

State of Nevada Solid Waste Management Plan 2017



Prepared by
Nevada Division of Environmental Protection
901 South Stewart Street, Suite 4001
Carson City, Nevada 89701-5249

For the
Nevada State Environmental Commission

Revised 8/22/17

This page intentionally blank

EXECUTIVE SUMMARY

Nevada's Solid Waste Management Plan (*Plan*) provides a current snapshot of the State's existing Solid Waste Management system in accordance with applicable statutes and regulations. The *Plan* describes the roles and responsibilities of State and local government, and current trends in solid waste management. It also identifies management challenges and proposes solutions for future consideration to improve solid waste management in Nevada.

Nevada Revised Statutes (NRS) 444.570 requires the State Environmental Commission (SEC), in cooperation with governing bodies of Nevada's municipalities to develop a plan for a statewide solid waste management system. The *Plan* strives to fulfill this requirement, providing information and guidance to support:

1. The SEC in their adoption of solid waste management regulations;
2. The Nevada Division of Environmental Protection (NDEP) in their efforts to effectively allocate solid waste management resources;
3. Nevada's municipal governments in their efforts to develop and implement effective solid waste management plans and ordinances; and
4. Stakeholders and their activities to provide solid waste services to Nevada's communities and businesses statewide.

In Nevada, state and local governmental entities share certain roles and responsibilities for solid waste regulations and program management. Governmental authority is defined in the Nevada Revised Statutes (NRS) 444.440 – 444.645 (see Appendix 5), and the Nevada Administrative Code (NAC) 444.570 – 444.7499 (see Appendix 6). In Southern Nevada, the authority to regulate solid waste is assigned by statute to Clark County's Southern Nevada Health District (SNHD), and in the North to the Washoe County Health District (WCHD). NDEP is the solid waste management authority for all other counties of the State.

Regulatory programs implemented by all three solid waste management authorities (SWMA) primarily focus on the administration of the environmental protection standards for the collection

and disposal of solid waste; however, the NDEP has additional responsibilities for statewide planning, public information, and educational activities. The local municipal governments are responsible for planning and implementing solid waste management systems for the solid waste generated in their municipalities.

Statewide Trends (Section 2)

This section addresses current trends in Landfills, Collection, Waste Generation and Recycling Rates, Importation, and Data Collection and Reporting.

Noteworthy Trends...

Since the early 1990's, the major trend in Nevada's solid waste management infrastructure has been toward regionalization. Landfills range in size from the very small (3 tons per day) to one of the largest in the U.S. (Apex, according to a 2016 report, receives over 6,800 tons per day). Nevada's two largest landfills (Apex in Southern Nevada and Lockwood in the North) receive about 90% of all the municipal solid waste disposed in the entire state.

Solid Waste importation has decreased approximately 20% in the past 10 years; however, waste importation may increase due to an emerging trend toward existing landfills, and proposed new landfills, positioning themselves to accept larger amounts of imported waste.

Solid Waste Management Systems (Section 3)

The solid waste management systems in each of Nevada's 17 counties are profiled in Appendix 3. Each description includes a map of the county showing where the solid waste facilities are located, and a companion profile describing the solid waste infrastructure and services.

Solid Waste Management Issues (Section 4)

The challenges facing landfills, Recycling and Waste Prevention, Importation of Solid Waste, Special Waste Management, Rural Solid Waste Management, Illegal Dumping and Open Burning, and State and Local Funding are covered in this section. The *Plan* provides suggestions for future consideration to improve Nevada's solid waste management system.

Noteworthy Changes and Challenges...

Due to new research on traditional landfill liner requirements, the Plan recognizes that site-specific conditions are critically important in the liner decision-making process.

Nevertheless, any effort to further develop Nevada's solid waste disposal infrastructure must put the highest priority on carefully assessing new innovations in landfill design to ensure that they protect the environment.

Recycling and Waste Prevention (Section 4.2)

In 1991, Assembly Bill (AB) 320 was enacted and set the stage for Nevada's entrance into the world of recycling. Shortly thereafter, a 25% recycling goal was set in law for each municipality that is required to have a recycling program.

Noteworthy Changes and Challenges...

For the past several years, Douglas, Washoe, and Carson City counties have surpassed the 25% recycling goal. Nevada's largest county, Clark, surpassed the 25% goal in 2012, but has since struggled to repeat those numbers. Since Nevada began tracking recycling rates, the statewide rate steadily increased to over 28.8% in 2012, but has fallen back to 22.3% in 2016. Proven as a powerful tool for increasing both participation and recycling rates, the availability of single-stream recycling has expanded to approximately 90% of Nevadans through the diligent efforts of several of Nevada's larger municipalities.

