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Printed Name of Representative: Patrick Peck, Director

Organization Name: South Central Solid Waste Authority

Signature: [signature]

Date: May 22, 2013
SWANA 2013 Excellence Award Application
Integrated Solid Waste Management Systems

South Central Solid Waste Authority, New Mexico
The South Central Solid Waste Authority (SCSWA) was established in 1992 to provide solid waste and recycling services to Las Cruces and Doña Ana County, New Mexico. SCSWA has become a model for full service cost effective integrated waste management for an area that combines the urban area of the state’s second largest city and a 3,800 square mile rural area – larger than the combined area of Delaware and Rhode Island. The SCSWA system integrates solid waste disposal at the Corralitos Regional Landfill with waste diversion programs (single stream recycling, household hazardous waste collection, and drop off for green waste, white goods and e-Waste) for the urban and remote rural areas. Successful public outreach and education has increased recycling and waste diversion and is targeting illegal dumping. With an eye on 30 years in the future, SCSWA has embarked on comprehensive programs to expand and continuously improve these integrated services.
Section 1

Overview of System and System Performance

The South Central Solid Waste Authority (SCSWA), the City of Las Cruces, and private service providers provide an integrated solid waste management system for the region centered in Doña Ana County in southern New Mexico. The SCSWA was established in 1992 and continues to be the governing authority for solid waste management for Doña Ana County.

In the past five years, the SCSWA has implemented the following programs:

- Waste diversion and re-use programs to increase landfill diversion from 5% to 26% in five years.
- Using public/private partnerships to implement automated curbside recycling in the City of Las Cruces (99,000 population)
- Performing annual E-waste recycling events
- Cleaning 285 tons of trash from illegal dumpsites
- Identifying engineered solutions to increase the available airspace at the Corralitos Regional Landfill by about 200 years
- Provided MSW automated curbside collection services for City of Anthony and Sunland Park
- Implemented “Green” or sustainable culture
  - 100% use of Biodiesel
  - Electric and Hybrid vehicles
- Stabilizing an abandoned landfill site by using tire bales to armor a stormwater channel

The SCSWA is currently embarking on programs to further increase waste diversion, develop a series of state-of-the-art transfer stations, while continually providing its customers with superior cost-effective service. SCSWA’s integrated waste management system has evolved to be able to effectively and efficiently meet solid waste management needs and is poised to continue to provide exemplary services for the forecasted population growth.

A. Facilities and Programs

The service area is divided into three management areas: North, Central (Greater Las Cruces), and South, each encompassing the three most densely populated areas in Doña Ana County. SCSWA facilities are
located throughout the management areas. Figure 1 (previous page) shows the relationship between nine Collection and Recycling Centers (CRCs), one transfer station, one recycling center, and one regional landfill. These facilities are connected together by a fleet of collection vehicles and transfer trailers that move waste between generation points and the regional landfill or the material recovery facilities. Brief descriptions of these facilities include their function and interrelationships. The facilities are distributed within the management areas for convenient access as shown in Figure 2.

**COLLECTION AND RECYCLING CENTERS (CRC)**

The CRC serves as a site for disposal of solid waste, recyclable materials, household hazardous waste, green waste and white goods. The distribution of CRCs in the management areas is shown in Figure 2 and a photo of a typical CRC is shown in Figure 3. The use of CRCs is limited to residents in unincorporated areas of the service area. Site attendants monitoring the incoming waste are trained in the rules and regulations governing various types of waste that are accepted at the CRCs. Upon acceptance of a load, the attendant directs the customer to the appropriate unloading area. All prohibited waste is turned away during initial inspection and the resident is provided direction for legal disposal. Solid waste unloading is monitored to ensure material is being deposited appropriately.

Non-recyclable and non-prohibited waste is unloaded into roll-off containers and open top-trailers. Separate designated containers are used for collection of materials such as waste oil, batteries, and antifreeze. Scrap metal and white goods are also separated by the attendants for recycling. Facility attendants note the composition, volume, and origin of the waste for every load and maintain waste logs, recycling logs, and random inspection reports for the facility. When the roll-off or trailers are full, a transport driver delivers an empty container/trailer and transports the full container to the SCSWA’s Corralitos Regional Landfill. The CRCs are responsible for about 15% of the waste received at the Corralitos Regional Landfill and 15% of recyclables for the SCSWA system.

**AMADOR AVENUE TRANSFER STATION**

The SCSWA provides solid waste transfer and disposal of non-hazardous, MSW for residents and businesses located throughout Doña Ana County. In conjunction with Las Cruces Utilities Solid Waste, Doña
Ana County Utilities, and their respective recycling components, the SCSWA accepts and disposes of:

- MSW collected by government and private haulers;
- All forms of residential waste delivered by the public; and
- C&D waste delivered by government, private haulers, and contractors.

The SCSWA Amador Avenue Transfer Station, located in Las Cruces, is shown on Figure 4. At this facility, waste from the SCSWA service area is accepted, inspected via a random vehicle inspection plan, and compacted and loaded into transfer trailers for the 14-mile trip to the Corralitos Regional Landfill (located west of Las Cruces). Waste is pushed into a pre-compactor unit to achieve maximum allowable payloads of 80,000 tons ensuring a cost-effective hauling operation while reducing the number of vehicles on the highways. Figure 5 (below) shows the handling of the various waste types at the Amador Avenue Transfer Station. Loads with significant quantities of metal waste and large, bulky items are typically diverted from handling at the SCSWA Amador Transfer Station due to the compaction difficulties with such large items and are hauled directly to the landfill.

