

# Guidance for Preparing and Reviewing Waste Tire Processing Facility Submittals



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Due to revisions to the Wisconsin solid waste management rules in February 2006, new or existing tire processing facilities (that previously operated under the scrap metal exemption) are now subject to plan review and licensing requirements. So all new and existing tire processing facilities must submit a plan of operation report in accordance with the submittal requirements of s. NR 502.08(4) and (5), Wis. Adm. Code. This guidance document has been prepared to assist in applying these processing facility submittal requirements to waste tire facilities and to suggest points of emphasis. This guidance is not intended to replace administrative code requirements in ch. NR 502. Waste tire material is defined as whole waste tires or any material that results from the processing of waste tires. This material includes, but is not limited to, shredded tires, products made from tires, loose wire or wire mixed with rubber and fiber from processing. Waste tire material does not include rims removed from the tire.

General submittal requirements specified in s. NR 500.05 and relevant state and local regulations apply to plan of operation reports for waste tire processing facilities. Although s. NR 500.05 specifies a review fee for all solid waste plan of operation report submittals and s. NR 500.06 specifies a license fee for all solid waste facilities, a provision in s. NR 520.04, Table 2 exempts review and license fees for waste tire processing facilities which have a primary purpose of converting solid waste into usable materials, products or energy.

### Plan of Operation Report – s. NR 502.08(4)(a) to (x)

1. The report for new facilities should verify that an initial site inspection has been performed in accordance with s. NR 502.04(2), and address any locational criteria listed in s. NR 502.08(3) which are referenced in the department's inspection response letter. Existing facilities should request an initial site inspection in accordance with s. NR 502.04(2) and request exemption from any locational criteria (listed in s. NR 502.08(3)) that the facility fails to meet.
2. In addressing s. NR 502.08(4)(h), the report should include a description of the shredding operation identifying product and waste flow as well as estimation of the waste tires amount processed daily using a realistic rate of the processing equipment including the type of processing equipment and the product produced (e.g., tire derived fuel, crumb rubber, etc.).
3. In addressing s. NR 502.08(4)(n), in addition to the following guidelines, ch. Comm 14 Wis. Adm. Code should be followed (Note: The Department of Commerce has authority regarding fire safety in commercial properties. Provisions of ch. Comm 14 Wis. Adm. Code could supersede any guidance included in the following paragraphs):

- A. Inside storage of whole, cut, chipped or shredded waste tires should meet the fire prevention, exposure protection and fire fighting access guidelines contained in the “Standard for Storage of Rubber Tires” adopted by National Fire protection Association (NFPA).
  - B. The following information should be included regarding fire safety in an outside waste tire material storage:
    - 1.) Emergency planning, which should include a description of the actions site personnel need to take in case of fire, including evacuation procedures for site personnel.
    - 2.) The procedures, materials and equipment (such as bulldozer, front-end loaders) to be used to prevent the spread of a fire to surrounding piles of tires, buildings and property.
    - 3.) The procedures, materials and equipment to be used to extinguish a fire.
    - 4.) Actions to be taken to prevent runoff from the site during and after fire suppression activities.
    - 5.) Proposed testing to identify contamination of soil and runoff water.
    - 6.) Methods of disposal of contaminated water, soil and debris resulting from waste tire fire.
    - 7.) Methods/procedures to be used to eliminate potential ignition sources such as combustibles materials and welding.
    - 8.) Safeguards to minimize hazard of sparks from equipment such as burners, boiler stacks and vehicle exhaust.
  - C. The fire safety plan should be discussed with the local fire department and any other agency (e.g., Department of Commerce) which may be involved in case of an accidental fire.
  - D. The fire safety plan should address issues related with an annual fire drill. Coordination of the fire drill with the local fire department should be recommended.
- 4. In addressing s. NR 502.08(4)(r), the report should describe measures to be taken, both maintenance and operating procedures to ensure that materials entering or leaving the site are not deposited on public roads. This description should also include areas where vehicle traffic enters or exits the site and measures such as the use of tarps or enclosures to minimize spillage including paving portions of the site exiting to public rights-of-way.
  - 5. In addressing s. NR 502.08(4)(t), the report should include measures to limit access to the site.
  - 6. In addressing s. NR 502.08(4)(u), the report should provide the estimated maximum quantity of waste tire material stored at the facility. Include a description of the storage area design including individual waste tire material pile locations and size configuration. Necessary open space should be maintained between individual waste tire material piles and buildings to provide effective fire break. A working inventory of waste tire material equal to or less than three times the actual daily processing rate of the processing equipment may be closer to the buildings where processing of waste tires occur but in no case physically piled against the building proper. The size of land area for processing facilities should be large enough to provide adequate space for waste tire storage piles and maneuvering of fire fighting equipment which will be needed during fighting an accidental fire.

7. In addressing s. NR 502.08(4)(w) the report should also include a proposal regarding outside waste tire material storage conditions that are unfavorable for the harboring, feeding and breeding of vectors. One or more of the following methods may be used to control vectors:
  - A. Tires are drained of water and kept dry by storing in a building or trailer, or under cover.
  - B. Tires are altered so as not to retain water. Narrative and diagram should be included to explain the procedure for waste tire alteration.
  - C. Tires are treated with a larvicide and/or adulticide that is appropriate to prevent mosquito larvae and pupa. The life of the larvicide and/or adulticide utilized should be considered when determining the frequency of application. Explanation as to how to determine reapplication frequency should be included in the report. A listing of the larvicide/adulticide to be used, application rate (i.e., volume per 1,000 waste tires), and instruction for mixing and application should also be included.
  - D. Waste tires are processed within four days of stockpiling.

### Engineering Plans

In addressing s. NR 502.08(5)(c), the plans should also show the location of any firefighting equipment, telephones and any other features relevant to the operation of the facility.

### Financial Responsibility

1. In accordance with s. NR 502.04(6), financial responsibility should be estimated based upon what it would cost the DNR to remove and legally dispose or ship to an end user the maximum quantity of waste tire materials that is stored at the site in the event that the processing facility was not closed properly by the owner of the facility. The cumulative total amount of financial responsibility will be equal to the estimated individual totals for the different type of waste materials that are to be on site. Marketable products and commodities, produced by processing waste tires, may be excluded from the closure cost estimate.
2. The department recommends that the processing facility obtain insurance, letter of credit or bond to cover the estimated cost of fire fighting and clean-up due to an accidental fire. The estimate should include the cost to be reimbursed to the local fire department for fighting a fire.
3. Provisions of ss. NR 520.05 to 520.13 apply to waste tire processing facility financial responsibility issues.

**Contact 608/266-2111 or [DNRWasteMaterials@Wisconsin.gov](mailto:DNRWasteMaterials@Wisconsin.gov) for further information.**

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