

APPENDIX C. Detailed Working Group Recommendations by Chapter

CHAPTER 3. WASTE CHARACTERIZATION ELEMENT

The Waste Characterization Working Group recommends the following:

- ❖ **Recommendation:** Develop and implement systematic methods to obtain and properly quantify waste generation and diversion rates:
 - Revise and modify the existing SWAR form
 - Include detailed and specific instructions for preparation and submission of data
 - Mandate use of a new form, preferably an online questionnaire that can be completed electronically
 - Implement use of the new form for reporting 2006 tonnages
 - Implement a more robust, comprehensive database allowing integrated management of all SWB information — SWARs; recycling, composting, and diversion reports; waste characterization data; permit, compliance, and enforcement records; illegal dumping reports; and so on.
 - Implement required use of the Waste Characterization Data Collection Forms included in Appendix H.
 - Provide technical support by NMED staff to assist operators with systematic collection and reporting of waste disposal and diversion activities.

- ❖ **Recommendation:** Include training modules in the Certification Courses for Landfill, Transfer Station, Composting, and Recycling Facility operators on proper data collection and reporting methods, as well as waste characterization instruction and hands-on field exercises.

- ❖ **Recommendation:** Assure consistency of waste collection data by requiring that all facilities install scales for weighing waste by 2008; and/or obtain scale data for wastes delivered from disposal sites (landfill).
 - In lieu of scaled weights, all waste disposal or diversion data must be converted from volume to tons using an approved formula on the annual report form provided by NMED. Methods used to obtain volume data must be specified by the operator and reviewed in the field by NMED staff
 - For facilities or municipalities that report data inconsistent with the best available population-based waste generation data, details must be provided on why the discrepancy exists, and what corrective measures will be taken to resolve data collection problems.
 - Obtain authorization from the State Legislature or Governor to establish a Solid Waste Infrastructure Grant program that will allow qualifying municipalities to obtain funds to purchase and install appropriate waste scales
 - Issue the first grants and have scales installed and operational within the next five years.

- ❖ **Recommendation:** Improve waste characterization database.
 - Within the next three years every MSW facility (landfill, transfer station, recycling facility) shall have completed at least one, and preferably two, waste characterization efforts
 - Data shall be compiled and evaluated by NMED staff and a report of waste characterization findings prepared
 - Within five years, secure state funding and conduct a formal statewide waste characterization study.

- ❖ **Recommendation:** Include in revised Regulations a requirement that all recycling, composting, and other diversion efforts report annual recovery data to NMED.
 - Within the next three to five years establish reporting requirements for all public and private sector entities engaged in diversion activities in New Mexico to provide data to NMED on tonnages of all materials diverted from landfill disposal

- Within three years promulgate revised Regulations to establish the above reporting requirements
- Within five years implement data systems and reporting methodologies to capture public and private sector diversion activities.

CHAPTER 4. DIVERSION ELEMENT

The Diversion Working Group recommends the following:

❖ **Recommendations on Grants and Reporting:**

- The Alliance will consider the following when it looks at grant protocol Grants and Incentives
 - The grant fund should be as large as possible
 - Grants should be awarded on an annual cycle
 - Grants should be given only to those Participating Organizations providing an economically viable and sustainable plan for providing access to recycling
 - Grants should be prioritized so that entities seeking to reach Tier 1 status are given first preference; entities at Tier 1 status are given second preference; entities at Tier 2 status are given third preference; etc
- NMED should look at other sources of funding for grants (such as the tire recycling fund and water quality grants) in order to provide the largest listing of resources possible.
- Recycling Access Reporting
 - Participating Organizations required to provide SWARs will complete additional information sections documenting access to recycling. For Participating Organizations not already required to submit SWARs, SWB will provide a short form for reporting the necessary data. Participating Organizations will provide requested information on an annual basis. They will list all known services offered in their area that accept each item identified for recycling or diversion (including composting and beneficial use), and provide diverted tonnage data.
 - SWB shall work to:
 - Ensure that reporting forms can be, and are encouraged to be, submitted electronically
 - Create a mechanism so that data can be compiled automatically when received
 - Compile the information on Participating Organizations' Community Recycling Plans, performance in providing access to recycling and/or diversion, and diverted volume data, and make this information available to the public.