There are two receiving areas on either side of the surge pit at the same relative elevation (Figure 6, right). The traffic flow plan and the surge pit are designed to segregate commercial and heavy trucks in the north receiving area from public vehicles in the south receiving area. The south area for public use is designed for one-way traffic flow, with one entrance and one exit. The primary objective of the design of this public area is to protect the safety of facility users. Approximately 70 to 80 percent of the total material processed at the facility is MSW while the other 20 to 30 percent is C&D material. In 2012, Amador Avenue Transfer Station managed about 130,000 tons of material, which was ultimately disposed at the Corralitos Regional Landfill.
AMADOR AVENUE RECYCLING CENTER
The Amador Avenue Recycling Center is utilized by the public as a drop-off location for the collection of recyclable material. The center managed approximately 30,000 tons of recyclable material in 2012. The center collects the following material types:

<table>
<thead>
<tr>
<th>Paper Products</th>
<th>Plastic Products</th>
<th>Metals</th>
<th>Vehicle-Related Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newspapers/Old Newspaper</td>
<td>Plastics (#1 through #7)</td>
<td>Scrap Metal/White Goods</td>
<td>Used Oil</td>
</tr>
<tr>
<td>Pulp Cardboard/Old Corrugated Cardboard</td>
<td>Styrofoam</td>
<td>Aluminum</td>
<td>Batteries</td>
</tr>
<tr>
<td>Office Paper/Telephone Books</td>
<td></td>
<td>Tin</td>
<td>Tires</td>
</tr>
</tbody>
</table>

Table 1 - Materials collected at Amador Avenue Recycling Center

The SCSWA maintains two contracts for recyclable materials. Collected material, other than e-Waste, is loaded into a transfer trailer at the SCSWA Amador Avenue Transfer Station where it is hauled 45 miles to Friedman Recycling, Inc.’s Material Recovery Facility (MRF) in El Paso, Texas. E-waste is hauled to Unicor recycling facilities in Phoenix and Tucson, Arizona and Texarkana, Texas.

CORRALITOS REGIONAL LANDFILL
The SCSWA Corralitos Regional Landfill (Figure 7) serves as the disposal location for a majority of waste generated within the Doña Ana County service area and portions of adjacent counties. The landfill is located 14 miles west of Las Cruces. Most of the waste is received by tractor trailers from the SCSWA Amador Avenue Transfer Station and CRCs. However, private haulers with established accounts are allowed to transport material directly to the landfill. The landfill receives 400-500 tons/day and about 120,000 tons/per year. The current landfill permit has total of 19,000,000 CY of airspace which provides an overall life of the permitted disposal area of 50 years. A permit renewal and modification is in development that would extend the life of the first phase of the regional landfill to an additional 90 years. The landfill is expected to accommodate waste for a total of 200 years at the completion of both phases of the landfill.

WASTE TRANSFER FLEET
The SCSWA operates an overall fleet of 22 vehicles including nine transfer trucks, three roll-off trucks, and support vehicles. The vehicle fleet are stored and maintained at the Amador Avenue facility. The fleet is less than 10 years old and RTA fleet management software is used to track maintenance for the fleet vehicles.
B. Population, Service Area, and Tonnage that are Managed

POPULATION
Doña Ana County is one of the fastest growing counties in New Mexico with an estimated 2012 population of 214,445. The population has increased of over 30 percent since the formation of the SCSWA in 1992. The City of Las Cruces is the second largest city in New Mexico with a population of approximately 99,665 people. Population projections forecast a 30 percent increase over the next 30 years for Doña Ana County based on Doña Ana County’s Vision 2040: A Sustainable Outlook for Doña Ana County and the City of Las Cruces (Vision 2040) plan. A thumbnail sketch of Doña Ana County demographics from the U.S. Census Bureau is:

- Age – 53% are between 18 and 65 years old; 13% are over 65 years
- Ethnicity – 66% are Hispanic; 30% are white; 4% are American Indian, Black, or Asian
- Homeownership rate – 66%
- Median Household Income -$37,223
- Persons below the poverty level – 26%

SERVICE AREA
The 3800-square mile SCSWA service area includes all of Doña Ana County and portions of the White Sands Missile Range in Otero County and the City of Truth or Consequences in Sierra County. Within the service area about 46% of the population resides within the Las Cruces city limits, and the remaining lives in unincorporated areas, where the population density is about 31 people per square mile. The unincorporated areas include 37 designated colonias which were established without provision for infrastructure or services. Level of service varies between the communities that SCSWA serves. In Sunland Park, only basic once per week collection is provided for $12.00 per month while the City of Las Cruces provides weekly MSW service, bulk and brushy collection, and curbside recycling for $17.62 per month.

TONNAGE MANAGED
The SCSWA managed approximately 158,000 tons per year of MSW and C&D (Table 2). The SCSWA, the City of Las Cruces, and Doña Ana County have implemented waste diversion programs to significantly increase diversion of material from 4.9% in 2007 to 26% in 2012.

