

Appendix 9

*Supplementary Plan: End-of-Life Management of Motor Vehicle
Batteries, Tires, & Oil*

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End-of-Life Management of Motor Vehicle Batteries, Tires, & Oil

Per NRS 444.583, "State Department of Conservation and Natural Resources shall establish a plan for the appropriate disposal of used or waste motor vehicle batteries, motor vehicle tires and motor oil. The plan must include the issuance of permits to approved sites or facilities for the disposal of those items by the public. The plan may include education of the public regarding the necessity of disposing of these items properly and recycling them." This supplementary plan to the Sustainable Materials Management Plan has been developed to provide updated and consolidated information regarding the handling of these materials.

Used or Waste Motor Vehicle Batteries

One of the main types of motor vehicle batteries include lead-acid batteries. Because these batteries contain lead and corrosive lead-contaminated sulfuric acid, proper end-of-life management is important.

Generators

Businesses

Businesses that generate used motor vehicle batteries can either handle these batteries under the Federal standards for Universal Waste Management (40 CFR part 273), or they can recycle and dispose of them as hazardous waste. Used batteries must be sent to designated permitted facilities. Also, businesses can return as a core to exchange for a new battery provided the battery is not damaged.

Residents

Residents should check with their local automobile maintenance facilities, car dealers, auto parts stores, battery retailers, waste collectors, or local government waste authorities to see where they can drop off used motor vehicle batteries. Per NAC 444A.130, a municipality that provides a program for the disposal of household hazardous waste must also provide for the collection of used motor vehicle batteries at least semi-annually.

End-of-Life Treatment, Storage, & Disposal – Permitting

Destination facilities treat, recycle, or disposal of used motor batteries. These facilities are subject to full hazardous waste regulation as a treatment, storage, and disposal (TSD) facility

and must be permitted by the NDEP. Additionally, it is illegal to dispose of or abandon a motor vehicle battery at any site which has not been issued a permit for that purpose by the solid waste management authority.

Used or Waste Motor Vehicle Tires

“Waste tires” means passenger car tires that are not suitable for their intended purpose because of wear, damage, or defect. Each year Nevada generates approximately 2 million waste tires. Some are reused or re-treaded, a few are recycled, and the remainder are landfilled. In the early '90s, the NDEP established a management program for waste tires in accordance with NAC 444A.200 - 444A.470.

The goal of Nevada's Waste Tire Management Program has always been to minimize the threats to public health and the environment that result from improper storage and disposal of waste tires. To achieve this goal, the flow of waste tires needs to be kept out of illegal tire dumps, and standards must be met for proper storage and disposal. To further strengthen this program, the Legislature passed Senate Bill (SB) 186 in 2009 to augment waste tire management. The statutory amendments state that waste tires cannot be landfilled in counties that have permitted waste tire management facilities.

One key element of the Nevada Division of Environmental Protection (NDEP) Bureau of Sustainable Materials Management's (BSMM) mission is to promote sustainable resource management, and waste tires are no exception. The management of waste tires is based on the premise that waste tires are a resource, not a waste. BSMM encourages the solid waste management authorities to find environmentally beneficial and economically viable alternatives to disposal of waste tires in a municipal solid waste landfill, such as shredding or grinding the tires for use in rubberized asphalt, playground mulch, road embankments, and/or civil engineering applications. Based on the mission of the BSMM and the 25% state recycling goal, it is our opinion that if a waste tire can be legitimately recycled and used in an effective manner (as approved by the solid waste management authority) then landfilling should be considered as a last resort.

Tire Retailers

Tire retailers must be registered with the NDEP. Each retailer who contracts with a waste tire hauler must contract with a registered hauler. Retailers who hire unauthorized haulers may be liable for costs associated with cleanup of an illegal tire dump. A retailer who does not receive a copy of a completed manifest from a waste tire hauler within 30 days of pick-up should report the missing manifest to the appropriate solid waste management authority.

If a retailer does not contract with a waste tire hauler, they may haul their own tires or contract with a licensed solid waste hauler. If either of these options is used, the retailer shall keep receipts for the disposition of the tires for at least 3 years. The receipts must list the number, weight, or volume of tires and their destination. The records must be available for inspection by the solid waste management authority during regular business hours.

