

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

OFFICE OF WASTE MANAGEMENT



SOLID WASTE REGULATION NO. 7

**FACILITIES THAT PROCESS
CONSTRUCTION AND DEMOLITION DEBRIS**

**EFFECTIVE DATE- JANUARY 1997
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SOLID WASTE REGULATION NO. 7
FACILITIES THAT PROCESS CONSTRUCTION AND DEMOLITION DEBRIS

7.1.00 GENERAL INFORMATION & REQUIRED PLANS

7.1.01 General Information:

- (a) Pursuant to R.I. Gen. Laws §23-18.9-8, any person who desires to construct, develop, establish, manage, own, operate, or maintain a construction and demolition debris processing facility, as defined in Rule 1.00 must obtain a solid waste management facility license from the Department in accordance with the requirements set forth in Rules 1.00 and 7.00 of these Rules and Regulations.
- (b) Processing facilities that accept 50 tons per day or less of construction and demolition debris, as construction and demolition debris is defined by R.I. Gen. Laws §23-18.9-7(7) and these regulations, are exempt from the requirement of obtaining a solid waste management facility license; however they are not exempt from complying with all other applicable requirements, which shall include submittal and approval of all applicable required information prior to operation, for the construction and operation of a construction and demolition debris processing facility, and are subject to the Rules and Regulations for such facilities. A "License Exemption Form" (Rule 7.00 Appendix "A") shall also be completed and filed with the Department to register qualifying facilities.
- (c) Facilities that which receive any of the following types of materials do not qualify for the exemption set forth in subsection (b) above and must apply for a solid waste management facility license. These materials include solid waste that is not construction and demolition debris (even if resulting from the construction, remodeling, repair and demolition of structures and roads and land clearing), including but not limited to, asbestos, garbage, corrugated container board, electrical fixtures containing hazardous liquids such as fluorescent lights, fluorescent light ballasts or transformers, carpeting, furniture, appliances, tires, drums, containers greater than ten gallons in size, any containers having more than one inch of residue remaining on the bottom, and fuel tanks. Specifically excluded from the definition of construction and demolition debris is solid waste (including what otherwise would be construction and demolition debris) resulting from any processing technique, other than that employed at a Department-approved construction and demolition debris processing facility, that renders individual waste components unrecognizable, such as pulverizing or shredding.
- (d) No license or registration shall be issued or be renewed if the facility has any existing violations of these rules and regulation during the time of application or request for renewal. The Department is authorized to deny, suspend, or revoke a

license or registration, or deny a license renewal or registration renewal where it finds there has been a failure to comply with regulations established by the Department, or where the applicant, licensee, or registrant is not in compliance with any approved operating plan or engineering plans adopted pursuant to these Rules and Regulations. The Department may also issue a Notice of Violation with administrative penalties. Licenses and registrations issued pursuant to this section are non-transferrable.

- (e) Granting of a license, license renewal, registration, or permission for an equipment addition shall in no way effect the applicant's responsibility to meet all federal and state laws, local zoning and other local codes or ordinances.
- (f) Construction and demolition debris processing facilities and other processing facilities that accept 50 tons per day or less of construction and demolition debris must demonstrate, through records maintained at the facility, and provided to the Department (upon request), that seventy-five percent (75%) of all material received by the facility are processed and removed from the site within six (6) weeks of receipt on a continuous basis, and that in no case stores material on site for over three (3) months.
- (g) All solid waste management facilities that process or separate construction and demolition debris and generate screenings and/or wood chips must comply with Rule 7.3.00.