C. Discuss the Effectiveness of the System and How Effectiveness Is Measured
The SCSWA mission statement includes a commitment to the triple bottom line: “The Mission of the SCSWA is to manage the solid waste in these areas in a manner that is environmentally sound, socially responsible, and cost-effective.” System effectiveness is measured against objectives in these three facets: financial, social, and environmental.
FINANCIAL OBJECTIVES AND PERFORMANCE

The SCSWA is an enterprise fund and must be wholly economically sustainable. The financial performance objectives are:

- Fiscal responsibility through annual budgets, budget adherence, and financial audits
- Achieve “no findings” on annual independent audits
- Plan for future growth and increased demands on the system

Fiscal Responsibility. An annual budget is developed by the SCSWA Executive Director and is approved by the SCSWA Board of Directors, including budget revisions when necessary. The budget is established with the goal of ensuring that operational expenses do not exceed the funds available.

A monthly financial statement is prepared for review by the SCSWA Board of Directors at their monthly meeting. The financial statements are reviewed, approved, and archived in the monthly meeting minutes. The monthly SCSWA Board of Directors meetings are open to the public which maintains public transparency in the financial operations of the agency.

Achieve “No Findings” on Annual Independent Audits. The SCSWA has an excellent record of performance on annual independent audits. The most recent audit was completed in November 2012. The annual audits examine the basic financial statements, the schedule of revenues, expenses, and changes in net assets. The audit for the year ending June 30, 2012 found that the financial statements “present fairly, in all material respects, the financial position of the SCSWA” and that both the financial statements and budgetary comparison are in conformity with accounting principles generally accepted in the United States. There were no audit findings in the latest audit report. In the previous eight years there has been only one audit finding, which was corrected immediately.

Plan for Future Growth and Demands

In 1992, the SCSWA developed a 20 year solid waste management plan (SWMP) which initially focused on development of a regional landfill and a series of transfer facilities, implementation of recycling and waste diversion programs. In 2012, the SCSWA updated the SWMP by developing a 5-Year Business and Master Plan. The 2012 Plan Update identifies programs to prepare the SCSWA to meet future waste management needs of the City and County. Although it is a 5-year plan, the planning horizon is 30 years in the future recognizing that funding and implementing improvements in waste reduction, diversion, collection, transfer and disposal programs require long-term vision. The business portion of this Plan considers potential funding sources to implement recommended improvements. The plan is considered to be a living document and is regularly revised to meet the needs and future goals of the SCSWA.

This plan includes:

- Review of the characteristics of the service area and how they may change in five years
- Description of the SCSWA facilities and an assessment of facility needs
- Evaluation of non-SCSWA solid waste management facilities in the service area

SCSWA Planned Infrastructure Improvements

- Add one transfer station in each Management Area
- Consolidated services from six Collection and Recycling Centers to new transfer stations
- Build two new Collection and Recycling Centers
- Co-locate Collection and Recycling Centers with wastewater treatment plant for green waste/biosolids composting (where possible)

Infrastructure improvements shown in Figure 8 (page 9)
■ Assessment of legislative and regulatory drivers

■ Analysis of options to meet SCSWA needs and recommended option

The SCSWA Board of Directors participates in the development and routine updates to the 5-Year Business and Master Plan, particularly in the analysis of options and selection of a recommended option.

The 2012 Update has five County-wide recommendations and infrastructure improvements in each of the management areas that are necessary to implement the County-wide recommendations. The SCSWA has made significant progress in implementing each of the recommendations:

■ **Pass an ordinance that directs solid waste within the SCSWA service area to SCSWA designated facilities**: The Solid Waste Ordinance has been drafted. Eight community meetings to introduce the benefits of the ordinance were held in April-May 2013. The ordinance will be considered by the Doña Ana Board of Commissioners in the summer of 2013 with the goal of an effective date of September, 2013.

■ **Curbside collection in unincorporated areas of the County**: Infrastructure improvements and the Solid Waste Ordinance are both necessary to make curbside collection in the unincorporated areas economically possible. Conceptual designs of facilities and initial land acquisition strategies have started. The communities have been involved in infrastructure improvements through community meetings.

■ **Landfill permit renewal and modification to extend landfill life**: The permit renewal and modification application will be submitted to the New Mexico Environment Department in June, 2013.

■ **Complete Safety Upgrades**: Continually improve safety at all SCSWA facilities.

■ **Increase recycling in unincorporated areas of the County**: Implemented recycling drop-off programs at the Collection and Recycling Centers.

*The SCSWA financial performance and stability and planning for the future show that financial objectives for effectiveness have been met.*
Figure 8 - SCSWA infrastructure improvements are planned to increase efficiency in the Integrated Solid Waste Management System.

**PROPOSED INFRASTRUCTURE IMPROVEMENTS**

**MEJORAS SUGERIDAS A LAS INSTALACIONES**

**Overview of System and System Performance**

**South Central Solid Waste Authority (SCSWA)**

**Integrated Solid Waste Management System**

**New Mexico**

**ANTHONY TRANSFER STATION**

**Doña Ana County**

**Hatch**

**Radium Springs**

**Las Cruces**

**Garfield **

**SALEM TRANSFER STATION**

**Central Management Area**

**Zona de Gestión Centro**

**Butterfield**

**La Mesa**

**Mesquite**

**Old Foothills Landfill**

**Green Waste Clippings**

**JORNADA TRANSFER STATION**

**Central Management Area**

**Zona de Gestión Centro**

**La Union**

**Santa Teresa**

**South Management Area**

**Zona de Gestión Sur**

**Sunland Park**

**North Management Area**

**Zona de Gestión Norte**

**LEGEND**

- **Haul Truck** - Camión de Carga
- **Collection Truck** - Camión de Basura
- **Private Haulers** - Camiones de Carga Privados
- **Community / Recycling Center (CRC)** - Centro Comunitario y de Reciclaje (CRC)
- **SCSWA Collection & Haul Truck Route** - Ruta de Recolección y Carga de la SCSWA

