

**WEST VIRGINIA  
SECRETARY OF STATE  
JOE MANCHIN, III  
ADMINISTRATIVE LAW DIVISION**

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OFFICE WEST VIRGINIA  
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Form #6

**NOTICE OF FINAL FILING AND ADOPTION OF A LEGISLATIVE RULE AUTHORIZED  
BY THE WEST VIRGINIA LEGISLATURE**

AGENCY: WV DEP - Division of Waste Management TITLE NUMBER: 33

AMENDMENT TO AN EXISTING RULE: YES  NO

IF YES, SERIES NUMBER OF RULE BEING AMENDED: 5

TITLE OF RULE BEING AMENDED: " Waste Tire Management Rule"

IF NO, SERIES NUMBER OF RULE BEING PROPOSED: \_\_\_\_\_

TITLE OF RULE BEING PROPOSED: \_\_\_\_\_

THE ABOVE RULE HAS BEEN AUTHORIZED BY THE WEST VIRGINIA LEGISLATURE.

AUTHORIZATION IS CITED IN (house or senate bill number) HB 2663

SECTION \_\_\_\_\_, PASSED ON April 14, 2001

THIS RULE IS FILED WITH THE SECRETARY OF STATE. THIS RULE BECOMES EFFECTIVE ON THE  
FOLLOWING DATE: June 26, 2001

  
Authorized Signature

\$4.80

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TITLE 33  
LEGISLATIVE RULE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF WASTE MANAGEMENT

OFFICE WEST VIRGINIA  
SECRETARY OF STATE

SERIES 5  
WASTE TIRE MANAGEMENT RULE

§33-5-1. General.

1.1. Purpose and Applicability.

1.1.a. Purpose. This rule is intended to meet the requirements of W. Va. Code §20-11-8 and §22-15-21, as amended, to properly manage waste tires, including collection, accumulation, storage, disposal, processing, monofilling, reusing, transporting, recycling, permitting and recordkeeping.

1.1.b. Applicability. This rule applies to and establishes requirements for any person or persons who manage waste tires by whatever means in the State of West Virginia, as of the effective date of this rule.

1.1.c. Reference to Other State Agency Requirements.

1.1.c.1. Persons who manage waste tires may also be regulated under W. Va. Code, §§17-23 or 24, 20-11, 24-2, and rules promulgated thereunder.

1.1.c.2. In the event of conflict between this rule and other state agencies' rules, the more stringent rule prevails.

1.2. Authority. W. Va. Code §22-1-3, §22-1-3a, §20-11-8(d), and §22-15-21(k), as amended.

1.3. Filing Date. --

1.4. Effective Date. --

1.5. Legislative Mandate. It is unlawful to dispose of tires in a solid waste landfill in West Virginia, except for waste tires collected as part of the Division of Highways waste tire remediation projects or other collection efforts in accordance with W. Va. Code §17-24 or the Department of Environmental Protection's Pollution Prevention and Open Dump Program or other state authorized remediation or cleanup programs: Provided, That waste tires may be disposed of in solid waste landfills only when the state agency authorizing the remediation or cleanup program has determined there is no reasonable alternative available.

1.6. Penalties. Any person who violates the provisions of the "Solid Waste Management Act," W. Va. Code §22-15, or any permit, rule, or order issued pursuant to W. Va. Code §22-15, is subject to the same criminal and or civil penalties as set forth in W. Va. Code §22-11-24 and §22-15-15.

§33-5-2. Definitions.

Unless the context clearly requires a different meaning, all terms contained in this rule and not defined by this section are defined by their plain meaning. This section contains definitions for terms that appear throughout this rule.

2.1. "Access Road" means all roads providing access to a solid waste facility from a road that is under federal, state, or local authority, or internal roads providing access from one portion of the facility to another.

2.2. "Automobile Dealer" means any business engaged in the sale of automobiles,

trucks or motorized recreational vehicles in the State of West Virginia.

2.3. "Beneficial Use" means the use or reuse of whole waste tires or tire derived material which are reused in constructing retaining walls, rebuilding highway shoulders and subbase, building highway crash attenuation barriers, and other civil engineering applications, feed hopper or watering troughs for livestock, or other agricultural uses approved by the Department of Environmental Protection, playground equipment, boat or truck dock construction, house or building construction, go-cart, motorbike or race track barriers, recapping, alternative daily cover, or similar types of beneficial applications: Provided, That waste tires may not be reused as fencing, as erosion control structures, along stream banks or river banks or reused in any manner where human health or the environment, as determined by the Secretary of the Department of Environmental Protection, is put at risk.

2.4. "Bond" means any performance bond or other form of financial assurance provided by W. Va. Code §22-15-12 and the Solid Waste Management Rule (33CSR1).

