



STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
P.O. Box 029, TRENTON, NJ 08625-0029

PERMIT TO CONSTRUCT AND OPERATE* TREATMENT WORKS

**Local Agency approval required prior to construction or operation*

The New Jersey Department of Environmental Protection grants this permit in accordance with your application, attachments accompanying same application, and applicable laws and regulations.

PERMIT NO.	ISSUANCE DATE	EXPIRATION DATE	DESIGN FLOW
06-3492-4SG	June 15, 2006	See below	N/A

NAME AND ADDRESS OF APPLICANT

New Jersey Department of Environmental Protection
Bureau of Nonpoint Pollution Control
P.O. Box 029
Trenton, New Jersey 08625-0029

LOCATION OF ACTIVITY

Counties: All
Municipalities: All

General Requirements:

This approval revokes the Department's general treatment works approvals 03-3490-4SG, 04-3490-4SG, and 04-3491-4SG and authorizes administrative authorities to approve onsite wastewater treatment systems located within the State of New Jersey using recycled tire chips in lieu of gravel in disposal areas with systems otherwise designed pursuant to N.J.A.C. 7:9A-1 et seq. All other aspects of the onsite wastewater treatment and disposal system design and construction not specifically covered by this approval must conform to N.J.A.C. 7:9A-1 et seq.

Product Specifications:

Only products which meet the following specifications are covered by this TWA.

1. Tire chips generated in New Jersey must be from an approved Class B Recycling Center or facilities operating under an individual Solid Waste Permit, and must not have any outstanding violations with regard to that approval. If the facility is not located in New Jersey then the facility must be permitted and/or licensed by the State in which the facility exists and be in good standing with that permit and/or license to generate tire chips for septic system applications. Tire chips from transient chipping facilities or facilities exempt from full regulation shall not be used in this application.
2. All tire chips must be accompanied with a Quality Assurance Certificate signifying compliance with the specifications in this approval from the production facility, with an original date and signature, for each batch of tire chips.
3. The tire chip application must meet the standards of ASTM D6270-98 "Standard Practice for Use of Scrap Tires in Civil Engineering Applications, Type A Material".
4. The size of the recycled tire chips shall have a maximum dimension, in any direction, of no more than 203mm (8 inches). In addition, 100% of the tire chips shall pass the 102mm (4 inch) square mesh sieve, a maximum of 50% passing (by weight) the 38mm (1.5 inch) square mesh sieve, and a maximum of 5% passing by weight the No. 4 sieve (4.75mm; 0.187 inch). 90% (by weight) of the tire chips shall meet the above specification. The gradation shall be measured in accordance with AASHTO T-27, "Standard Method for Sieve Analysis of Fine and Coarse Aggregate", except that the minimum sample size shall be 12 kilograms (30 pounds).

5. Extension of metal inclusions must be at least partially encased in rubber and may protrude no more than 25mm (1 inch) from the cut edge of the chip on 75% of the pieces (by weight).
6. All tire chips for this application must be produced by a shearing process.
7. Restrictions:
 - (a) Chips may not be produced by a hammer mill;
 - (b) Chips must be free of fines, dust, ashes, and clay in accordance with N.J.A.C. 7:9A-10.3(e)2;
 - (c) Chips must be free of any liquid contaminants, such as oil, grease, gasoline, diesel fuel, antifreeze, etc.;
 - (d) Chips must be free of foreign objects or materials including wire material from tire chipping activities;
 - (e) Tire chips made from burnt tires or tires that have been exposed to extreme temperatures are prohibited; and
 - (f) Tire chips must not be made from truck tires that contain or had contained metal reinforcing bars.

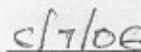
Expiration Date:

This approval to construct and operate shall cease upon the written revocation of this approval by the New Jersey Department of Environmental Protection.

APPROVED by the Department of Environmental Protection



Barry Chalofsky, P.P., Chief
Bureau of Nonpoint Pollution Control



Date

This permit is also subject to special provisos and general conditions stipulated on the attached page(s) which are agreed to by the permittee upon acceptance of the permit.

Vendors' Requirements:

The tire chip producer is responsible for the following:

1. Suppliers of tire chips seeking to sell their product in the State of New Jersey must be registered with the Department's Division of Water Quality, who will maintain lists of currently registered tire chippers who have certified that they will conform with the provisions of this approval.
2. Suppliers of tire chips seeking certification/authorization from the state of New Jersey must produce chips that meet the Product Specifications in this approval. Verification of product specification compliance must be performed by an independent, third-party testing lab, authorized by the State of New Jersey to perform such testing.
3. A test sample shall consist of four (4), five (5)-gallon buckets filled with tire chips taken from the out-feed conveyor.
4. The product verification method must consist of gradation analysis in accordance with AASHTO T-27, "Standard Method of Sieve Analysis of Fine and Coarse Aggregate" or ASTM C136-05, "Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates."
5. Suppliers seeking approval must have their material tested three (3) times in the first calendar year of doing business. One test is to be performed every four (4) months. At the end of one year, if all tests are passed, the supplier will become a "Supplier in Good Standing." A Supplier in Good Standing must have the testing performed once per year every year after the first year.
6. Authorized vendors shall include a copy of their certification with the bill of lading for each batch of tires delivered.