**Recycle**

**White Goods**

**Household Hazardous Waste**

**Green Waste Clippings**

**Private Haulers Route** - Ruta de Camiones de Carga Privados

**City of Las Cruces**

**CDM Smith**

**South Central Solid Waste Authority (SCSWA)**

**Integrated Solid Waste Management System**

**New Mexico**
SOCIAL OBJECTIVES AND PERFORMANCE

Patrick Peck, the Executive Director of the SCSWA, encapsulates the agency’s mission in a simple statement: *Value to the constituent by providing the most efficient and least expensive solid waste management services.* Every action of the agency, from the 5-Year Business and Management Plan to the infrastructure in improvements in the management areas, is intended to increase efficiency and decrease costs to be able to provide value to the residents of Doña Ana and surrounding counties. The social performance objectives are:

- Cleanup of illegal dumping sites
- Engage in public-private partnerships to increase recycling program
- Maximize landfill life and minimize cost per landfill acre
- Maintain responsiveness to customer complaints

**Cleanup of illegal dumping sites**

Residents in several communities in the unincorporated areas of the County were surveyed and the results showed that illegal dumping was consistently ranked in the top five of community concerns. To address this concern, the SCSWA has established a program to deter and cleanup illegal dump sites. This program includes:

- Removal of over 285 tons of trash from illegal sites since 2011
- Ten illegal dump cleanups planned for 2013
- Hired a New Mexico State University (NMSU) Environmental Studies student intern to organize illegal dump cleanups
- Participate on a regional Illegal Dumping Task Force with partners Keep Doña Ana County Beautiful, US Bureau of Land Management, and NM Health and Human Services Department.
- Hosted 15 “Dumpster Day” community clean up events in 2012
- Eight community meetings in 2013 with information on deterring illegal dumping and increased cleanup efforts
- Established a hotline (877-No-Throw) for reporting illegal dump sites promoted through billboard and public relations advertising (Figure 9)
- Produced educational video on illegal dumping that is shown at schools and at community meetings

**Engage in Public-Private Partnerships to Increase Recycling Programs**

Recycling is very popular in the City of Las Cruces. The SCSWA recently signed a 5-year contract, with the option to renew for an additional five years with Friedman Recycling to collect and process single-stream residential curbside recyclable material within the limits of the City of Las Cruces. Curbside...
collection of recyclables (excluding glass) is performed by Friedman and the material is processed at a Material Recovery Facility. Additionally, the SCSWA is proud to support the recycling successes of local institutions and private businesses in the County. These include several businesses that perform independent recycling. A summary of these businesses and the materials recycled follows:

- **Electronics/Metals/White Goods**: Balderas Appliances, Best Buy, Coyote Scrap, Highway 85 Trading Post, Home Depot, Las Cruces Recycling, NMSU, Rechargeable Battery Recycling Corp, Staples
- **Green Waste**: Gardener’s Turf Grass, Midwest Bio-Systems, NMSU, Sierra Vista Growers
- **Paper/Plastic Products**: Albertsons, Aldershot Nursery, NMSU, Phone Book Recycling
- **Automotive Products**: Chaparral Sand and Gravel, Checker Auto Parts

The next recycling challenge for the SCSWA is to increase recycling in the unincorporated areas of the County. The combined results of the Solid Waste Ordinance and infrastructure improvements are expected to encourage curbside pickup of recyclables in these areas.

**Maximize Landfill Life and Minimize Cost per Landfill Acre**

The SCSWA is currently developing a 20 year permit renewal application for the Corralitos Landfill. The permit application requests increasing the overall height of a landfill which minimizes the footprint required for waste disposal over the life of the landfill. This in turn, minimizes the impacts to the natural surroundings and neighboring lands. Increasing the height of the landfill also delays the need for siting a new landfill, which can be a long and costly endeavor. In addition, increasing landfill life improves the economic sustainability of the SCSWA and could allow the SCSWA to minimize future rate increases and to attain economies of scale for its landfill operations. The increased revenue can also be used to further support recycling/waste diversion programs.

This permit modification was shared with the public at eight community meetings held in April-May 2013. No negative comments on the proposed vertical expansion were offered at the meetings.

**Maintain Responsiveness to Customer Complaints**

The SCSWA take customer complaints seriously and the policy for customer complaints is same day response. In 2012 when the government of the City of Sunland Park imploded, the SCSWA stepped in to provide solid waste management services. At the time, Sunland Park was receiving many customer complaints every day about missed pickups, missing waste containers, and buildup of waste. The SCSWA response was immediate, beginning curbside pickup in two days, using routes developed from aerial photography to efficiently pick up waste from the 3000 customers. Since that time there have been virtually no customer complaints.
The SCSWA's focus on providing programs and services that customers value along with continuous improvements in efficiency that benefit the customers shows that the objectives for social effectiveness have decisively been met.