2.5. "Chief" means the chief of the Division of Waste Management of the West Virginia Department of Environmental Protection or his or her authorized representative.

2.6. "Department of Transportation Symbol" means the identification number placed on new tires mandated by the Federal Motor Vehicle Safety Standards for motor vehicles and motor vehicle equipment pursuant to Section 103 of the National Traffic and Motor Vehicle Safety Act of 1966, as amended.

2.7. "D.O.T. Regulated Tire" means any tire that was originally used for those purposes defined under "tire" or meets the definition of "waste tire" that is identified with a Department of Transportation symbol.

2.8. "Remediate or Remediation" means to remove all tires located above grade at a site and may also include the removal of the solid waste incidental to the removal of waste tires at a site: Provided, That remediation does not include clean up of hazardous waste.

2.9. "Retail Tire Dealer" means any person or persons engaged in the business of retail sale of tires to an end user in the state of West Virginia.

2.10. "Sale and/or Selling" includes exchange, consignment, barter, gift, and offer for sale. Sale and/or selling includes the removal of tires from a stock of merchandise by a wholesale distributor, or a retail tire dealer, for its own use.

2.11. "Salvage" means old or scrap brass, copper, iron, steel, other ferrous or nonferrous materials, batteries or rubber and any junked, dismantled or wrecked machinery, machines or motor vehicles or any parts of any junked, dismantled or wrecked machinery, machines or motor vehicles.

2.12. "Salvage Yard" means any place which is maintained, operated or used for the storing, keeping, buying, selling or processing of salvage, or for the operation and maintenance of a motor vehicle graveyard: Provided, That no salvage yard shall accept, store or process more than one hundred waste tires unless it has all of the permits necessary to operate a monofill, waste tire processing facility or solid waste facility. Any salvage yard which currently has on its premises more than one hundred waste tires not on a vehicle must establish a plan in conjunction with the Department of Environmental Protection for the proper disposal of the waste tires.

2.13. "Shredded Waste Tires" means tires or tire derived material, which has been processed by shredding to particle sizes not greater than 72 square inches.

2.14. "Storage Cell" means a dedicated monofill area for long term storage for waste tires or tire derived material located within an approved solid waste disposal facility for the purpose of long term storage for the eventual retrieval for marketing purposes.

2.15. "Tire" means any continuous solid or pneumatic rubber covering designed to encircle the wheel of a vehicle and may include the following types of tires: passenger car tires, light-duty and heavy-duty truck tires, high speed industrial tires, bus tires, and special service tires (including military, off-the-road, recreational/all terrain vehicle, and slow speed industrial).

2.16. "Tire Derived Material" means any shredded, chipped, crumb rubber or other such tire material that has been processed from a tire, or waste tire.

2.17 "Vector" means any insect, rodent, or other organism capable of directly or indirectly transmitting infectious diseases or pathogenic organisms from one person to another or from an animal to a person.

2.18. "Waste Tire" means any continuous solid or pneumatic rubber covering designed to encircle the wheel of a vehicle but which has been discarded, abandoned or is no longer suitable for its original, intended purpose nor suitable for recapping, or other beneficial use, as defined in W. Va. Code §17-24-2, because of wear, damage or defect. A tire is no longer considered to be suitable for its original intended purpose when it fails to meet the minimum requirements to pass a West Virginia motor vehicle safety inspection. Used tires located at a commercial recapping facility or retail tire dealer for the purpose of being reused or recapped are not waste tires.

2.19 "Waste Tire Chips" means tires or tire derived materials that have been reduced to particle sizes not greater than 2 inches by 2 inches.

2.20 Waste Tire Generator means any person or persons whose activity results in the generation of waste tires by whatever means.

2.21. "Waste Tire Monofill" or "Monofill" means an approved solid waste facility where waste tires not mixed with any other waste are placed for the purpose of long term storage for eventual retrieval for marketing purposes.

2.22. "Waste Tire Pile" means a collection and/or accumulation of more than one hundred waste tires into a single location or given parcel or tract of land.

2.23. "Waste Tire Processing Facility" means a solid waste facility or manufacturer that accepts waste tires generated by sources other than the owner or operator of the facility for processing by such means as cryogenics, pyrolysis, pyroprocessing, cutting, splitting, shredding, quartering, grinding or otherwise breaking down waste tires for the purposes of disposal, reuse, recycling or marketing.

2.24. "Waste Tire Transporter" means any person who transports waste tires collected from retail tire dealers or other sources in this state. Waste tire transporters must be in compliance with W. Va. Code 24-2-1b(a) to lawfully transport tires. Provided, That persons transporting waste tires generated by their own business activities, citizens transporting their own waste tires, or persons who are transporting waste tires generated from state authorized waste tire remediation or cleanup projects are not, in this instance, waste tire transporters.