As the largest county in Nevada, and as such, seen as the greatest opportunity for increasing the State's overall recycling rate, the NDEP continues to promote recycling in Clark County and has implemented even more measures to increase recycling activity.

To evaluate the pros and cons of specific types of recycling, the Nevada Legislature authorized two studies: an electronics waste (e-waste) study in 2009 and a deposit on recyclable products study in 2011. Neither study evidenced enough clear benefit to warrant passage.

In counties over 100,000 in population, a recent bill amendment mandated that recycling services must be made available to newly constructed and major renovated multi-family

dwellings (MFDs), such as apartment complexes and condominiums. For approval, plans for said construction and/or renovation must provide space for collecting recyclables on premises.

Waste Importation (Section 4.3)

Although importation has been in decline, business interests and rural community development planners are beginning to market Nevada’s waste disposal capacity to out-of-state customers. Given this trend and the US Supreme Court’s prohibition on restriction of waste flow, it appears Nevada will continue to receive imported waste.

Special Waste Management (Section 4.4)

Because of their physical, chemical and/or biological characteristics, “special wastes” have the potential to be hazardous to living organisms and therefore must be specially handled to prevent exposure to them or release to the environment.

Noteworthy Changes and Challenges...

Following several elemental mercury spills in school-settings, NDEP developed a webpage (<https://ndep.nv.gov/land/mercury>) and a brochure to inform the public of the dangers, proper handling and disposal of “household” mercury. A household generated solid waste with the identical characteristics of a hazardous waste is exempt from federal regulations as a hazardous waste.

Medical or pharmaceutical wastes generated by medical and veterinary facilities (e.g., businesses) are generally well-managed through the availability of commercial medical waste disposal services throughout the State. However, disposal services for home-generated medical and pharmaceutical wastes are harder to find as the demand continues to grow.

E-waste continues to grow in volume as does the concern with their components, many of which have been identified as hazardous waste (older model TV cathode ray tubes (CRTs), computer monitors, and cell phones, etc.) As industry and government at the national level

search for ways to relieve the accumulation of e-waste, the emphasis in Nevada is on public education. Informing Nevadans of recycling and disposal locations available in their areas is a key element in e-waste management. NDEP continues to provide support for e-waste collection events and promotes reclamation efforts wherever possible.

Rural Solid Waste Management (Section 4.5)

Due to their sparse populations, many of Nevada's rural municipalities are struggling to provide even the basic elements of a solid waste management system. Rural solid waste management (SWM) systems could benefit greatly from more coordinated planning efforts among communities, landfill operator training programs, and public education regarding recycling and waste reduction. Reinstating the State's recycling and solid waste grant program could provide assistance to local governments to augment their planning efforts and acquire necessary equipment.

Illegal Dumping and Open Burning (Section 4.6)

In 2013, the Nevada Legislature passed Senate Bill 449 which increased enforcement penalties for illegal dumping in an effort to further protect the environment. Illegal, or open dumping, is a persistent problem for both rural and urban areas. Fundamentally local in nature, a combination of local solid waste management planning, local public education, and coordinated enforcement at the local level is essential for success in combating this problem. Local community groups have been instrumental in organizing efforts to control illegal dumping, such as community cleanup projects that include the participation of local government officials, and using public information campaigns to raise awareness and promote a sense of environmental stewardship in its citizenry.

State and Local Funding (Section 4.7)

To supplement their allotted State Tire Fund (tax) revenues, all three SWMAs have established fees on disposal, permitting, and other activities associated with solid waste management. In October 2014, the SEC approved the implementation of solid waste fees for NDEP with collection beginning in 2015. These new solid waste fees are only applicable to solid waste management facilities under the DCNR-NDEP's jurisdiction. This new funding source will help to defray the State's costs of managing and regulating solid waste.

Noteworthy Changes and Challenges...

Nevada's rural local governments may also require increased funding to support local waste management operations. Although local taxing authority may be available, the tax base for some communities may not be sufficient to generate needed revenue. In such locations, private solid waste companies may not be profitable, leaving the municipality to face significant challenges meeting their solid waste needs in a manner that complies with all applicable environmental regulations.

Key Stakeholders

Although NDEP is required to submit this *Plan* to the SEC, it is also intended to be used as a resource and guide for the State Legislature, NDEP, SNHD, WCHD, state and local agencies, and Nevada's municipal governments as they seek to craft effective Solid Waste Management laws, regulations and policies. It is hoped that the *Plan* also provides useful information to generators of solid waste (residents, businesses, and various industries) and solid waste service providers (refuse collectors, landfill operators, recyclers). Implementation of the suggestions provided for future consideration in each section of the *Plan* could further serve to enhance and strengthen solid waste management in Nevada.