ENVIRONMENTAL OBJECTIVES AND PERFORMANCE
Caring for the environment means more than just environmental compliance. The SCSWA continually looks to improve its operations with practices that do more to protect the environment. The SCSWA objectives for environmental effectiveness are:

- Reduce reliance on fossil fuels and the carbon footprint of the operations
- Increase waste diversion and recycling
- Illegal dump cleanups

Reduce Reliance on Fossil Fuels and the Carbon Footprint
For an industry that is entirely reliant on trucks hauling trash, this objective may seem farfetched. Nevertheless, the SCSWA has implemented measures to reduce fossil fuel use and carbon emissions and has plans to increase efficiency which will lead to decreases in both fuel use and emissions. Measures that have been implemented include:

- The SCSWA was the first New Mexico agency to use biodiesel for all collection and transfer vehicles. Biodiesel initially was made from tortilla chip makers in El Paso, but now 50% of the biodiesel is made in Las Cruces. The equipment at the Corralitos Regional Landfill is fueled with biodiesel.
- The three vehicles used at the Amador Avenue Transfer Station are electric.
- Staff vehicles are either hybrid or biodiesel
- Trucks hauling recyclable material to the MRF in El Paso haul about 40 tons/day of recycling residuals back to the landfill, to get beneficial use on both legs of the trip and decrease truck traffic
- Doubled the vehicle maintenance budget over 10 years to ensure trucks are operating efficiently
- Utilize RTA Fleet Management software to track parts replacement and maintenance

Future infrastructure improvements were developed with the objective of making the system more efficient. Closing six of nine Collection & Recycling Centers and replacing those services with new transfer stations will decrease the number of trucks hauling uncompacted waste and will allow the trucks to go directly to landfill, reducing the truck traffic in the City of Las Cruces. The infrastructure improvements are anticipated to result in a 50% reduction in the number of truck miles.
Increase Waste Diversion and Recycling

The SCSWA has a diversion rate of 20 to 25%. The agency has implemented several programs aimed at increasing these rates over time. The most effective programs are those that provide outreach and education about recycling and diversion and these types of programs are where the SCSWA has focused. The SCSWA recycling programs have been successful and have led to significant increases in the tons of recyclable materials collected. The programs are:

- Commercial and residential recycling at the Amador Avenue Recycling Center
- Curbside recyclable pick up in the City Las Cruces
- 17 “Recycle Rallies” in elementary schools with our partner Keep Las Cruces Beautiful in 2012
- Recycling bins at 37 elementary schools in Las Cruces
- E-waste events held in conjunction with American Recycling Day
- Participate with community groups in writing grant applications for funding recycling programs
- Increasing public awareness through art – refurbishing the Roadrunner sculpture made of recyclables at the Interstate-10 rest area

Diversion in addition to recycling includes the green waste program, clean fill, and biosolids. The Yard Waste and Clean Fill Recycling Center is located adjacent to the closed Old Foothills Landfill. The SCSWA purchased the chipper used at this facility so that yard waste can be chipped and composted. The compost is used by the City of Las Cruces and its residents as a beneficially re-used material. The composted green waste is also used on the cap of the closed landfill. Clean fill materials are used as drainage and erosion control around the base of the closed landfill.

Illegal Dumping Cleanups

The unincorporated areas of the County are plagued by illegal dumping and the residents have rated it as one of their top five concerns. The SCSWA has an active program to encourage citizens to report illegal dumping and to cleanup illegal dumps. Going forward, the Solid Waste Ordinance and planned infrastructure improvements are anticipated to decrease the illegal dumping.

The SCSWA is a role model in environmental protection, above and beyond environmental compliance, and meets their objectives for environmental effectiveness.

D. HOW ENVIRONMENTAL SUSTAINABILITY IS INTEGRATED

The SCSWA has met environmental effectiveness objectives that ensure environmental sustainability is built into the integrated waste management system now and into the future. In addition to the environmental protection objectives described in the response to Item C, above, the SCSWA provides research opportunities to improve landfill protectiveness. California State Polytechnic University has been conducting research on the dimensional stability of geosynthetic clay liners by measuring thermodynamic stresses in the liner with tensiometers. Another research effort will evaluate effective cap erosion barrier designs with a series of test plots on a closed portion of the landfill.
E. LONG TERM SYSTEM AVAILABILITY

The SCSWA has a 5-Year Business and Master Plan that has a 30-year planning horizon to ensure long-term system availability. A critical component of the plan is the promulgation of the Solid Waste Ordinance, which is expected to be effective in the fall of 2013. Once the ordinance is in place, there will be sufficient flow control and revenues to implement proposed infrastructure improvements and other recommendations that will meet the needs of the service area for the next 30 years.

The SCSWA currently has operational practices that maintain the system for long term availability. Asset management principles are applied in the development of the SCSWA Capital Replacement Plan. Vehicles are intended to be used for 10 years and are maintained using RTA Fleet Management software. The Corralitos Regional Landfill Permit modification and renewal will ensure the landfill is available to meet the needs of the system for the next 100 years with space for a total of 200 years.

SCSWA recognizes the importance of recycling and diversion in the solid waste management system, and has implemented several programs to increase recycling and diversion in the cities and unincorporated areas.

F. ENVIRONMENTAL PROTECTION AND REGULATORY COMPLIANCE ISSUES AND SOLUTIONS

The SCSWA maintains the highest level of regulatory compliance and goes beyond compliance with environmental protection. The permit for the Corralitos Landfill has been in place for 18 years and must be renewed by 2014. The renewal and modification application will be submitted in June 2013. The New Mexico Environment Department conducted a mid-term permit review and the SCSWA received no significant findings or corrections at the mid-term of the existing permit. In 18 years, the landfill has received one Notice of Violation as a result of an inspection in 2004. The violation was corrected and no violations have been issued since that time. Staff from the SCSWA are considered as role models and are consistently asked to teach at state-sponsored operator certification courses.