### **§33-5-3. Permitting Requirements.**

#### **3.1. Applicability.**

3.1.a. A permit from the Department of Environmental Protection is required for any person or persons who generate, accumulate, collect, transport, store, process, dispose, or otherwise manage waste tires in the State of West

Virginia on and after the effective date of this rule.

3.1.b. Exceptions to permitting requirements. Persons who use no more than one hundred waste tires for beneficial use, as defined in this rule, may, in the discretion of the Secretary, accumulate waste tires for this specific purpose without a permit. The commissioner of the Division of Highways may temporarily accumulate, without a permit, as many waste tires as he or she deems necessary at any location or locations necessary to effectuate waste tire pile remediation. A recycling facility is exempt from permitting whose only function is to accept at no charge, buy or transfer source separated material, including waste tires for reuse, resale or transfer for further processing. Provided that, a solid waste permit from the Department is not required for transporting waste tires.

3.1.c. Use of Waste Tires as Alternative Fuel. Waste tires or tire derived material that is used as an alternative or supplemental fuel shall not require a solid waste facility permit or be regulated under this rule: Provided, That the facility utilizing such material is permitted and regulated by the Division of Air Quality within the Department of Environmental Protection or other appropriate state regulatory agency.

3.1.c.1. Use of Waste Tires as a Raw Material Feedstock. A facility or pilot project which utilizes waste tires as raw material feedstock in a process such as pyrolysis, cryogenics, (chemical/thermal) or high pressure waterjetting to break down waste tires into their respective constituents of crumb rubber, polyester or nylon fiber, steel belts and other constituents not herein specified to develop new and/or recyclable materials shall not require a solid waste facility permit or be regulated under this rule: Provided, That the facility is permitted and regulated including the handling, storage, and stockpiling of waste tires consistent with this rule by the Division of Air Quality, Division of Water Resources or other appropriate state regulatory agency. Additionally, the Secretary may allow, without a solid waste facility permit,

pilot or test projects using the latest best available technology.

3.1.c.2. Beneficial Use of Waste Tires. Whole waste tires or tire derived materials may be reused in the applications described under the definition of "beneficial use" in section 2 of this rule, or in other acceptable civil engineering applications. At the discretion of the Secretary, the Department may require a permit for the accumulation of more than 100 waste tires for beneficial use. Additionally, the Secretary has the authority to determine if an unreasonable number of waste tires have been accumulated for an unreasonable length of time for beneficial use. In such determination, the Secretary may take enforcement action for creating an open dump and require the removal and proper disposal of the waste tires.

3.1.d. Commercial Solid Waste Facilities Required to Accept Waste Tires.

3.1.d.1. Commercial solid waste facilities shall accept whole waste tires from any person and may charge a reasonable fee for acceptance of waste tires. Provided however, whole waste tires accepted may not be disposed of in a landfill except as allowed in paragraph 3.1.e.1 of this section and W. Va. Code §22-15-21(j). Provided further, that whole waste tires accepted which are not eligible for disposal shall be stored in accordance with 3.5.e.

3.1.d.2. Except as required in paragraph 3.1.e.2 of this section, whole waste tires accepted by commercial solid waste facilities are exempt from the calculation of monthly tonnage limits and from any solid waste disposal assessment fees.

3.1.e. Exceptions to Prohibiting Waste Tires from Disposal in Landfills.

3.1.e.1 Commercial solid waste landfill facilities may only dispose of whole waste tires generated from the Division of Highways waste tire remediation projects and the

Department of Environmental Protection Open Dump Program when the Division of Highways or the Department of Environmental Protection has determined that there is no other reasonable alternative available.

3.1.e.2. Whole waste tires accepted from the Division of Highways or the Department of Environmental Protection projects and program which are permanently disposed of in a landfill are not exempt from the calculation of monthly tonnage limits or any solid waste disposal assessment fees.

3.1.e.3. The Division of Highways and the Department of Environmental Protection may negotiate with a solid waste landfill facility for rates and charges for the disposal of waste tires regardless of the rates and charges established by the Public Service Commission.

3.1.e.4. Waste Tire Monofills. Waste tires may be disposed in waste tire monofills to provide a long term storage site for waste tires or tire derived material, while minimizing the risk of vector attraction, fire and leachate generation until such time that markets are further developed for reuse and recycling.

3.1.e.5. Alternative Daily Cover. Beneficial use of shredded waste tires is acceptable and may be substituted as alternative daily cover at solid wastelandfills, if approved in writing by the Department: Beneficial use of shredded waste tires as alternative daily cover is exempt from the calculation of monthly tonnage limits and solid waste disposal assessment fees. Provided, That the amount (tons) of shredded waste tires used beneficially as alternative daily cover must be included in each monthly tonnage report.