❖ **Recommendation:** Overhaul reporting and data systems with thought given to methodologies, models, and databases already developed and tested to capture recycling and diversion information from the private sector, as well as small recycling operations and reuse programs.

❖ **Recommendation:** Capture diversion volumes from all composting operators in the state, including home composting.

❖ **Recommendation:** Review and possibly modify the Regulations on calculating the state solid waste diversion rate to allow for capturing information on non-MSW materials diverted for *beneficial use*.

For example, the Regulations exclude bio-solids composting from the diversion rate, because EPA does not classify these fractions as MSW. However, beneficial use diverts these materials from landfill disposal, extends the life of expensive landfill space, and helps avoid the costly and sometimes contentious process of siting new landfill capacity.

❖ **Recommendation:** Research C&D material reuse and recycling potential. Although EPA does not count C&D recovery as MSW diversion, this material is almost one-third of wastes sent to New Mexico landfills. Key stakeholders urge following the example of other states (e.g., CA, OR, MN), and revising New Mexico standards and the Regulations to allow C&D recycling and reuse to be counted as diversion.

C&D is often generated in large quantities, concentrated at the point of generation, and has the potential to be reused locally, which can simplify logistics for rural areas and small towns, as well as urban areas. Composition studies elsewhere have found that over 75 percent of C&D materials are recyclable. Developing C&D recycling markets and counting C&D recovery in the state diversion rate bear further evaluation.

❖ **Recommendation:** A concerted effort should be made to promote and document existing and potential *source reduction* programs in New Mexico. SWB should coordinate with the NMED Green Zia education and recognition programs in helping to expand private sector efforts to reduce quantities and toxicities of solid waste. Also, reuse programs that intercept discards before they actually enter the solid waste stream should be among the activities tracked as *source reduction*.

❖ **HHW Program Recommendations:**

- Educational Efforts
 - Prepare a public outreach campaign stressing “Buy Only What You Need—Find Safe Products” to reduce the amount of HHW purchased
 - Increase citizen understanding of proper management and disposal for latex paints, which can be disposed of in landfills if allowed to harden before disposal
 - Encourage formation of a waste exchange network for reuse of HHW materials.
 - State purchasing policy shall be changed to include policies for the procurement of recycled commodities such as re-refined oil
 - State contracts should be developed to allow local communities, cities, and counties to procure HHW services under a state bid contract
 - Include HHW training module in transfer station and landfill certification courses.
- Funding Mechanisms
 - Expand the scope of SWFGF to include funding or low interest loans for HHW collection programs in New Mexico
 - Consider establishing a HHW/CESQG Grant Fund to help communities off-set collection program costs.

❖ **CESQG Recommendations:** As precedent exists in New Mexico to regulate several specific wastes such as used motor oil, lead-acid batteries, and liquids, and as mercury-containing lamps are currently listed as a Universal Waste, and as these wastes have not been previously addressed, it is recommended that the Regulations be amended to include requirements for these wastes.

❖ **Mercury Containing Lamps Recommendations:** All businesses are strongly encouraged to recycle their-mercury-containing lamps. The NMED is instructed to prepare and maintain a current list of lamp recyclers.

❖ **Other Recommendations:**

- Establish a HHW and CESQG Fund based on a Legislative Appropriation to help implement management, collection, and recycling programs for hazardous items.
- Conduct a study and evaluate management data within three years to determine current status of the problem and possible impacts. Focus on rural areas. Results will assist with a determination to potentially ban of these materials with a curbside hauler exemption during the next Plan review period.
- Coordinate with, and scale up efforts through the Green Zia Program to include more businesses in training and recognition programs for properly managing hazardous wastes.
- Include a waste quality, screening, and segregation training module in landfill and transfer station certification courses.
- Expand and enhance NMED education and outreach efforts to the affected community.

CHAPTER 5. FACILITIES ELEMENT

The Facilities Working Group recommends the following:

❖ **Solid Waste Facility Siting Recommendations:**

- The Regulations have been effective at protecting the environment, but smaller population centers are experiencing the greatest cost impacts
- The Regulations should foster and simplify the siting of recycling and composting facilities to achieve waste diversion objectives listed in the Act, and to extend the life of expensive remaining landfill space
- The Regulations should also facilitate siting of transfer stations and convenience centers to reduce the cost and complexity of solid waste management for smaller communities
- Funding sources should be identified for smaller communities closing local landfills and transitioning to transfer to offset increased infrastructure and transportation costs
- Funding sources should be identified for recycling and composting initiatives.

