and Cardboard Recycling in Mora County	Purchase four motor-oil collection tanks and three cardboard collection bins at transfer stations. The motor-oil will be used to heat a convenience center.	$15,858
Santa Ana, Pueblo of	Santa Ana Resource Recovery and Recycling Park	Use funds to develop a resource Recovery and Recycling Park at their solid waste transfer station to include one 6-bin recycling trailer, a storage shed for the collection of household hazardous waste, community outreach and education efforts.	$20,000
Taos County	Taos County Solid Waste Recycling and Illegal Dump Site Program	Purchase two alley cat recycling trailers for plastic collection. Use remaining funds to purchase recycling bins for plastic collection.	$20,000
Tucumcari, City of	2008 Recycling Containers	Funds will purchase two event recycling stations, 20 office recycling stations, and will help to purchase one alley cat collection trailer.	$10,000
TOTAL			**$165,908**

ILLEGAL DUMPING PROJECT AWARDS – 2008

Applicant	Project Title	Project Summary	Amount Awarded
Guadalupe County	Anton Chico Area Illegal Dumpsites	Clean-up four historic illegal dumpsites, install signage to discourage illegal dumping, and conduct public education forums to educate the public against illegal dumping and its consequences.	$27,100
Mora County	Holman Illegal Dumpsite Cleanup	Clean-up the Holman illegal dumpsite, abate future illegal dumping by installing signs and conducting public education regarding illegal dumping.	$19,945
Santa Ana, Pueblo of	Santa Ana Illegal Dump Clean-up	Clean-up a historic dump site, conduct community education and outreach on proper solid waste disposal and the hazards of illegal dumping, and reclaim the dumpsite for a Resource Recovery and Recycling Park.	$20,000
Valencia County	Sand Hill Restoration	Clean-up a illegal dumpsite, install signs, bollards and cable to discourage future illegal dumping and conduct community outreach to educate about illegal dumping.	$8,106
TOTAL			**$75,151**

Permit Section — Significant Activities

Camino Real Landfill Denied 10-Year Permit; Issued 1-Year Permit

Camino Real Landfill—
Installation of a methane gas monitoring well

Camino Real Landfill (CRLF) was originally permitted as a landfill in March of 1997. On July 24, 2008, NMED Secretary Ron Curry rejected a 10-year permit renewal for CRLF in Sunland Park and, instead approved a permit for one year only.

Camino Real Environmental, Inc., the applicant, was required to reapply for another permit immediately to meet state Solid Waste Rules that require applicants to submit an application one year before permit expiration.

All 13 of the permit conditions proposed by the hearing officer were adopted. Those conditions require CRLF to enhance its random waste screening inspections in order to prevent illegal waste from being accepted at the landfill; facilitate on-going public involvement by having at least one public meeting within the year; comply with Solid Waste Management Rules; provide notice before beginning new cell construction; provide liner construction reports for approval by the department; amend the special waste disposal plan to include expanded information; install a weather station on site to reflect the area's meteorological conditions; submit a plan to review options for reducing dust at the landfill, as well as other permit conditions.

Camino Real Landfill—
Waste screening near the working face of the landfill

Camino Real Environmental , Inc. has appealed the Secretary's decision. However, they did submit a new permit application in July 2008 to meet the Solid Waste Rules.

Permit Section — Significant Activities

Socorro Landfill Denied a 20-Year Permit

On February 25, 2008, NMED Secretary, Ron Curry denied a Solid Waste Permit for Socorro Landfill because of the city's 20-year history of noncompliance at its' registered landfill. The denial requires the city to stop accepting waste at the landfill by Dec. 31, 2009 and to have the facility capped by June 30, 2010. The City of Socorro has appealed the decision.

Socorro Landfill; failure to control litter

The landfill, which is four miles south of Socorro, has been open since 1988, prior to state regulations that required landfills to be lined. The city submitted a permit application for a new municipal and special waste landfill at the site of the existing landfill.

Between March 1999 and February 2008, SWB cited the landfill for numerous violations, including failure to maintain an authorized waste screening program; lacking complete load inspection sheets; failing to implement a methane monitoring plan; failing to control litter; failing to properly apply a daily cover; lacking an intermediate cover; failing to provide records on request; lacking an acceptable contingency plan; lacking an adequate load inspection plan; failing to prevent unauthorized access; failing to post signs; lacking proper storage for recyclables; failing to characterize special waste; and having unauthorized disposal or attempted disposal of liquid waste.