3.1.e.6. Beneficial Use as Select Waste in Commercial Solid Waste Landfill Facilities. Tire derived material may be beneficially used for the first eight (8) feet of select waste by being placed on the protective cover of the composite liner system and shall be

exempt from the calculation of monthly tonnage limits and solid waste disposal assessment fees.

### 3.2. Types of Permits Required.

3.2.a. Waste Tire Monofill and Waste Tire Processing Facility. A permit must be obtained from the Secretary prior to the installation, establishment, construction or operation of a waste tire monofill or a waste tire processing facility. Provided, That a portable tire grinder or tire shredding machine shall not constitute a waste tire processing facility, unless determined otherwise by the Secretary.

3.2.a.1. Minor Modifications. A permittee of an existing approved commercial solid waste facility shall apply to the Secretary for a minor permit modification to conduct waste tire processing activities. The permittee may also apply for a minor permit modification to install and operate a designated monofill storage cell for the placement of waste tires and/or tire derived material at the facility: Provided, That such activities fully comply with this rule. Each designated monofill storage cell must be located at least two hundred (200) feet from any other solid waste disposal cells.

3.2.a.2. Salvage Yard. In addition to a license issued by the Division of Highways, a salvage yard which on and after the effective date of this rule has on its premises, at any given time, more than 100 waste tires not mounted on wheels on vehicles or machines must obtain a commercial solid waste facility permit to store said tires or have entered into an agreement with the Department of Environmental Protection for the proper disposal of the waste tires.

### 3.3. Permit Application Requirements.

3.3.a. Regulatory Requirements. Unless otherwise approved by the Secretary in writing, all applicants for a waste tire monofill, storage cell, salvage yard or waste tire processing facility or activity shall comply with the permit application requirements of §33CSR1 subsection

3.7, as applicable, and the following additional requirements:

3.3.b. Projected Maximum Quantity/Tonnage Information. The proposed annual quantity/tonnage of waste tires and tire derived material to be received, processed and stored at the processing facility/activity shall be stated in the application. The maximum quantity/tonnage received, processed and stored at any given time, may not exceed a projected (quarterly) three month supply. However, if the applicant can verify a market or an end use for the tire derived material by copies of signed contractual agreements, the applicant may be eligible, if approved by the Secretary in writing, to receive, process and store at any given time, up to a six month supply: Provided, That no more waste tires and tire derived material shall be received at the facility until the previous maximum quantity/tonnage allowed by the Secretary to be received, processed and stored has been removed from the facility for marketing.

3.3.c. Market Analysis Information. A market analysis relating to waste tires and tire derived material shall be provided by the applicant including:

3.3.c.1. Identification of Potential and Verified Markets. A listing of specific information utilized by the applicant to identify potential and verified markets for the material to be received and processed at the facility shall be provided. Data supplied must also include any material quality requirements of the potential market contacts, market pricing structures, as available and applicable; and the identification of marketing services available for assistance in product quality or material preparation and transportation.

3.3.d. Flow Diagram. The applicant shall provide a flow diagram along with a narrative description of the operation and activities involving the flow of the waste tires from their receipt, processing into tire derived material, storage and transport to market (end

use). There must be sufficient explanation in the flow diagram and narrative descriptions to explain the complete flow of the proposed facility's operation and activities.

3.3.e. Emergency Response Plan. An emergency response plan must be included in the application that includes, at a minimum, the following:

3.3.e.1. Notification Procedures. A notification procedure to summon emergency assistance from the local police departments, fire departments, Department of Environmental Protection and state or local emergency response teams. This procedure must be posted at the facility's office in a conspicuous location and at the main entrance gate visible and legible to the public.

3.3.e.2. Fire Plan. The application shall include a written fire plan with a description of the procedures to be implemented, detailed map depicting location of existing and/or proposed fire hydrants, water supply lines, fire extinguishers or fire ponds if no fire hydrants are to be included in the facility operation or activity and any other proposed fire control equipment. The fire plan must be designed to effectively control a worst case scenario tire fire which could occur at the facility.

3.3.f. Groundwater Protection Plan. All applicants for a waste tire monofill or storage cell, salvage yard, waste tire processing facility or activity shall submit a groundwater protection plan in accordance with 47CSR58 as part of the application.

3.4. Permit Application Fees.

3.4.a. Amount. The application fee is two thousand five hundred dollars (\$2,500) for a waste tire processing facility and three thousand dollars (\$3,000) for a waste tire monofill or salvage yard. The application fee for a waste tire processing activity or waste tire storage cell at an

existing permitted solid waste facility is five hundred dollars (\$500).