7.1.02 Radius Plan: A radius plan including all the information listed below shall be submitted for approval with each application for a registration, license or renewal. The radius plan must be drawn to a minimum scale of one inch to two hundred feet (1" = 200') adjusted to fit on a standard 24 x 36 inch sheet and include all areas within one-quarter (1/4) mile radius out from all property lines of the site. The required information includes:

- (a) Zoning of the area as required in Rule 1.5.05 above
- (b) All buildings and dwellings
- (c) All water supplies (wells, etc.)
- (d) All surface water courses
- (e) All roads
- (f) Legal boundaries of site certified by a Registered Land Surveyor in the State of Rhode Island
- (g) North arrow
- (h) Extent of 100 year floodplain (where applicable)
- (i) Locus Plan

7.1.03 Site Plan: A site plan including all of the information listed below for all areas within the site shall be submitted for approval with each application for a registration, license or renewal. The site plan must be drawn to a minimum scale of one inch to fifty feet

(1"=50') and adjusted to fit on a standard size (24" x 36") sheet. The required information includes:

- (a) Existing and proposed contours at two (2) foot contour intervals or less
- (b) Buildings
- (c) Roads
- (d) Utilities
- (e) Surface water courses (if any)
- (f) Wells (if any)
- (g) Site drainage facilities
- (h) Groundwater monitoring wells, if required by Rule 7.2.04
- (i) Unloading, processing and storage areas
- (j) Legal Boundaries of site certified by a Registered Land Surveyor in the State of Rhode Island
- (k) Fences and gates
- (l) Weighing facilities
- (m) Locations of buffer zones
- (n) On-site traffic patterns
- (o) Landscaping
- (p) North arrow
- (q) Any and all freshwater wetlands as defined by Department Rules and Regulations
- (r) Legend

7.1.04 Construction and Engineering Plans: A preliminary set of construction and engineering plans and specifications relating to all buildings and equipment of the facility must be submitted for approval to the Department with each application for a license or renewal. This set shall be sufficient in detail to allow for a comprehensive review. A complete set of final plans approved by the Department shall be a condition of the license prior to construction or operation.

7.1.05 Operating Plan: An operating plan shall be submitted for approval by all construction and demolition debris processing facilities and other processing facilities that accept 50 tons per day or less of construction and demolition debris. Said plan shall include, at a minimum, information on all of the areas listed below. The duration of the operating plan shall equal that of the license, where applicable, and shall be updated with each application for renewal or earlier if necessary. Any changes or additions to the facility's operation subsequent to the approval of the operating plan, including new equipment additions, shall be submitted to the Department for approval prior to the time that changes will be implemented. The following information, at a minimum, shall be included in the plan:

- (a) Description of the overall operation and function of all processing equipment to be used

- (b) Operating hours
- (c) Operating and design capabilities
- (d) Types of materials to be accepted, processed, stored, recycled and/or disposed of at a licensed facility
- (e) Personnel and duties
- (f) Dust Control Program
- (g) Odor Control Program
- (h) Litter Control Program
- (i) Vector Control Program
- (j) Groundwater Monitoring Program if required by Rule 7.2.04
- (k) Final disposal quantities and arrangements for non-recyclables and processing residue
- (l) Communications equipment available
- (m) Provisions for limited access
- (n) Description of program for providing records containing the date, time, weight of construction and demolition debris to be processed and registration of each vehicle unloading or loading materials at the facility
- (o) Weighing facilities or other volume accounting method
- (p) Fire control and prevention provisions approved by the local fire chief including a contingency plan for fires in storage areas and/or unprocessed stockpile areas
- (q) Methods describing how non-processible waste, hazardous waste and waste not authorized by the Department will be identified, handled and removed from the facility
- (r) Methods describing how adulterated wood waste [treated wood, painted wood, coated wood and any other wood that is not clean] will be identified and separated from the waste stream being processed, such that it will not be recycled and re-used with unadulterated wood waste
- (s) Identification of how "recyclable materials" and "recyclables" which cannot be marketed will be disposed of
- (t) Sampling and Testing plan for processed material containing that information required by Rule 7.3.00 of these Regulations
- (u) Identification of proposed markets and the names and address of destinations for "recyclable materials" and "recyclables"
- (v) Identification of provisions or methods of solid waste and leachate containment
- (w) Routine maintenance and house cleaning schedules
- (x) Erosion/Sedimentation Control Plan

7.1.06 Closure Plan: The applicant shall submit for approval a closure plan that which includes information on the following:

- (a) Fences, gates and any other security measures to prevent unauthorized access to the site during closure and post-closure activities.