Socorro Landfill; improper storage of recyclables

Eleven inspections of the landfill between May 1988 and January 1998 showed violations for having blown or excessive litter, lacking a waste cover, failing to have an authorized waste plan, lacking methane sampling and failing to have a contingency plan. Those violations resulted in six Notices of Violation (NOVs). In addition to the NOVs, the department issued compliance orders to the city in 2003 and 2006. Those orders were settled but the city has not complied with portions of the settlement.

State regulations require that an operator demonstrates an ability to operate a landfill before a permit can be granted. The bureau offered the alternative to the city that it hire a private contractor to manage its landfill and participate in an affirmative action plan.

Permit Section — Additional Significant Activities

Rio Rancho Landfill Issued a 10-Year Permit Renewal and Modification

On June 2, 2008, Secretary Ron Curry approved the 10-year Permit Renewal and Modification for the Rio Rancho Landfill. The landfill is located in Rio Rancho on approximately 101± acres. Waste Management of New Mexico (the applicant) was approved to continue the construction and operation of the existing landfill; and to implement the permit modification to raise the height of the landfill by 50 feet above the previously permitted final grade. The modification of the finished vertical elevation will extend the useful site life of the landfill between five and ten years depending on the annual rate of disposal.

Waste Management operators continue to accept "solid waste" and "special waste" as defined in the New Mexico Solid Waste Act, and 20 NMAC 9.1. The solid waste is placed and compacted in lined units/cells that are served by environmental control systems, including a leachate collection system, active landfill gas collection and control systems, liner systems, and storm water management controls. Special waste is processed in accordance with the permit conditions and applicable regulations. At the end of each working day, the working face of the waste will be covered with at least six inches of soil or an alternative cover as approved by NMED.

The following list of non-hazardous wastes from the previous permit period was again approved:

- Residential municipal solid waste;
- Commercial solid waste;
- Construction and demolition debris;
- Petroleum contaminated soils (special waste);
- Sludge (special waste);
- Ash (special waste)
- Packing house and killing plant offal (special waste);
- Spill clean-up wastes from chemical substances or commercial products (special waste); and
- Treated formerly characteristic hazardous waste (TFCH).

The majority of waste received at the landfill originates primarily from Rio Rancho, NM, Sandoval County, NM, Albuquerque, NM, Bernalillo County, NM and surrounding areas. However, waste disposed at the landfill may be generated outside of those areas.

It is anticipated that the facility will continue to receive an average of 1,600 tons of waste per day from commercial haulers and the public. Waste Management of New Mexico, estimates a maximum rate not expected to exceed 2,000 tons of solid waste per day.

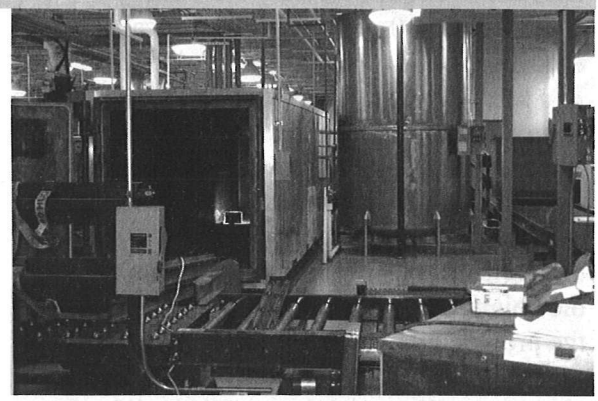
Installation of the protective liner and leachate collection system at the *Rio Rancho Landfill*

Permit Section — Additional Significant Activities

Stericycle Infectious Waste Processing and Transfer Facility
Issued a 10-Year Permit Renewal

On March 11, 2008, Secretary Ron Curry approved a 10-year Permit Renewal and Modification for the Stericycle Infectious Waste Processing and Transfer Facility (Stericycle). The facility is located at 1920 First Street, Albuquerque, New Mexico.

The permit renewal allows Stericycle to continue to service hospitals, laboratories, veterinary clinics and other health-care related facilities from New Mexico, Texas, Kansas, Arizona, and Colorado with their regulated infectious waste management needs. An expansion of 800 square feet for the wastewater pretreatment system allows for infectious waste processing to increase from 450 tons a day to 600 tons a day. Stericycle will continue to use an autoclave treatment process where steam sterilization under pressure disinfects the waste. Once rendered non-infectious, the waste is disposed of at a permitted landfill.



Infectious waste processing line at the *Stericycle Infectious Waste Processing and Transfer Facility*

In addition, the facility also operates a transfer station to send all trace chemotherapy and pathological waste to a permitted incineration facility out of New Mexico.