3.4.b. Incomplete Application Fee. The Department of Environmental Protection may require an additional fee of ten percent (10%) of the applicable application fee for any application refiled due to deficiency or incompleteness.

### 3.5. Minimum Design and Construction Requirements for a Waste Tire Processing Facility or Activity.

3.5.a. Perimeter Security. A waste tire processing facility or activity must be secured and enclosed within a minimum six (6) foot high woven wire or chain link perimeter fence with a lockable entrance gate and an emergency exit gate at another location.

3.5.b. Grade. No portion of the surface of the ground on which waste tires or tire derived material is stored may be less than two percent or greater than eight percent in grade.

3.5.c. Access Roads. All access roads including fire lanes/fire breaks and the buffer zone must be designed and constructed for all-weather conditions with proper storm drainage provisions.

3.5.d. Access Flow and Restrictions. The facility shall be designed in a manner that restricts unauthorized access. Signs shall be posted at the main entrance gate that direct persons entering the facility during regular business hours to report to the site office.

3.5.e. Storage Plan for Waste Tire and Tire Derived Material. The storage plan must address the receiving and handling of waste tires and tire derived material at, to and from the facility. The plan must address the following items at a minimum:

3.5.e.1. Storage Requirements. The facility or activity must be designed to receive, process and store a quantity/tonnage of waste

tires and tire derived material in accordance with the provisions of subdivision 3.3.b of this rule. Include in the application, the calculations necessary for determining the quantity/tonnage.

3.5.e.2. Other Solid Waste Materials. All miscellaneous solid waste materials generated as a result of operations must be properly disposed at an approved solid waste facility within one week after being received and/or generated at the facility.

3.5.e.3. Size Restriction on Waste Tire Storage.

3.5.e.3.A. Waste tire storage piles may not exceed a maximum dimension of 50 feet wide by 50 feet long by 15 feet in height. A minimum of a 50 foot wide zone around each pile shall be maintained free of all debris and vegetation at all times. The facility shall not exceed a maximum of 18 piles of tires or tire derived material.

3.5.e.3.B. In the absence of an available water supply of at least 500 gallons per minute provided by fire hydrants within 1,000 feet of the facility, a minimum of 10,000 gallon water supply on site for the exclusive use of fire fighting personnel shall be established.

3.5.e.4. Location of Storage Piles. Waste tire and tire derived material storage piles at the proposed facility or activity must be shown on a map in sufficient detail including the length, width and height of each storage pile and the location and dimensions of all fire lanes/fire breaks and buffer zones.

3.5.e.5. Spacing of Storage Piles (Fire Lane/Fire Break). Waste tire and tire derived material storage piles must have a minimum fire lane/fire break spacing of fifty (50) feet between piles at the base and fifty (50) feet from buildings or other structures at the base. Fire lanes/fire breaks must be maintained free of any obstructions at all times so that emergency

fire fighting equipment will always have access in the event of an incident.

3.5.e.6. Buffer Zone. A buffer zone of fifty (50) feet wide minimum shall be provided between the perimeter fence and any storage piles. The buffer zone must be kept clear of weeds, trees, vegetation, debris or other materials that may restrict access to all portions of the facility by emergency fire fighting equipment.

3.5.f. Vector Control Plan. A vector control plan shall be submitted that includes the following:

3.5.f.1. Methods of Vector Control. A description of how storage piles and any fire pond impoundment will be maintained to prevent and/or control mosquito breeding and harborage of disease carrying vectors. Methods of acceptable vector control may include, but are not limited to, the following:

3.5.f.1.A. Covering of Storage Pile. Covering by plastic sheets or other impermeable barriers, other than soil, to prevent the accumulation of precipitation in whole tires; and

3.5.f.1.B. Chemical Treatment. Chemical treatment to eliminate harborage or breeding may be utilized. Provided, That any chemical treatment program utilized as part of the vector control plan must be approved by the West Virginia Department of Agriculture.

3.6. Minimum Design and Construction Requirements for a Waste Tire Monofill or Storage Cell.

3.6.a. Unless otherwise approved by the Secretary in writing, the following specific requirements must be followed in designing and constructing a waste tire monofill or storage cell.

3.6.a.1. Liner System. A liner system shall consist of the following elements:

3.6.a.1.A. Subbase;

3.6.a.1.B. Compacted soil liner;

3.6.a.1.C. Leachate collection and protective cover zone; and

3.6.a.1.D. Daily Q.A./Q.C. reports in accordance with §33CSR1 subparagraph 4.5.e.2.I as applicable, shall be prepared and maintained in a bound log book at the site in regard to liner system construction.

3.6.a.2. The subbase portion of the liner system shall consist of a cleared and grubbed natural ground surface capable of supporting the entire liner system.