- (b) Legal boundaries
- (c) Measures taken to remove all remaining refuse and residue
- (d) Planned or estimated year or time period of proposed closure
- (e) Methods of restricting access and preventing additional waste disposal
- (f) Methods of protecting ground and surface water
- (g) Intended future use of the facility
- (h) A Closure Fund or Closure Bond shall be established to ensure proper closure of the facility. The Closure Fund shall establish and maintain the amount necessary for a third party closure and shall include all costs necessary for adequate closure. Periodic review and adjustments of the fund must be done as required. The terms and conditions of the Closure Fund shall be set forth in a Closure Fund Agreement as required by Rule 7.2.08.
- (i) Measures taken to stabilize all disturbed soils.

7.2.00 FACILITIES THAT PROCESS CONSTRUCTION AND DEMOLITION DEBRIS - OPERATING STANDARDS

7.2.01 General: All construction and demolition debris processing facilities and processing facilities that accept 50 tons per day or less of construction and demolition debris shall meet the requirements set forth in this rule in addition to the General Operating Standards set forth in Rule 1.00 and other applicable requirements set forth in these Rules and Regulations.

7.2.02 Storage:

- (a) The storage of unprocessed and/or processed construction and demolition debris stockpiles is limited in size to the financial assurance to be posted for closure costs as required in Rules 7.1.06 and 7.2.08. For example if the closure cost estimate is based on the disposal of a 1000 ton stockpile of unprocessed construction and demolition debris, the facility must limit its unprocessed stockpile to 1000 tons.
- (b) The facility must be able to demonstrate through records maintained at the facility, and provided to the department (upon request), that seventy-five percent (75%) of all material received by the facility is processed and removed from the site within six (6) weeks of receipt on a continuous basis, and in no case shall the facility store material on site for over three (3) months.
- (c) Storage of unprocessed and/or processed construction and demolition debris must be in designated areas, and stockpiles must not exceed twenty (20) feet in height and fifty (50) feet in width. A minimum separation of fifty (50) feet must also be maintained between stockpiles, and between stockpiles and buildings or other structures. In addition, unprocessed and/or processed construction and demolition debris must not be compacted, or covered with soil or other materials. Processing

of materials utilizing compaction equipment may be allowed only with prior Department approval.

- 7.2.03 Wastewater and Leachate: All water used in processing the construction and demolition debris, and cleaning of the facility, as well as leachate from any refuse collected in storage pits or transfer areas, shall be disposed of in a manner that will not pollute any source of private or public water supply, or any of the waters or groundwaters of the State and shall be disposed of in accordance with all state and federal laws and regulations.
- 7.2.04 Groundwater Monitoring Wells: Facilities that process construction and demolition debris may be required by the Department to install monitoring wells at locations approved by the Department. A hydrogeological report and water quality monitoring plan may be required based on the following factors:
- (a) Size, type and location of storage stockpiles;
 - (b) Length of time unprocessed materials will be stored;
 - (c) Groundwater classification and proximity to groundwater drinking wells (public and private);
 - (d) Proximity to and classification of surface water bodies, flowing water bodies and freshwater wetlands; or
 - (e) Other factors determined by the Department that may be necessary to protect the health, welfare and safety of the public and the environment.
- 7.2.05 Buffer: A buffer zone, or approved equally protective alternative measure(s) must be identified and maintained between all processed and unprocessed construction and demolition debris stockpiles, processing activities and the property line of the facility. Said buffer zone must be of sufficient distance to address dust, odors, litter, or any other concern or condition identified by the Department. Alternative measures may include, but are not limited to enclosing operations and/or storage within the confines of a protective structure, fencing, screening, vegetation or approved equal.
- 7.2.06 Fire Protection: A facility shall not pose a hazard to the health and safety of persons or property from fires. No facility that processes construction and demolition debris shall be issued a license, registration, or renewal unless it has submitted a fire protection plan that has been approved by the local fire chief, or his or her designee, of the district in which the facility is located. In addition, the following requirements must be met:
- (a) All facilities that process construction and demolition debris shall submit site locator plans, site sketches, and operating plans to the Department and to the local fire chief for their review and approval so as to provide emergency service whenever called.
 - (b) There shall be within 1000 feet of the facility and storage stockpiles, either an adequate supply of water under pressure or the equivalent of cover material

for use exclusively in fighting fires or other equivalent method that which meets the approval of the Department and the local fire chief. Cover material for the purposes of extinguishing a fire shall be required in the event that the construction and demolition debris is stored outside of the confines of a protective structure.

