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Scrap Tire Management

If improperly managed, stockpiles of scrap tires can present a significant fire threat, and trapped water provides breeding sites for mosquitoes, which can transmit disease. Also, landfilled tires consume valuable landfill capacity and may result in an unstable base for constructing the landfill cap.

Scrap tires are regulated as a solid waste in New Hampshire, under the provisions of the New Hampshire Solid Waste Rules (Rules). Env-Sw 905 of the Rules specifies requirements for collecting, storing, transferring, processing, treating, and landfilling tires. A solid waste management facility permit is required in most instances.

Collection, Storage and Transfer

All activities involving the collection, storage, and/or transfer of scrap tires must meet certain standards, as set forth by the rules. Tires may be collected and stored in outdoor transfer containers, covered trailers, or on the ground. A solid waste permit is required to collect, store, and transfer scrap tires unless the tires are sent directly for salvage and re-use as tires. No permit is required to actively collect, store, and transfer source separated tires that pass inspection in New Hampshire and may be legally re-used as tires. A permit is required, however, to collect mixed loads of usable and non-usable tires where the usable tires are then sorted out.

If stored on the ground, the stockpiles must be no greater than 25 feet in diameter and 15 feet in height, or less if required by local fire officials. In addition, fire lanes at least 25 feet wide must be maintained around each stockpile and a berm no less than 12 inches in height must surround each stockpile to contain pyrolitic oils or other liquids resultant to firefighting. Further, the storage facility must have equipment, cover material and other supplies, including water, sufficient to control a fire until the nearest fire company capable of extinguishing the fire arrives.

Whether stored indoors or outdoors, precautions must be taken to prohibit the establishment of a habitat for breeding mosquito populations. Limit the size of tire piles and ship tires off-site as soon as you accumulate a full load. Collecting tires in a trailer keeps them dry and ready for prompt shipping without additional handling. If tires must be stored outside, covering the pile with plastic will help to minimize the collection of water.

Processing and/or Treatment

Tires may be processed or treated in accordance with Env-Sw 500 of the Rules. Processing tires, such as by chipping or shredding, must be done in a manner that limits noise, odor and fugitive dust emissions to the greatest extent practicable. In most instances, a solid waste management permit is required for facilities that process tires. No permit is required, however, for facilities that process scrap tires into "new" tires by recapping methods and facilities that process tires at the site of generation.

Treatment of tires must meet the same standards that apply to processing. If the treatment method is by incineration, additional requirements apply, as specified by Env-Sw 700 of the Solid Waste Rules. At properly equipped and permitted waste-to-energy facilities, scrap tire chips can be burned to both create energy and provide an alternative to landfilling the tires. The open burning of tires is prohibited. In all cases, a processing or treatment facility must properly account for and manage all bypass and residual waste, including ash, generated by the treatment process.

All waste-derived products produced by processing or treating tires must be certified under the provisions of Env-Sw 1500 of the Rules prior to distribution and use. Certain tire-derived products and uses meeting nationally recognized standards are "automatically" certified by rule, as described below. To obtain certification for tire-derived products that are not automatically certified by rule, an application must be filed with NHDES pursuant to the requirements in Env-Sw 1500.

Scrap Tire-Derived Products and Uses Certified-by-Rule

Scrap tires and recapped tires that pass inspection in New Hampshire are not solid waste unless the tires have been abandoned.

ASTM D 6270-98 **Standard Practice for Use of Scrap Tires in Civil Engineering Applications** describes several uses of scrap tires in construction projects. These uses include tire shreds as lightweight embankment fill, lightweight retaining wall backfill, drainage layers, thermal insulation to limit frost penetration beneath roads, insulating backfill around building foundations and retaining walls made from whole tires. All of these uses are intended to serve an engineered function and therefore must be designed and built under the direct supervision of a professional engineer licensed in New Hampshire. As pointed out in ASTM D 6270-98, it is the responsibility of the design engineer to determine the appropriateness of using scrap tires in a particular application and to select applicable tests and specifications to facilitate construction and environmental protection. Note well that this is not a disposal option for scrap tires and that the use of such must serve a legitimate function in an engineered, constructed system. In particular, use of tires as general fill is not included or allowed.

Landfilling is the least preferred option for managing scrap tires. However, when landfilled, tires must first be quartered, split or shredded to reduce the potential for the tires to resurface. Landfilling may occur at authorized facilities only.

Towns are authorized under RSA 261:153(V) to collect an additional fee at the time of motor vehicle registration to offset the cost of disposing of automobile wastes (scrap tires, used oil, and motor vehicle batteries) at municipally owned solid waste management facilities. (See also NHDES fact sheet SW-23 "Vehicle Registration Fees for Recycling." Towns may use the revenue from this fee for off-site scrap tire management.)

For more information, contact:

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