3.6.a.3. The compacted soil liner shall:

3.6.a.3.A. Be a minimum compacted thickness of one (1) foot;

3.6.a.3.B. Be compacted in six (6) inch lifts;

3.6.a.3.C. Be no more permeable than  $1 \times 10^{-6}$  cm/sec based on laboratory and field testing;

3.6.a.3.D. Be free of particles greater than two (2) inches in any dimension;

3.6.a.3.E. Be placed without damaging the subbase;

3.6.a.3.F. Be placed during a period of time when both the air temperature and the soil temperature are above freezing so that neither the compacted soil nor the subbase are frozen;

3.6.a.3.G. Have a slope of at least two percent (2%) to facilitate the drainage of any leachate across the liner surface; and

3.6.a.3.H. Be designed, operated, and maintained so that the physical and chemical characteristics of the liner and its ability to restrict the flow of constituents, or leachate is not adversely affected by the leachate.

3.6.a.3.I. The construction of the compacted soil liner shall be certified by a W. Va. registered professional engineer and a Q.A./Q.C. report shall be submitted to the Secretary prior to the placement of the leachate collection and protective cover zone.

3.6.a.4. The leachate collection and protective cover zone shall:

3.6.a.4.A. Create a flow zone between the compacted soil liner and waste tires and/or tire derived material more permeable than  $1 \times 10^{-3}$  cm/sec based on laboratory and field testing. The leachate collection zone including the piping system must be designed and placed on a minimum slope of two percent (2%) to facilitate efficient leachate drainage and prevent ponding on the compacted soil liner;

3.6.a.4.B. Be at least nine (9) inches thick;

3.6.a.4.C. Be constructed of soil or earthen materials to ensure that the hydraulic leachate head on the compacted soil liner does not exceed one (1) foot at the expected flow capacity from the drainage area except during storm events;

3.6.a.4.D. Be comprised of clean soil or earthen materials that contain no debris, plant material, rocks, or other solid material larger than one-quarter (1/4) inch in diameter and no material with sharp edges;

3.6.a.4.E. Be graded, uniformly compacted, and smoothed;

3.6.a.4.F. Be installed in a manner that prevents damage to the compacted soil liner; and

3.6.a.4.G. Contain a perforated piping system capable of intercepting liquid within the leachate collection zone and conveying the liquid to control collection points. The piping system shall also meet the following:

3.6.a.4.G.1. The slope sizing and spacing of the piping system shall assure that liquids drain efficiently from the leachate collection zone;

3.6.a.4.G.2. The distance between pipes in the piping system may not exceed one (100) hundred feet on center;

3.6.a.4.G.3. The pipes shall be installed perpendicular to the flow;

3.6.a.4.G.4. The minimum diameter of the perforated pipe shall be four (4) inches with a wall thickness of Schedule 40 or greater;

3.6.a.4.G.5. The pipe shall be capable of supporting anticipated loads without failure based on facility design;

3.6.a.4.G.6. Rounded stones or aggregates shall be placed around the pipes of the piping system. The stones or aggregates shall be sized to prevent clogging of the pipes and damage to the composite liner;

3.6.a.4.G.7. The piping system shall be installed in a fashion that facilitates cleanout, maintenance, and monitoring. Manholes or cleanout risers shall be located along the perimeter of the leachate collection piping system. The number and spacing of the manholes or cleanout risers shall be sufficient to insure proper maintenance of the piping system by water jet flushing or an equivalent method; and

3.6.a.4.G.8. The leachate collection system shall be cleaned and maintained as necessary.

3.6.a.4.H. The construction of the leachate collection and protective cover zone shall be certified by a W. Va. registered professional engineer and a Q.A./Q.C. report shall be submitted to the Secretary prior to the placement of waste tires or tire derived material in the monofill.

### 3.7. General Operational Requirements.

3.7.a. General Requirements for a Waste Tire Monofill Processing Facility or Activity. Unless otherwise approved by the Secretary in writing, no person may operate a waste tire monofill, processing facility or activity that does not conform to an approved plan of operation and the following:

3.7.a.1. Provisions must be made to secure the facility from theft, vandalism and fire, which may include posting a security guard during non-operational hours if so directed by the Secretary;

3.7.a.2. Confining windblown material within the operational area and controlling dust and noise;

3.7.a.3. Installing and maintaining surface water diversion ditches around the areas;

3.7.a.4. Access to the monofill, processing facility or activity must be restricted through the use of fencing (woven wire or chain link), not less than six feet in height;

3.7.a.5. Effective means must be taken to control flies, rodents, vectors, insects and vermin;

3.7.a.6. A supervisor must be on duty at the facility at all times while it is open;

3.7.a.7. The main entrance gate and emergency exit gate must be kept locked when an attendant is not on duty;

3.7.a.8. No person shall engage in the open burning of waste tires.