❖ **Solid Waste Capacity Recommendations:**

- Recommendations regarding capacity focus on the data that is available to monitor the status of each facility, and to identify regional capacity shortfalls in advance. However, the data collected and compiled by NMED in the SWAR process is inadequate to make this evaluation. Therefore, improve the uniformity and validity of the data reported by each facility, and simplify the reporting process
- Develop additional tools to assist NMED in compiling and evaluating the data (i.e., electronic database, “waste shed” mapping, metrics, etc.)
- Identify funding sources to upgrade the data collection and analysis effort.

❖ **Other Recommendations:**

- Develop an updated, forward-looking inventory of landfills, transfer stations, convenience centers, recycling, composting, and other diversion facilities. This matrix (see sample format Tables 5.1 and 5.2) will identify data with regard to permit status, capacity, longevity, waste receipt rates, etc., necessary to meet the 10-year and 20-year planning windows. The analysis focuses on facilities that are expected to outlive the mandatory closure requirements of the proposed regulatory revisions. This task will also include the development of uniform definitions (e.g., permit capacity vs. ultimate capacity). Table 5.1 illustrates the lack of uniformity of the reported data, and highlights the need for improved data collection.
- Prepare a Solid Waste Facilities Map (see sample format Figure 5.1 in the Plan) that identifies site locations as well as service areas, or “waste sheds.” This map connects transfer stations and public convenience centers with destination disposal sites. Boundaries would be estimated in order to evaluate population equivalents, haul distances, etc; and most importantly, highlight areas that require new facilities and/or financial assistance. This is a more functional approach than using the six NMED Solid Waste Districts, which were established for enforcement purposes, not to reflect disposal market conditions.
- Prepare a Solid Waste Diversion Map (see sample format Figure 5.2 in the Plan) showing locations of recycling, composting, and other diversion operations (e.g., reused building material outlets), and indicating the flow of recovered materials to processing facilities, markets, and end-use manufacturers. This map will show which areas of the state offer access to recycling, as recommended by the Diversion group, and which areas will need technical, funding, or other assistance to implement diversion capabilities.
- Improve the value and applicability of the current database on solid waste facilities as updated by SWARs submitted by each government unit or waste management entity. This will include several initiatives:
 - Revise the SWAR Form
 - Make the SWAR Form more user-friendly (e.g., allow electronic completion/ filing; furnish historic site-specific data online, etc.)
 - Require that reporting for waste receipts at major disposal sites, to the extent practical, be recorded in actual weights to promote uniformity of data
 - Mandate in the Regulations that annual reporting documentation submitted by each solid waste facility be authenticated by the operator using, for example, certification by a knowledgeable landfill operator (certified by NMED), or a registered professional engineer with specific knowledge of the facility
 - Expedite preparation and distribution of the required SWAR by SWB
 - Provide funding for implementation of the above, as well as updates to data collection and analysis programs.

- Promote the siting of recycling, composting, and transfer facilities in furtherance of statewide waste management and waste reduction goals.
 - The Regulations should foster and simplify the siting of recycling, composting, and transfer facilities
 - Funding sources should be identified for communities which are transitioning from landfill to transfer to offset increased infrastructure and transportation costs.