- (c) All facility equipment including but not limited to, dozers, front end loaders and compactors shall be supplied with fire extinguishers.
- (d) The above required elements must be included in the facility's fire contingency plan.
- (e) The local fire chief or his or her designee is authorized to conduct random, unannounced inspections of facilities licensed or registered under this regulation to insure continued compliance with the approved fire protection plan. If any facility, notified by the local fire chief at the time of inspection, is found to be in non-compliance with the approved plan said facility shall immediately cease operation until such time as they correct any deficiency and the local fire chief or his or her designee finds the facility is in compliance with the approved fire protection plan.
- (f) If the Department is notified in writing by the local fire chief that any facility is found to be in violation of the fire protection plan under this regulation on three separate inspections, within any three year time period, said facility shall have their license or registration to operate under this regulation revoked.

7.2.07 Equipment Failure and Shutdown Provisions: All facilities shall have an alternate method of disposal, approved in writing by the Department, with another solid waste management facility for use in the event of equipment failure or forced shutdown. In the event of equipment failure or forced shutdown, storage of unprocessed materials must not exceed the Department approved storage quantity as specified in Section 7.2.02.

7.2.08 Closure Fund Agreement or Closure Bond:

- (a) Every facility shall establish a closure fund agreement with the Department. The facility shall establish and maintain a joint depository account in the name(s) of the facility and the Department at a federally insured financial institution establishing a closure fund as required by 7.1.06(h), and 7.1.06(i).
- (b) A facility shall be permitted to withdraw funds from the account described in paragraph (a) of this section only with the prior written approval of the Department and only for the purposes of closure as described in the closure plan described in and submitted as a requirement of Rule 7.1.06.
- (c) As a precondition to acceptance of any materials at the facility or within six (6) months of the effective date of these regulations relative to any existing facility, the facility must have on deposit in the Closure Fund an amount sufficient to fully finance closure of the facility at capacity.

- (d) Each facility must submit to the Department on a quarterly basis a statement generated from the financial institution representing the amount held in the Closure Fund.
- (e) In the event that the amount in the Closure Fund exceeds the amount for which normal federal insurance is provided, it shall be the responsibility of the facility to acquire full insurance for the total amount of the closure fund and/or to establish any additional accounts necessary subject to the provisions of this section.
- (f) No facility shall have the right to withdraw, pledge, mortgage, assign, transfer, encumber or otherwise alienate funds from the Closure Fund without the prior written approval of the Department.
- (g) In the event that the amount in the Closure Fund is not sufficient to finance complete closure, the facility is responsible for the full cost to complete closure.
- (h) As an option to the use of a closure fund depository account as described in Rule 7.2.08(a) -7.2.08(g), the facility shall establish and maintain a closure bond in the amount necessary to properly close the facility when it is at full capacity. This closure bond shall be established as a pre-condition for licensure or registration as an approved facility.

7.3.00 CONSTRUCTION AND DEMOLITION DEBRIS: REUSE, SAMPLING AND TESTING REQUIREMENTS

7.3.01 General Information:

- (a) All facilities that process or separate construction and demolition debris and generate screenings and/or wood chips for reuse must sample and test these materials in accordance with Rules 7.3.02 and 7.3.03.
- (b) Any costs associated with the testing of these materials by the facility or by the Department to verify the results of the facility's tests shall be borne by the facility. Each facility must establish a fund with the Department to cover the costs of these tests. The amount required in this fund must be indicated in the facility operating plan and must be based on the number of tests required for the quantity of materials processed or separated at the facility. At all times, the fund established pursuant to this section must equal or be greater than the cost of two (2) rounds of sampling.