The operational management philosophy is to encourage employees to develop innovations that will improve regulatory compliance. An example of an employee-developed innovation is the litter trench used at the landfill. Employees noticed that trash would not move beyond a storm drainage trench because the wind velocity decreases across the trench. This observation has led to constructing litter trenches around the working face at the landfill that are effective devices in controlling wind-blown litter.

Environmental protection beyond regulatory compliance is reflected in the environmental effectiveness objectives held by the SCSWA. As described in C. above, these objectives are to reduce reliance on fossil fuels and the carbon footprint of the operations, maximize land resources, increase waste diversion and recycling, and cleanup illegal dumps. The SCSWA currently meets the environmental effectiveness objectives and has strategies for continuing environmental protection into the future.
Section 2

Financial and Business Management

The mission of the SCSWA is to provide exemplary solid waste services in a cost-effective manner. The charter of the SCSWA is to operate as an enterprise fund and must ensure that the cost of providing solid waste services is financed or recovered primarily through user fees. The financial and operational goals are in concert with the mission and charter. The SCSWA Executive Director and Board of Directors maintain the financial integrity of the system and are able to adjust to changing conditions in a timely, efficient manner as is often required in operating a fully integrated waste management system.

A. DISCUSS THE FINANCIAL AND OPERATIONAL GOALS OF THE SYSTEM AND HOW THEY ARE MEASURED

The goals of the SCSWA are to operate the integrated waste management system in an economically sustainable fashion while meeting the social and environmental objectives. Financial management of the SCSWA is conducted transparently with oversight, and in accordance with accounting principles generally accepted in the U.S. The annual budget is developed by the Executive Director, and reviewed and approved by the SCSWA Board in meetings open to the public. Monthly financial statements are reviewed and approved by the Board at open meetings. An annual third-party audit is conducted to ensure financial statements meet accounting standards and to report on adherence to the approved budget. Annual audits have documented consistent success in financial management of the SCSWA. The SCSWA’s excellent financial performance contributes to the triple “A” bond rating for the City of Las Cruces.

The revenue is forecasted based on economic analysis of trends, along with historical data. Expenditures are based on historical data and asset management data. The allocation of funding in the annual budget is the primary tool for implementing operational goals. The budget for a typical year, allocates half of the budget to operation of the landfill and transfer station, and one quarter is allocated to recycling and Collection & Recycle Centers, respectively. Each of these major categories includes funding for staffing, equipment, outreach, and environmental compliance.

Additionally, an operational reserve is maintained that is approximately 25% of the total budget.

From the perspective of debt, the agency has the enviable position of no short term debt and has only bond obligations. This budget approach demonstrates the SCSWA’s dedication to fulfilling the mission of providing solid waste management services “in a manner that is environmentally sound, socially responsible, and cost-effective.”

B. COST EFFECTIVENESS OF THE SYSTEM AND HOW IT COMPARES WITH OTHER SYSTEMS IN YOUR STATE OR REGION

Cost effectiveness can be defined as receiving comparable goods or services for the lowest cost. For solid waste management, the service that is comparable between systems is the cost of disposal at the landfill, the tipping fee. The tipping fee at the SCSWA Corralitos Regional Landfill in Las Cruces is $28.30 per ton, compared to the state-wide average of $31.00 per ton. Figure 11 compares the tipping fees of publicly owned landfills in the state and shows that the SCSWA tipping fee at
Corralitos Regional Landfill is in the mid-range. More importantly, the SCSWA tipping fee incorporates the cost of providing other programs such as illegal dump cleanups, education and outreach, and recycling subsidies. The only other New Mexico landfill with a similar price structure is Caja del Rio in Santa Fe, whose tipping fee is $14.20 higher than at the Corralitos Regional Landfill.

C. PLANNING AND FORECASTING METHODS AND HOW THEY ARE APPLIED

The SCSWA has 5-Year Business and Master Plan that is the basis for planning. This 5-Year Business and Master Plan identifies programs to prepare the SCSWA to meet future waste management needs of the City and County. The plan is developed for a 30-year planning horizon and provides recommendations to improve waste reduction, diversion, collection, transfer and disposal programs. The business portion of this Plan considers potential funding sources to implement recommended improvements. The 5-Year Business and Master Plan Update assesses historic and projected waste and recycled material flow within the County based upon the population projections established in the County’s One Valley One Vision 2040: A Sustainable Outlook for Doña Ana County and the City of Las Cruces Plan (Vision 2040) with additional population data from the United States Census Bureau. The most recent update of the 5-Year Plan was completed in 2012 and significant progress has been made on the recommendations presented in the plan.

D. EMPLOYEE RELATIONS PROGRAM AND HOW IT IS MEASURED

“The SCSWA is only as successful as its employees are” is the philosophy of Patrick Peck, SCSWA Executive Director. Mr. Peck knows the name of all 49 employees and makes it his job to talk with each employee on a routine basis. This employee-centered approach to employee relations has paid dividends in employee longevity. The average length of service is well over 10 years and employees have remained for up to 32 years. The turn-over rate is less than 5% per year. Elements of the employee relations program that have contributed to its success are:

- Recognition and reward – raises are based on performance, merit, and safety record as documented in annual performance appraisals
- Clear expectations – there are both a Personnel Manual and a Safety Manual that each employee is responsible for using
**Communication** – regular staff meetings and management by walking around; suggestion box monitored regularly and responses provided.