Table 5.1 New Mexico Solid Waste Facility Inventory - Landfills

Facility Name	Permit Status Issued : Expires	2004 Data (draft)							
		2004 Reported Beginning Capacity (SWB) (cy)	2004 Reported Used Capacity (SWB) (cy)	2004 Tons Accepted (SWB) (tons)	2004 Reported Remaining Capacity (SWB) (cy)	2004 Facility Daily Usage Rate (SWB) (cy)	Years Remaining (SWB table) (yrs)	Years Remaining (via calc.) (yrs)	2004 Facility Daily Intake Rate (SWB) (tons)
Subtitle D Landfills									
Caja Del Rio	6/27/1995 : 06/27/2015	6,375,191	317,566	210,690	6,057,625	870	19	27	1.1
Camino Real	3/5/1997 : 3/5/2007	7,573,179	978,315	568,850	6,594,864	2,680	7	9	3.1
Cerro Colorado	6/22/2000 : 6/22/2020	81,392,000	1,080,092	533,730	80,311,908	2,959	74	104	2.9
Clovis	6/15/1998 : 6/15/2018	1,682,881	135,374	88,800	1,547,507	371	11	16	4
Corralitos	8/9/1995 : 8/9/2015	16,762,937	335,037	134,020	16,427,900	918	49	69	7
Lea County	12/17/1997 : 12/17/2017	3,965,198	128,656	73,160	3,836,542	352	30	42	4
Northeastern NM Regional	3/26/1997 : 3/26/2007	5,417,500	53,960	32,270	5,363,540	148	99	139	1
Northwestern NM Regional	10/12/1995 : 10/12/2015	0	0	96,980	0	0	NP		5
Otero/Lincoln Regional	10/4/1993 : 10/4/2013	83,893	8,067	76,990	75,826	22	9	13	4
Rio Rancho	4/29/1994 : 4/29/2004	4,531,465	435,395	354,220	4,096,070	1,193	9	13	1.9
Roswell	5/21/1997 : 5/21/2017	1,419,372	196,213	87,760	1,223,159	538	6	9	4
Sand Point	3/2/1994 : 3/2/2014	2,590,630	111,137	69,570	2,479,493	304	22	31	3
Sandoval County	6/17/2005 : 6/17/2025	0	0	252,150	0	0	NP		1.3
SW NM Regional	12/19/1994 : 12/19/2014	1,829,833	67,296	28,040	1,762,537	184	26	37	1
Taos	8/16/2001 : 8/16/2021	3,038,000	72,800	36,340	2,965,200	199	41	57	1
Torrance/Bernalillo County	6/18/1997 : 6/18/2017	4,357,349	58,057	24,950	4,299,292	159	74	104	1
Tucumcari	5/31/2005 : 5/31/2025	0	0	2,700	0	0	NP		
Pending Permits (currently registered)									
De Baca County		0	0	2,150	0	0	NP		
Deming		923,000	108,800	37,370	814,200	298	7	11	2
San Juan County		0	0	121,490	0	0	NP		6
Socorro		0	0	15,980	0	0	NP		
Valencia Regional/Tri-Sect		9,918,750	0	17,850	9,918,750	0	NP		
Vaughn		0	0	1,060	0	0	NP		
C & D Landfills									
Magdalena C & D	08/7/2000 : 8/7/2020	not listed	not listed	not listed	not listed	not listed			not listed
Mesa Verde C & D	3/12/2001 : 3/12/2021	450,966	15,911	5,150	435,055	44	27	38	
Southwest	5/8/1997 : 5/8/2007	1,378,415	301,531	189,840	1,076,885	826	4	5	1.0
Permitted Sp. Waste (only) Landfills Permit Issued									
Keers Asbestos (2)	7/16/93								
Lea Land Industrial (2)	2/27/96								

Notes:
(1) NP = not provided on SWB table
(2) Source: SWB Permit Section

Table 5.2 New Mexico Permitted Transfer, Recycling, and Composting Facilities (Draft - To Be Completed)

Facility Name	Permit Status Issued : Expires	Design Capacity	Annual Waste Receipts (2004 Annual Report)	Service Area (2004 Annual Report)	Waste Destination
Transfer Stations					
Artesia	3/16/1995 : 3/16/2015				
Cibola County	1/23/1996 : 1/23/2016				
Deming	11/11/2001 : 11/11/2021				
Don Reservoir	8/24/2000 : 8/24/2020				
Eagle Rock	8/7/2000 : 8/7/2020				
East Mountain	12/2/2002 : 12/2/2022				
Las Vegas	10/19/1999 : 10/19/2019				
Los Lunas	11/17/1999 : 11/17/2019				
McKinley County	1/23/1996 : 1/23/2016				
Montessa Park	5/11/1998 : 5/11/2018				
Ruidoso (Gavilan Canyon)	12/19/1994 : 12/19/2014				
Santa Fe	5/7/1996 : 5/7/2016				
South Central SWA	11/2/1995 : 11/2/2015				
Recycling Facilities					
Cerro Colorado IPF	8/5/1999 : 8/5/2019				
Environmental Control	1991 : 2001				
Master Fibers	11/15/1996 : 11/15/2006				
Durango-McKinley Fiber Co.	4/17/1996 : 4/17/2006				
Composting Facilities					
Albuquerque	8/5/1999 : 8/5/2019				
Artesia	9/17/1993 : 09/17/2013				
Los Alamos	1/3/1996 : 1/3/2016				
Sandoval	6/17/2005 : 6/17/2025				