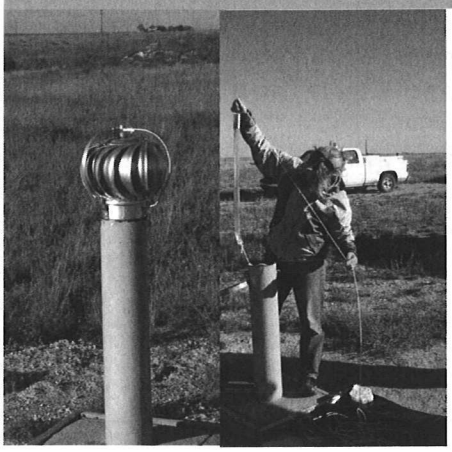
Permit Applications, Modification, and Renewals Issued in 2008

County	Facility Name	Type of Application
Bernalillo	Stericycle Infectious Waste Processing and Transfer Facility	Permit Renewal, 10-Year Permit Issued March 11, 2008
***Doña Ana	Camino Real Landfill and Recycling Facility	Permit Renewal and Modification, 1-Year Permit Issued July 24, 2008
Sandoval	Rio Rancho Sanitary Landfill	Permit Renewal and Vertical Modification, 10-Year Permit Issued Sept. 23, 2008
Socorro	City of Socorro Landfill	New Landfill Permit Application, Permit Denied July 25, 2008
Permit Applications and/or Modifications Submitted in 2008		
McKinley	Red Rocks Regional Landfill	Permit Renewal and Lateral Expansion
Santa Fe	Caja Del Rio Landfill	Permit Modification to Add Special Waste Sewage Sludge (Biosolids)

*** New Permit Renewal submitted in 2008

Permit Section – Technical Assistance

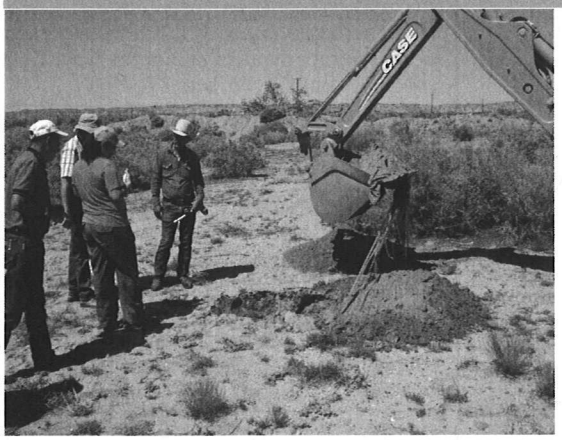
Clayton Landfill Closure



Solid Waste staff provided field assistance to the City of Clayton and their consultant Gordon Environmental to expedite the final closure of the locked landfill. Assistance consisted of completing excavation pits to determine the areal extent of the waste disposal areas and the depth of existing intermediate cover.

Additionally, two groundwater monitoring wells at this facility have elevated levels of Volatile Organic Compounds (VOCs) consistent with the chemical signature of methane. Staff recommended that a cluster of spinner vents be installed around the most contaminated wells. In a effort to determine the highest concentration of VOCs, water samples were collected with a HydraSleeve. (This was the first time that a water sample from a landfill in New Mexico was collected using this device.) The HydraSleeve captures a sample of water from any discrete interval in the screened portion of the well with no change in water level and minimal disturbance to the water column.

Valencia County Landfill Closure



On July 25, 2008 and July 29, 2008, Permit Section staff of the Solid Waste Bureau conducted an investigation of the areal extent of waste disposal areas and existing soil cover conditions. The staff performed a total of 27 depth-to-waste samples over the 22.5 acre landfill. In addition, the Bureau collected eight five-gallon soil samples and eight one-gallon bags for analysis of hydraulic conductivity, initial soil proctor compaction, standard sieve analysis, Atterberg limits, and soil classification. Each sample consisted of three different soil grabs from selected trenches. The purpose of this sampling effort was to obtain site specific data for the landfill cap modeling. Using the EPA's *Hydrologic Evaluation of Landfill Performance (HELP)* model, Vicky Baca, SWB Engineer completed the alternative cover design demonstration on behalf of Valencia County.

Additional technical assistance includes:

- Preparing scopes of work for engineering and groundwater Requests for Proposals (RFPs) for small facility operators.
- Completing groundwater sampling at unlined landfills to expedite landfill closures.