**Training** – required training for job responsibilities and safety has been successful in reducing the workman’s compensation multiplier and saving the agency $125,000 per year.

**Safety** – Safety requirements based on job description and hazard analysis to determine personal protective equipment. The SCSWA was the first solid waste operation in New Mexico to require local employees to wear steel-toed boots, high visibility vests, and ear and eye protection at the transfer station and the landfill.

Safety is a focus of SCSWA and is incorporated into all aspects of operations. SCSWA safety training includes training provided by Safety Counseling Inc. as well as SCSWA management. Tailgate safety meetings are held at all eight off-site locations and the landfill. Tailgate safety training consists of handouts, PowerPoint presentations and videos (via laptop). A sign-in sheet is used to track attendance and participant feedback is encouraged.

SCSWA also has a safety committee that meets monthly and is comprised of employees from different areas including the landfill, the transfer station, the recycling center, drivers, and collection and recycling centers. They meet to review incidents and accidents. Roundtable discussions focus on what factors and measures could have been taken to prevent the occurrence. Recommendations for future action, follow-up, and trainings are made and documented.

### E. CHANGE MANAGEMENT PROCESSES AND THE RESULTS

Flexibility and a willingness to take action are the keys to adapting to change at the SCSWA. Change management begins with identifying changes that are needed. The SCSWA identifies community needs by community surveys and community meetings, as well as discussions with community leaders, and public and private entities that provide waste management services. Examples of changes to meet community needs are:

**City of Sunland Park** – Irregularities within the governing body resulted in State take-over of City operations. The SCSWA was asked to provide solid waste management services for the City. SCSWA provided collection vehicles within two days and took over all collection services within six weeks.

**Town of Anthony** – SCSWA assisted the Town by securing a contract with a private hauler to provide curbside pickup.

**Truth or Consequences** – located in Sierra County, north of Doña Ana County, needed waste disposal services. The SCSWA assisted with development, facility design, and operational support, and is contracted to haul material from the transfer station to the Corralitos Regional Landfill.

**Green Waste Diversion** - SCSWA purchased a mobile chipping unit that is moved around between the CRCs. A contract employee moves and operates the chipper. This arrangement ensures that the chipper is available at different spots depending on demand. The use of a contractor to operate the chipper means that SCSWA did not have to incur the cost of hiring an
employee to implement the green waste diversion program. The diverted green waste reduced the amount of waste to the landfill to 1,350 tons per month, which saves the County $30,000 in tipping fees.

- **Cleanup of illegal dumps** – Illegal dumping was identified as a top concern in three communities surveyed. This concern has resulted in a continuing program of cleanups and community “dumpster days” where dumpsters are made available for free trash disposal. The tipping fees are waved for dumpster days and reduced for illegal dumpsites on Bureau of Land Management (BLM) lands. BLM has provided a grant to Doña Ana County for cleanup of illegal dumps. That program is expected to be a $500,000 program over five years and is now a model for the state.

- **Recycling** – Increased community demand for recycling services has resulted in curbside recyclable pickup in Las Cruces and recycling at the eight Collection and Recycling Centers in the unincorporated areas.

The second step in change management is to make the changes that were identified in the first step. The SCSWA uses public-public, public-private, and private contracts to implement changes. Collections in Sunland Park, Anthony, and Truth or Consequences and composting biosolids are examples of public-public and public-public-private partnerships. Recycling in the SCSWA requires both public-public agreement with the City of Las Cruces for pick-up and a private contract for processing recyclables. Flexibility in contracts and agreements has been and will continue to be a critical factor in managing change.

Finally, funding for changes is the third aspect of change management. Economic analysis of trends to forecast potential changes is used by the SCSWA Executive Director in developing annual budgets and in the 5-Year Business and Master Plan. Changes that occur on very short time frames are addressed as budget revisions that are reviewed and approved by the SCSWA Board. The willingness of the SCSWA Executive Director and Board to identify and implement changes shows an unswerving commitment to serving the communities.

Section 3

**Community Relations**

**A. COMMUNITY OUTREACH AND FEEDBACK EFFORTS**

The SCSWA recognizes that the crucial element in increasing waste diversion and reducing illegal disposal practices is education and public outreach. The community outreach efforts engage the public through several avenues (Figure 13):

- **Published Articles**
  - Green/Recycling Connections
  - Bi-weekly column published in area newspapers

![Figure 13: SCSWA outreach events include Dumpster Days (top) and e-Cycle (bottom)
The SCSWA provides big, blue recycling bins to 37 schools in the Las Cruces area to help make recycling easily accessible to the kids and the community. Some schools participate in “bin beautification” to personalize their recycling bins.

LIBBY the dog also attends the Recycle Rallies, winning students’ hearts... and showing that she recycles, too!

The goal is to get kids excited about recycling...
Education aimed at adults uses traditional and social media. Traditional media outlets are newspaper articles, television interviews, and radio announcements. Figure 15 shows a sampling of the newspaper articles about SCSWA activities and information on waste diversion.

C. HOST COMMUNITY CONSIDERATIONS AND HOW SCSWA RESPONDED TO THEM

The SCSWA’s focus on providing value to the customer has resulted in numerous changes to address community concerns as described in detail above. Specific to community concerns, community surveys indicated concerns about illegal dumping. The SCSWA has partnered with Keep Doña Ana County Beautiful, US Bureau of Land Management (BLM), and NM Health and Human Services Department on a regional Illegal Dumping Task Force. One community benefit of the Illegal Dumping Task Force has been the successful cleanup of 285 tons of illegally dumped trash and 15 dumpster days where the tipping fees were paid by the BLM.