Table courtesy of Gordon Environmental, Inc, 2006

CHAPTER 6. EDUCATION ELEMENT

The Education Working Group recommends the following:

❖ Program Recommendations:

- How to Set Up a Community Recycling Program
- Create Online Recycling Market Directory
- Outreach Program for Elected Officials
- Reduce and Reuse Awareness Campaign Aimed at Citizens

❖ Other Recommendations:

- Identify partners
- Identify priorities
- Create marketing product with unified message
- Provide funding to maintain list of resources
- Identify target audiences and distribute marketing product to them
- Identify verification measures to confirm that education strategies are working (messages are heard)

CHAPTER 7. FUNDING ELEMENT

❖ **Funding Discussion:** The Funding Working Group has not reached consensus on what funding mechanisms could be used to create the \$1,500,000 annual budget dedicated to support the Statewide Programmatic Initiatives Fund described above. The group discussed several ideas.

- Secure an additional \$1.5 million annually from the general fund to support program priorities
- Seek a legislatively funded trust that would provide interest sufficient to provide \$1.5 million in interest income for program priorities
- Ask the legislature to enact a surcharge on some identified item, such as a per-ton fee on waste sent to landfills, or a tax on plastic retail bags, and dedicate the resulting revenues to a solid waste management/diversion fund. NOTE: It was very important to some group members to ensure that a surcharge, if imposed, contain limits that preventing the fee from being increased for other purposes later.
- Add an additional percentage to the ESGRT in general to fund program priorities
- Bottle bill – Though this type of legislation has been introduced a number of times before in NM, reportedly the earlier bills and redemption programs they set forth were poorly designed. The Hawaii and California redemption systems (bottle bills) offer good models to follow in crafting a sound bill
- Ask the legislature to enact disposal fees on tires or other problem waste items, with the resulting monies earmarked to a solid waste management/diversion fund. NOTE: A disposal fee on tires could allow the state to recoup “disposal fees” tire dealers are already charging to customers, but that are presently being retained by dealers rather than actually going to support tire disposal, as legislators and others believe.

After evaluating the current funding situation, the Funding Working Group reviewed requests from the other working groups and developed the following recommendations:

❖ Capital Outlay Revolving Fund Recommendation

- Within the next three years, a capital outlay revolving funding source should be created. Capital outlay expenditures that are within the control of NMED should come out of this revolving funding source. The funding criteria should contain both sustainability and accountability components.
- Examples of existing revolving funds that could be looked at as models include:
 - Water Trust Fund

- EPA Clean Water Revolving Fund
- Mortgage Finance Authority or New Mexico Finance Authority funds as sources
- Revolving loans funds as used in other states to build recycling industry capacity.

❖ **Statewide Programmatic Initiatives Fund Recommendation**

- Within the next three years, an on-going source of funding should be enacted that is dedicated to support the program priorities listed below, and is separate from the capital outlay revolving funding source. The fund should have an annual budget of \$1,500,000 to support these priorities:
 - Data projects
 - Installation of scales at all solid waste disposal, composting, and other discard management facilities for accurate reporting of materials handled by weight
 - Upgrading of the NMED SWAR form and database to improve the accuracy and reliability of information needed to assess current solid waste management activities statewide, project future capacity needs and plan accordingly
 - Support for interim waste sampling surveys at landfills, transfer stations, recycling/ composting facilities, and other discard handling operations over the next three years
 - Conducting a statewide waste composition study within the next 3-5 years yielding waste generation quantities and projections by population and other relevant factors as a basis for sound planning.
 - Technical assistance to participating organizations working on diversion goals in the Plan and working towards integrated solid waste management systems, including:
 - Technical assistance and training on the interim waste sampling protocol
 - Technical assistance and training on the new SWARs
 - Technical assistance, training, and information resources on setting up recycling and composting programs, marketing materials, building public participation, etc.
 - Support educational goals established in the plan:
 - Implement a statewide message campaign (see Chapter 6)
 - Foster public awareness of recycling, reuse, reduction, correct disposal of HHW, illegal dumping abatement, and other diversion activities in which people can participate on their own, even before an organized recycling program may be available in their community.
 - Support a program to assure that EJ interested parties have access to, and participation in, solid waste management planning and decisions, including support for a public participation process in developing the next Plan.

