



GUIDELINE 21 - SCRAP TIRE MANAGEMENT

North Dakota Department of Health - Division of Waste Management

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The North Dakota Department of Health (NDDH) regulates scrap tires under Article 33-20 of the North Dakota Administrative Code (NDAC). Generators of solid waste, including scrap tires, are responsible for the storage, transportation, disposal, recycling and reuse of waste materials. Open burning of tires is prohibited under the Air Quality rules, NDAC Article 33-15.

Integrated waste management, a hierarchy for managing solid waste, includes waste reduction, reuse, recycling, energy recovery, and disposal. **Waste reduction** includes buying tires with a long tread life and providing tire maintenance (proper pressure, alignment, rotation, etc.) to optimize tire wear and life. **Reuse** of tires includes retreading tires. Many tires, especially truck tires, are reused many times through the retreading process. Purchase of retread tires is also reuse. **Recycling** tires includes processing tires into crumb rubber for play grounds, pavement surfaces, athletic track surfaces. Approved engineering uses of shredded tires include use as drainage fields, landfill construction, low weight fill, etc. Some large tires are used for livestock watering. **Energy recovery** includes burning tire-derived fuel (TDF) in a power facility, gasification plant, or cement kiln. TDF burns cleanly in a high temperature boiler (tires do not burn cleanly in the open environment). **Disposal in a permitted landfill** is a less desired element in the strategy; however, it is preferred to stockpiling or dumping tires. Landfills may legally bury tires in North Dakota; however, many choose not to bury tires due to handling or space constraints. Many generators contract with a tire processing/recycling facility who charge a tipping fee to pay for transportation, processing, marketing and disposal costs. Open dumping, stockpiling and open burning are illegal disposal options. **Improperly managed tires pose fire, insect, rodent, snake, and potential disease concerns.**

Tire fires pose serious threats to fire fighters, workers and citizens. According to the U.S. Environmental Protection Agency (EPA):

“Emissions from an open tire fire can represent significant, acute and chronic health hazards to firefighters and nearby residents . . . unprotected exposure to the visible smoke plume should be avoided . . . open tire fire emissions are estimated to be 16 times more mutagenic than residential wood combustion in a fireplace. One of the key contaminants is benzene.”

Regarding **disease**, the Center for Disease Control (CDC) advises:

“Help reduce the number of mosquitoes in areas outdoors where you work or play, by draining sources of standing water. In this way, you reduce the number of places mosquitoes can lay their eggs and breed . . . **remove discarded tires**, and other items that could collect water.”

Cities, counties, and tire dealers may obtain a “Permit-by-Rule” to store the equivalent of a semi- truck load of whole or shredded scrap tires for transport to a recycling or disposal facility subject to the following conditions: (1) storage must not create a public nuisance; (2) access to the storage area must be controlled; (3) the storage area must be accessible to fire control equipment; and (4) funds must be set aside for disposing or recycling the stored scrap tires. Storage of larger quantities requires a formal solid waste permit. Contact the NDDH for information on the permit provisions.

Commercial businesses collecting and hauling scrap tires must have a waste hauler’s permit issued by the NDDH. Tires may not be delivered to a facility that is not in compliance with the state rules or abandoned upon any street, alley, highway, public place or private premises. Anyone hauling scrap tires to unapproved

disposal sites (ravines, coulees, dumps, gravel pits, tree rows, etc.) is in violation of NDAC 33-20 and subject to enforcement action.

Tire businesses are advised to transport their tires to an end-user who will process, recycle and/or dispose the materials in a manner that complies with the laws of the state or the governmental jurisdiction having authority over waste management activities. In some cases, generators (tire dealers, cities, etc.) have been required to retrieve tires from persons paid to manage their waste because it was never managed properly. **If scrap tires are taken to a location which comes under enforcement action, generators may be liable for cleanup costs.**

To reduce liability, generators are urged to deal only with companies that properly manage wastes. The following article describes the U.S. EPA and the U.S. Department of Justice actions holding tire generators liable for tire cleanup activities:

"In 1997, Region 4 responded to a fire involving 100,000 to 300,000 tires stockpiled at a site in Irvington, Alabama. The EPA suppressed the fire and removed thousands of gallons of pyrolytic oil runoff from the fire that was threatening a wildlife sanctuary, incurring approximately \$230,000 in response costs. The EPA determined that the owner/operator was insolvent. Initially, the major generators balked, claiming that their disposal of used tires did not constitute disposal of a CERCLA "hazardous substance." Region 4 and Department of Justice persisted, however, and the tire generators agreed to settle their liability with the EPA.

This settlement enhances environmental protection by giving notice to arrangers for tire disposal that there is potential liability for tire fires and that they should take precautions to ensure that the tires are disposed of at responsible and secure facilities."

Individuals or businesses accepting scrap tires are subject to enforcement action if the activity: (1) creates a nuisance, (2) endangers public health or safety, or (3) presents a threat to environmental resources.

The NDDH does not have a program specific to scrap tires. Scrap tires are worth nothing unless processed into a saleable product for which there is a market. While the NDDH does not endorse specific companies, currently scrap tires are chiefly processed by four companies:

1. Waste Not Recycling, 2928-37th St. NW, Mandan, ND 58554, (701) 663-3370.
2. New Deal Tire, 117 W. Highway 12, Groton, SD 57445-2308, (605) 397-8473 or 605-397-8291.
3. Liberty Tire Services of Ohio, LLC, 12498 Wyoming Ave. S., Savage, MN 55378, (952) 894-5280.
4. Borderline Tire Industries Inc., 404 2nd Ave. E., PO Box 125, Oslo, MN 56744, (218) 695-2099.

More information regarding scrap tire issues is available through the Scrap Tire Management Council of the Rubber Manufacturers Association (RMA) at www.rma.org. Other information on tires, including fire control, health, and safety issues, is available at:

<http://www.usfa.fema.gov/applications/publications> (do a search for "tires")

<http://www.epa.gov/epaoswer/non-hw/muncpl/tires.htm>

<http://www.epa.gov/jtr/docs/r9tirerecommend.pdf>

Information on **disease hazards** (including encephalitis, West Nile Virus, hantavirus, rabies, etc.), associated with uncontrolled tire accumulations is available through the CDC at <http://www.cdc.gov> (do a search for "tires, disease").