3.7.a.9. All topsoil within the facility construction limits shall be salvaged and stored/seeded within the property boundaries for use in the facility closure; and

3.7.a.10. Whole waste tires must be cut into at least four (4) near equal portions, or split into at least two (2) near equal portions, or shredded or chipped prior to placement in a monofill.

3.7.b. Monitoring Wells Required for Waste Tire Monofills. A minimum of one (1) downgradient monitoring well must be drilled to intersect the uppermost significant aquifer. If the disposal area is between five (5) to ten (10) acres, a minimum of two (2) downgradient monitoring wells must be drilled. If the disposal area is greater than ten (10) acres, a minimum of three (3) monitoring wells must be drilled.

3.7.b.1. A minimum of four (4) independent samples from each well (background and downgradient) must be collected and analyzed in accordance with 33CSR1, subparagraph 4.11.b.2.B, during the first semiannual sampling event.

3.7.b.2. At least one (1) sample from each well (background and downgradient) must be collected and analyzed during subsequent semiannual sampling events.

3.7.b.3. The Secretary may specify an appropriate alternative frequency for repeated sampling and analysis for Appendix I constituents, or the alternative list approved in accordance with 33CSR1 subparagraph 4.11.b.2.B, during the active life (including closure) and the post-closure care period.

3.8. Quarterly, and Semiannually Recordkeeping and Reporting Requirements.

3.8.a. Recordkeeping and reporting requirements for waste tire monofills/storage cells, processing facilities/activities and salvage yards shall include the following:

3.8.a.1. Quarterly Reports.

Quarterly reports shall be submitted to the Secretary prior to the fifteenth day of the next quarterly reporting period on forms provided by, or acceptable to, the Secretary. More specifically, the report must include:

3.8.a.1.A. Date, quantity and origin of waste tires and tire derived material received at the facility;

3.8.a.1.B. Quantity/tonnage of waste tires and tire derived material processed at the facility;

3.8.a.1.C. Quantity/tonnage of waste tires and tire derived material stored at the facility; and

3.8.a.1.D. Name, address, telephone number and certificated motor carrier identification numbers of the waste tire transporters who transport waste tires and tire derived material transported to and from the facility, including the quantity/tonnage of waste tires and tire derived material so transported.

3.8.a.2. Problems, Conditions or Changes. Also, describe in the quarterly report any fires, vector or environmental problems, other conditions, or changes in the facility's operational procedures. In regard to fire, vector or environmental problems which have occurred, describe steps taken to prevent a recurrence.

3.8.a.3. Pesticide Application. Identify the name, type and quantities of pesticides used during the reporting period for vector control.

3.8.b. Semiannual Groundwater Monitoring Reports.

3.8.b.1. The groundwater sampling analysis monitoring reports and accompanying report of determining whether there was a statistically significant increase over background values for each parameter or constituent required in the particular groundwater monitoring program that applies to the facility, as determined for Phase I and Phase II monitoring programs, as required in 33CSR1 subsection 4.11 and must be submitted semiannually.

3.8.c. Term of Record Keeping. The permittee must retain records of the quarterly reports at the facility for not less than five (5) years.

3.9. Bonding and Financial Assurance Requirements for Permitted Waste Tire Processing Facilities/Activities, Monofills/Storage Cells, Salvage Yards and Commercial Recycling Facilities.

3.9.a. Bonding. Bonding shall be in the amount of six thousand (\$6,000) dollars per acre with a minimum amount of ten thousand (\$10,000) dollars as specified in W. Va. Code §22-15-12 of the Code. An additional financial assurance of two (\$2) dollars per whole waste tire, accumulated at any given time, as projected in the application and/or permit shall be required. Such two (\$2) dollar per tire bond will not be released until all tires are removed from the waste tire processing facility, waste tire monofill, storage cell or salvage yard. Provided that, permitted landfills as defined in the Solid Waste Management Rule (33CSR1) are exempt from additional bonding and financial assurance as required in this subdivision.

3.10. Closure Requirements for a Waste Tire Monofill/Storage Cell or Processing Facility/Activity.

3.10.a. Closure of a Waste Tire Monofill/Storage Cell or Processing Facility/Activity. Should a facility or activity cease operations, or be required to do so by any agency, all of the requirements of §33CSR1,

section 6 shall be complied with as applicable including, but not limited to, those specified below:

3.10.a.1. Removal of Miscellaneous Materials. All miscellaneous waste materials including but not limited to wheel rims, hubcaps, paper, trucks, trailers, containers, machinery and other items or debris remaining at the facility at closure shall be removed and taken to a Department of Environmental Protection approved solid waste facility for reuse, recycling and/or disposal as provided in subdivision 3.9.a of this rule, no bond may be released until all provisions of this rule have been met;

3.10.a.2. Security During Closure. All trucks, trailers, containers, structures and machinery shall be secured until removed;

3.10.a.3. Revegetation. All disturbed ground shall be graded, mulched and seeded; and

3.10.a.4. Sediment and Erosion Control Structures. Sediment and erosion control structures shall be installed and maintained as necessary to comply with §33CSR1, paragraph 4.5.b.3.