❖ **Funding Criteria Recommendation**

- When NMED has funding for the Statewide Programmatic Initiatives Fund for the purposes listed above, NMED should require that funding requests contain assessment plans to evaluate program performance, sustainability, and accountability. NMED should review its existing criteria for funding that are in place now and ensure that they have sustainability, accountability, and evaluation components. Applicants proposing diversion projects should include projections of waste reduction and diversion quantities expected as a result of project implementation.
- For the Capital Outlay Revolving Loan Fund to establish waste disposal and diversion capacity infrastructure projects, applicant local planning bodies should also include program evaluation measures. Criteria to be considered for this fund include:
 - Provision of local match funds
 - An advance feasibility analysis projecting long-term sustainability and accountability of proposed projects
 - Parameters and methods for evaluating and reporting project performance at the conclusion of the funding cycle. For example, waste reduction and diversion programs should report diversion rates achieved compared to projected diversion
 - A repayment schedule and evidence of ability to repay loans
 - Government units applying for funds from future capital outlay funding programs should first demonstrate that they have fully utilized the Environmental Services Gross Receipts Tax (ESGRT) for local needs.

CHAPTER 8. ENVIRONMENTAL JUSTICE COMPONENT

The Environmental Justice Working Group recommends the following:

- ❖ **Recommendation:** Work with NMED EJ Policy Committee on these and other recommendations to ensure effective implementation of the Executive Order mandates.
- ❖ **Recommendation:** Upon implementation of the Regulations, evaluate EJ outcomes and coordinate uniform standards:
 - Within three years, evaluate how the Regulations are working for all EJ stakeholders
 - Consider the evaluation as part of the planning process for the next update of the Plan
 - Coordinate among all bureaus within NMED to develop uniform standards for the assessment of cumulative effects that may arise from the concentration of regulated facilities in vulnerable communities
- ❖ **Recommendation:** Implement EJ training and assistance:
 - Make training available for local governments, tribal entities, non-governmental organizations, community groups and rural areas on solid waste management strategies and emergency response issues regarding solid waste matters.
 - Provide technical support by NMED staff to assist local planning and zoning entities regarding EJ guidance and training in order to inform local zoning officials about the environmental protection of vulnerable communities.
- ❖ **Recommendation:** Within one year of the approval of the Plan, develop and implement an outreach and technical assistance program to assist local governments and communities with strategies to limit illegal dumping. Those strategies shall include, but are not limited to:
 - The development of more transfer stations, citizen convenience centers, recycling facilities, and composting operations as recommended in Chapter 5 of the Plan (“Facilities Element”)
 - Initiatives regarding intergovernmental cooperation for the development of regional solid waste disposal facilities are encouraged. This is consistent with recommendations in Chapter 5 and 6, the Facilities and Education Elements respectively, of this Plan including the mandatory closure of landfills that cannot meet modern standards
 - Providing educational materials which include information on illegal dumping and the location of solid waste facilities
 - Providing financial and technical assistance to local governments and communities, with priority given to low income communities, in order to limit illegal dumping
- ❖ **Recommendation:** Implement website postings consistent with EJ:
 - Within one year of the approval of the Plan, SWB shall post links to public health and environmental databases, and a comprehensive list of community resources (in English and Spanish).
 - NMED and the SWB shall seek adequate funding and within 6 months of receipt of this funding, SWB shall publish on the NMED website, and make available, Spanish language translations of the Executive Order, the Plan, and the Regulations
 - NMED shall evaluate strategies to make information available including posting information on the website, and providing a hard copy for the public for review related to permits, annual reports and applications. SWB shall consider the information posted by the Hazardous Waste Bureau as a template.
- ❖ **Recommendation:** Explore options to provide technical assistance from a neutral source for affected communities and the public.