Site Requirements:

The location of the onsite wastewater treatment system must conform to all provisions of N.J.A.C. 7:9A-1 et seq.

No construction of the onsite wastewater treatment and disposal system or the proposed realty improvement shall begin until the administrative authority has provided written notification to the applicant that all aspects of the design and construction of the onsite wastewater treatment and disposal system which are not authorized under this treatment works approval are in strict conformance with N.J.A.C. 7:9A-1 et seq.

The issuance of this permit does not exempt the applicant of the responsibility to comply with all other applicable Federal, State, County and Municipal rules and regulations.

System Design Requirements:

All aspects of the disposal area system must be in strict conformance with the following provisions:

1. Filter Fabric must be specified to the following:
 - a. a minimum of 3 ounce nylon or 5 ounce polypropylene unit weight;
 - b. a permissivity of at least 1.0 sec^{-1} per ASTM D-4491;
 - c. a trapezoid tear strength of at least 35 lbs. per ASTM D-4533;
 - d. a mesh size equal to U.S. Sieve No. 70 (A.O.S.) per ASTM D-4751;
 - e. edges of adjacent sheets must overlap by a minimum of six inches; and
 - f. the design and installation of the tire chips shall otherwise be in conformance with the appropriate filter material sections of N.J.A.C. 7:9A-10.

2. The tire chips must be certified by the design engineer on the design plans with the following information:
 - a. the name and location from where the tire chips will be obtained;
 - b. the State license, registration or approval number for the facility generating the processed tire chips; and
 - c. the materials will meet the Product Specifications.

All other aspects of the design of the onsite wastewater treatment and disposal system must conform to the provisions of N.J.A.C. 7:9A-1 et seq.

System Construction Requirements:

Onsite wastewater treatment and disposal systems constructed using tire chips shall comply with all construction aspects of N.J.A.C. 7:9A-1 et seq. and the following requirements:

1. Tire chips must be acquired from a facility that is permitted and/or licensed by the State in which the facility exists and is in good standing with that permit and/or licensed to generate tire chips for septic system applications. Tire chips generated in New Jersey must be from an approved Class B Recycling Center or facilities operating under an individual Solid Waste Permit and must not have any outstanding violations with regard to that approval. Tire chips from transient chipping facilities or facilities exempt from full regulation shall not be used in this application.
2. All tire chips must be accompanied with a Quality Assurance Certificate identifying the facility that generated the tire chips and signifying compliance with the specifications in this approval by the production facility. Each certificate must contain an original signature and date, for each batch of tire chips delivered to the construction site.
3. No soil shall contaminate the tire chips during installation.
4. All tire chips not used in the disposal area shall either be used on the site for other approved applications, returned to the contractor who originally accepted the shipment from the supplier, returned to the supplier, transported to a recycling center approved by the Department to receive scrap tires as per N.J.A.C. 7:26A-1 et seq., or disposed as solid waste pursuant to N.J.A.C. 7:26-1 et seq.

The construction of the onsite wastewater disposal system must conform to all provisions of N.J.A.C. 7:9A-1 et seq. This approval only authorizes the construction and use of tire chips in lieu of gravel in the disposal area of an onsite wastewater treatment system.

Record Keeping:

The administrative authority issuing an approval to use tire chips in lieu of gravel shall maintain readily available records of the location of each of those systems located within their jurisdiction for Department review. These records must include, at a minimum, municipal block and lot information, street address, date of installation, type of disposal area, the design flow criteria used to size the disposal area, the approved facility that supplied the tire chips and contact information for the system designer and installer.

System Operation and Maintenance Requirements:

The operation and maintenance of the individual subsurface sewage treatment and disposal system must conform to all provisions of N.J.A.C. 7:9A-1 et seq.

System Abandonment Requirements:

Any tire chips that result from the excavation of a disposal area containing tire chips shall either be reincorporated into the disposal field, reused in other approved applications or disposed as solid waste pursuant to N.J.A.C. 7:26-1 et seq. Any tire chips to be reincorporated into a new or reconstructed disposal area must be sufficiently cleaned and prepared to the Product Specifications listed above.

Disposal areas that contain tire chips may be abandoned in place if permitted by the local administrative authority's abandonment requirements. Any such abandonment must include evidence of a permanent deed notice showing the location of the abandoned system and identify the presence of the tire chip material.