3.10.a.5. Facility Closure Plan. All applicants must submit a closure plan in the permit application.

3.10.b. Storm Water. Storm water and surface water drainage must be directed away from the facility or activity in a manner consistent with state water quality standards.

3.10.c. Closure Cap for a Waste Tire Monofill. A closure cap shall immediately be installed over the final placement of waste tires or tire derived material consisting of:

3.10.c.1. A substantial separation filter cloth to prevent soil or any other material from coming in contact with the tire material;

3.10.c.2. A minimum of one (1) foot of intermediate cover soil shall be placed and compacted directly over the filter cloth to create a fire break, minimize the inflow of precipitation and to protect the filter cloth from damage; and

3.10.c.3. A final one (1) foot minimum layer of soil sloped not less than three percent (3%) nor more than twenty-five percent (25%) grade shall be placed and compacted directly over the intermediate cover and revegetated (amendments, mulch, seed) as applicable in accordance with §33CSR1 subdivision 4.5.f.

3.10.d. Daily Q.A./Q.C. reports in accordance with §33CSR1 subparagraph 4.5.e.2.I as applicable, shall be prepared and maintained in a bound log book at the site in regard to the closure cap construction.

3.11. General Requirements for Retail Tire Dealers. Tire dealers shall be required to accept D.O.T. regulated tires if offered by their customers in exchange for tires purchased in a quantity equal to the number of tires purchased at the point of transfer or require the customer to sign the waiver form.

3.11.a. A tire dealer may temporarily contain five hundred (500) or less waste tires on the premises for a period not exceeding ninety (90) days, unless otherwise approved by the Secretary in writing. The temporary containment shall be in a safe and orderly manner which does not constitute solid waste disposal. However, the Secretary is authorized to limit the number of waste tires stored by a tire dealer if the Secretary determines that the waste tires are stored in an unsafe, disorderly, or unsightly manner.

3.11.b. Annual Record Keeping Requirements for Retail Tire Dealers.

3.11.b.1. Retail tire dealers must keep records which include the name, address, telephone number and certificated motor carrier

identification number of the waste tire transporter and the number of whole waste tires transported from the retail tire dealers business location(s) by the waste tire transporter(s). These records must be kept on site at each business location and made available for inspection by the Secretary or by his or her authorized representative within five (5) days upon request. All records shall be retained for a period of not less than three (3) years.

3.11.c Public Notice and waiver Requirements for Retail Tire Dealers. Tire dealers are required to post written notices on at least 8 ½ inch by 11 inch poster clearly visible to all customers and containing the universal recycling symbol and the following language:

3.11.c.1 "Waste Tire Management;"

3.11.c.2. "State law requires us to accept your (old) waste tires for recycling or proper disposal if you purchase new tires from us."

3.11.c.3. "State law authorizes us to charge you no more than the actual cost of disposal of your waste tires even if you do not leave your tires with us."

3.11.c.4. "It is a crime to burn, bury, abandon or throw away waste tires without authorization and or permits from the Department of Environmental Protection."

3.11.c.5. Public notices and waiver forms are available from the Department of Environmental Protection, Division of Waste Management.

3.11.c.6. Retail tire dealers may not charge a disposal fee to persons having winter tires changed or buying new winter tires and keeping usable summer tires for later installation or require such persons to provide a used or waste tire or sign a waiver.

3.12. General Requirements for Waste Tire Transporters and Other Persons Transporting Waste Tires.

3.12.a. No waste tire transporter or other person shall knowingly transport or knowingly allow waste tires under his or her control to be transported to a site or facility that does not have a valid permit or license to accept waste tires.

3.12.b. Recordkeeping Requirements for Waste Tire Transporters. Waste tire transporters must keep records which include the name, address and telephone number of the retail tire dealer(s), and the number of whole waste tires transported from the retail tire dealer(s) business location(s) by the waste tire transporter. Also, records showing the name, address and telephone number of the permitted site or facility to where the whole waste tires were transported by the waste tire transporter. These records must be made available for inspection by the Secretary or his or her authorized representative within five (5) days upon request. All records shall be retained by the waste tire transporter for a period of not less than three (3) years.