Citizens of the SCSWA host city, Las Cruces, expressed interest in curbside pickup of recyclable materials. Curbside pickup was instituted by the City in 2012 with recyclable materials processed under a SCSWA private contract.

D. CUSTOMER SERVICE APPROACH AND HOW IT IS MEASURED

The SCSWA approach to customer service is to provide services as promised and to mitigate breaches in services as soon as possible. The metric for customer service performance is customer complaints. The number of complaints received is noted as well as the response time. The objective is to respond to all complaints the same day. The SCSWA has been successful in providing timely response to customer complaints, despite the extensive service area.
Keep Las Cruces Beautiful

May 7, 2013

Patrick Peck, Director
South Central Solid Waste Authority
P.O. Box 20000
Las Cruces, NM 88004

Re: Solid Waste Association of North America 2013 Excellence Award

Keep Las Cruces Beautiful (KLCB) would like to heartily endorse the nomination of South Central Solid Waste Authority (SCSWA) for the Solid Waste Association of North America 2013 Excellence Award. Keep Las Cruces Beautiful has partnered with SCSWA on a variety of waste reduction and recycling projects over my six year tenure with KLCB. SCSWA has been a visionary organization taking Las Cruces, Dona Ana County and the region to become a national leader in waste reduction and recycling.

I served for several years on the Recycling Partnership organized by SCSWA to engage community activists in designing recycling and waste reduction programs for our region. Patrick Peck provided visionary leadership for this group and more importantly implemented the visions created by this group of community leaders.

Probably the most important outcome of the Recycling Partnership group was the implementation of single stream curbside recycling for the City of Las Cruces. This was an incredible accomplishment for SCSWA for our community.

KLCB partnered with SCSWA to do a recycling demonstration project with Las Cruces Public Schools. The three organizations partnered to obtain grants for a three year project to demonstrate the viability of recycling in the school district. The first year engaged six early adopter schools who demonstrated the viability of recycling to the district. Twelve schools engaged the second year and the balance of schools participated the third year. SCSWA provided heavy financial assistance to provide the containers and pickup services for each of the schools.

1085 Medpark Drive, Las Cruces, NM 88005  (575) 528-4723
The recycling demonstration project had an educational component building a positive climate for recycling with students and staff throughout the district. Virtually every school now has energized student bodies and staffs who are powerful advocates for waste reduction and recycling. SCSWA provided the leadership and motivation to schools and the district that remains a powerful force to support recycling in our communities.

SCSWA was the primary funder for the KLCB LIBBY the dog educational book project. As a result of SCSWA leadership L.I.B.B.Y. The “Green” Dog published 20,000 copies of the book targeting all third grade students in Dona Ana County. The books are distributed to third grade class rooms annually with a visit by the real L.I.B.B.Y. dog empowering students to not litter, reduce their waste and recycle.

Most recently SCSWA was a partner in the first ever in our community the Reuse and Recycle Fashion Show. SCSWA continually demonstrates its leadership and support for educational and promotional programs that encourage participation in waste reduction and recycling.

The visionary activities of SCSWA continually make our region a visionary and national leader in solid waste and recycling efforts. I highly recommend South Central Solid Waste Authority for this award.

Sincerely,

Craig Fenske
Keep Las Cruces Beautiful Coordinator
Office of the Mayor

KENNETH D. MIYAGISHIMA
Mayor

CITY OF LAS CRUCES

May 7, 2013

SWANA - The Solid Waste Association of North America
P.O. Box 7219
Silver Spring, MD 20907-7219

Subject: Support for the Nomination of South Central Solid Waste Authority, New Mexico for
Integrated Solid Waste Management Excellence Award

Dear SWANA Excellence Award Jury Members:

I would like to thank you in advance for your consideration of the South Central Solid Waste Authority nomination for the Solid Waste Association of North America (SWANA) Excellence Award for Integrated Solid Waste Management. I am offering my support for this nomination for several reasons:

- **Sustainable Features Result in Environmental Benefit and Cost Savings:** The South Central Solid Waste Authority’s integrated solid waste management approach has resulted in increased recycling, clean up of illegal dumps, educational outreach, and efficient operations that provide both an environmental benefit and cost savings.

- **Long-Term Community Benefit:** One of the most important project goals of the South Central Solid Waste Authority is to provide value to the customers. The value provided is increased convenience for recycling and solid waste, improvements in facilities and operations, and cleanups to restore the beauty of our landscapes.

- **Solutions for Sustainability:** The South Central Solid Waste Authority has a vision for moving forward, continuing to build onto the integrated system that has been put in place. Increasing the life of the landfill for 200 years and infrastructure improvements to decrease the carbon footprint of the system are evidence of the agency’s commitment to sustainability.

- **Community Outreach and Involvement:** Community involvement and education are hallmarks of the South Central Solid Waste Authority’s approach to providing solid waste services that meet the needs of the customers.

The South Central Solid Waste Authority facilities and operations meet all regulations and requirements while providing community benefits. I would like to take this opportunity to support the nomination of the South Central Solid Waste Authority for the 2013 SWANA Excellence Award in Integrated Solid Waste Management. Please feel free to contact me at (575) 541-2100 if I can be of any further assistance.

Sincerely,

Kenneth D. Miyagishima
Mayor

(575) 541-2067

POST OFFICE Box 20000

LAS CRUCES, NEW MEXICO 88004