Waste Tire Haulers & Registration

A person who transports waste tires or materials derived from waste tires over Nevada highways is required to register with a solid waste management authority and obtain a registration number. The NDEP registers waste tire haulers statewide, except for those operating in Clark and Washoe Counties. Waste tire haulers intending to do business in either Clark or Washoe County must register with their health districts prior to operating in those areas.

Waste tire haulers must take waste tires to a disposal facility that is authorized to accept tires or a permitted waste tire management facility. Waste tire haulers must also use a manifest to transport tires. The manifest must include the following information: name of generator, passenger tire equivalents or total ton of waste tires to be transported, name and registration number of the waste tire hauler, date of transport, destination of the waste tires, number of tires sold for reuse (if any), and signatures of the generator, hauler, and operator of the facility for the management of waste tires. The hauler must return a completed copy of the manifest to the waste tire generator within 30 days of pick-up.

Haulers must submit a summary of shipments to the solid waste management authority semi-annually, including the names of the retailers serviced and the number and destination of the tires collected. The solid waste management authority will provide a report form.

End-of-Life Processing & Disposal – Permitting

A facility for the management of waste tires is defined as “a site where waste tires are deposited for processing, recycling, or use as a fuel.” Processing is defined as “preparing a waste tire for recycling, use as a fuel, or disposal in a landfill by chipping, splitting or otherwise altering the tire.” A facility for the management of waste tires must have a final use for the waste tires or an available market for the material produced from processing the waste tires. At least 75 percent of the waste tires received at the facility must be used or removed from the facility as processed material for recycling or disposal within 12 months after receipt. If a facility for the management of waste tires exists within a county, waste tires generated in that county may not be landfilled in that county.

The owner or operator of a facility for the management of waste tires shall not accept waste tires for processing, recycling or for use as a fuel until he or she obtains a permit to operate a facility for the management of waste tires from the solid waste management authority. However, the following are not required to obtain a permit:

- A business which retreads tires and stores less than 3,000 passenger tire equivalents on the premises.
- A retail dealer of tires, or any other business that removes tires from motor vehicles, which stores less than 1,500 passenger tire equivalents on the premises.
- A disposal site which is authorized by the solid waste management authority to store waste tires or deposit waste tires in a landfill.
- Any business which stores less than 500 passenger tire equivalents on the premises.

NAC 444A.290 sets the standards for applications for permits, which include but is not limited to elements such as name(s) of the facility owner and operator, plan of the area where the tires will be stored, arrangement and size of tire piles, a description of the use for the waste

tires deposited or the available market for the material derived from tires after it is processed, procedures for the prevention of fire, and procedures to be used if a fire occurs.

The appropriate solid waste management authority reviews the application and provides a period of public review of the application. If approved, the solid waste management authority issues the permit to a specific owner or operator. This permit is not transferable, is valid for 5 years, and may be renewed.

Disposal of Waste Tires

If waste tires arrive at a permitted landfill segregated from other types of solid waste, they must be 1) chipped, split, or reduced in size in some other way prior to burial, 2) buried with construction and demolition debris, or 3) handled in a manner that is approved by the solid waste management authority and prevents resurfacing after they have been covered, reduces the possibility of a fire at the disposal facility, controls vectors, and otherwise protects the environment and public health. Waste tires that arrive at a permitted landfill commingled with other types of solid waste may be buried with the solid waste.

If a permitted facility disposes of tires in another way, the requirements for stockpiling prior to disposal would be more focused on in order to prevent fires and control vectors.

The handling method for waste tires at disposal facilities should be addressed in the operating permit issued by the solid waste management authority.

Used or Waste Motor Oil

Recycling and reusing used motor oil are preferable methods to disposal. Used oil can be refined into new oil, processed into fuel oils, or used as raw materials in the petroleum industry.¹ If not recycled or disposed of properly, used oil can pollute water supplies and the soil. Used oil can contain toxic chemicals and heavy metals which are harmful to the environment and public health, and it is slow to degrade.

Generators

Regulated Generators

Regulated used oil generators consist of businesses that generate and manage used oil through their commercial or industrial operations or from the maintenance of vehicles and equipment.² Examples of generators include auto repair shops, quick lube shops, and metal working industries. Used oil generated by Nevada businesses is not considered a hazardous waste in the State if it is collected and recycled or burned for energy recovery. When handling

¹ EPA. (2022, May 17). Managing, Reusing, and Recycling Used Oil.
<https://www.epa.gov/recycle/managing-reusing-and-recycling-used-oil>

² EPA. (2021, August 12). Managing Used Oil: Answer to Frequent Questions for Businesses.
<https://www.epa.gov/hw/managing-used-oil-answers-frequent-questions-businesses>

used oil, regulated generators must meet the used oil standards detailed under Subpart C of 40 CFR Part 279. These Federal regulations set requirements for used oil storage, labeling, responses to releases, and off-site shipment.

Businesses generating used oil may use a transporter to deliver used oil to re-refiners, processors, or burners. If a transporter is used, generators must ensure the transporter has obtained an EPA identification number as a used oil transporter. Businesses may also bring their used oil to Used Oil Collection Centers (UOCC) in shipments of no more than 55 gallons under the provisions of §279.24.

Residents

Used oil generated by households from the maintenance of their own vehicles and equipment are not subject to these Federal standards, but the used oil still must be appropriately disposed of. It is important that used oil is not dumped down any drain or put in the trash. Additionally, many service stations or collection centers will not accept used oil if it has been mixed or contaminated with other chemicals or products, such as antifreeze. Therefore, it is important to not mix used oil with other products.

Residents should check with their local automobile maintenance facilities, auto parts retailers, used oil collection facilities, waste collectors, or local government waste authorities to see where they can drop off used oil for recycling. Per NAC 444A.130, a municipality that provides a municipality program for the disposal of household hazardous waste must also provide for the collection of used or waste motor vehicle oil at least semi-annually.

Used Oil Collection Centers & Registration

UOCCs must be registered with the NDEP. UOCCs are facilities or sites that manage used oil and accepts/aggregates and stores used oil collected from regulated used oil generators. UOCC's may also accept used oil from household do-it-yourselfers (DIYers).

Collection centers that only accept used oil from household DIYers are not required to register with the NDEP, but registration is encouraged.

End-of-Life Treatment, Storage, & Disposal – Permitting

Recycling

As mentioned, the preferred end-of-life management option for used oil is recycling. Because used oil doesn't wear out, it can be repeatedly recycled. Facilities that process or re-refine used oil must meet the standards of Subpart F of 40 CFR 279. These standards require the facility to notify NDEP and obtain an EPA identification number. The standards also require that the facility be maintained and operated to minimize the possibility of fire, explosion, and releases of used oil as well as develop a contingency plan and arrangements with local authorities.

Burning Used Oil

Businesses or facilities generating used oil can burn the oil in on-site used oil-fired space heaters - provided that a few conditions are met.³ First, the used oil cannot be mixed with hazardous waste. Additionally, the business or facility may only use the used oil generated at its location or from household "do-it-yourselfers." Used oil generated at one business or facility cannot be burned in another business's or facility's space heater. Also, these space heaters cannot exceed 0.5 million Btu per hour. Air permits may be required depending on the business's or facility's location. Washoe County requires permits for on-site used oil space heaters within its county. If operating in Clark County, the business or facility may need to acquire an air permit. Additionally, if you are outside of Washoe and Clark County, an air permit may be required by NDEP's Bureau of Air Quality. Please check with your jurisdiction.

Disposal

Motor oil may not be disposed of or dumped at any site which has not been issued a permit for that purpose by the solid waste management authority. This applies to sanitary landfill or other disposal sites established by a municipality. Such sites must also be permitted for the purpose of disposing oil by the solid waste management authority.

³ Nevada Business Environmental Program. (2017). Understanding Used Oil & Used Oil Filters Fact Sheet. <https://unrbep.org/wp-content/uploads/2017/02/Understanding-Used-Oil-and-Used-Oil-Filters-Mar15-1.pdf>