7.3.02 Screenings: Reuse, Sampling and Testing Requirements:

- (a) The Department may approve the use of screenings for use as an alternative daily cover on landfills in the State if it can be demonstrated that the screenings meet the criteria in a landfill's approved operating plan, and are capable of meeting the following minimum performance criteria for daily cover material:
 - (1) to control and not sustain fires;
 - (2) to control and not contribute to odors (this may require the separation of plaster and wall-board from daily cover material);
 - (3) to control and not contribute to the propagation of vectors;
 - (4) to control and not contribute to blowing litter and dust;
 - (5) the screenings pass through a two inch screen;
 - (6) the amount of fines (material passing through a number 200 sieve) in the screenings is less than 25 percent by weight (dry basis);
 - (7) screenings may be mixed with other suitable materials, to meet the requirements set forth above.
 - (8) analytical testing for all screenings proposed for use as a daily cover shall include, at a minimum, appropriate toxicity Characteristic Leaching Procedure (TCLP) parameters as set forth in Part 261 of Title 40 of the Code of Federal Regulations (40 CFR 261) as is or as amended at a frequency approved in the operating plan.
- (b) Screenings separated from construction and demolition debris may also be reused for other specific uses if prior written approval is received from the Department. Such beneficial uses shall be evaluated on a case by case basis and shall be limited to non-agricultural and non-residential applications.
- (c) All projects utilizing screenings from construction and demolition debris must have a sampling and testing plan and schedule approved by the Department.
- (d) The sampling and testing plan shall include, but not be limited to, addressing the following constituents of concern:
 - (1) Metals: Arsenic, Cadmium, Chromium, Copper, Lead, Mercury and Nickel.
 - (2) Organic Compounds: PCB's, Endrin, Toxaphene, 2,4,5-T, 2,4,5-TP (Silvex).
 - (3) Asbestos - Must not exceed the requirements of the Rules and Regulations for Asbestos Control which states: "Regulated Asbestos Containing Materials: are friable asbestos materials containing more than 1% asbestos, including non-friable asbestos that may release asbestos fibers when handled or demolished."

- (e) No screenings shall be utilized within 200 feet of any body of surface water or freshwater wetland or within 500 feet of any body of surface water or freshwater wetland within the watershed of a public drinking water supply without specific approval of the Department.
- (f) No screenings shall be utilized within 200 feet of any private drinking water supply well or within 500 feet of any public drinking water supply well.
- (g) The plan shall also identify testing procedures and protocols, testing frequency, and maximum contaminant limits based upon the proposed end uses.

7.3.03 Wood Chips: Reuse, Sampling and Testing Requirements:

- (a) Wood chips generated from the pulverizing or chipping of unadulterated wood or land clearing debris, such as brush, tree limbs and stumps, may be utilized for the following:
 - (1) landscaping mulch
 - (2) soil amendment
 - (3) sewage sludge amendment for composting
 - (4) erosion control material
 - (5) fuel
 - (6) other uses approved by the Department and described in the facility's operating plan
- (b) Wood chips generated from the pulverizing or chipping of segregated building wastes and segregated demolition wastes or adulterated or treated wood are restricted to the following uses:
 - (1) fuel
 - (2) Department approved erosion control projects at approved landfills
 - (3) other projects with Department approval
- (c) All projects utilizing wood chips, except for fuel usage, must have a sampling and testing plan and schedule approved by the Department.
- (d) The sampling and testing plan shall include, but not be limited to, addressing the following constituents of concern:
 - (1) Asbestos - Must not exceed the requirements of the Rules and Regulations for Asbestos Control which states: "Regulated Asbestos Containing Materials: are friable asbestos materials containing more

than 1% asbestos, including non-friable asbestos that may release asbestos fibers when handled or demolished."

- (2) Ignitable Petroleum Distillates - Must not meet the definition of a hazardous waste as defined in the Rules and Regulations for Hazardous Waste Management.
- (3) Metals: Chromated Copper Arsenate (CCA), Arsenic, Chromium, Copper, Lead, and Mercury.
- (4) Semi-volatiles: Creosote*, creosol, Pentachlorophenol.

*- Arsenic, Chromium, and Copper are indicators of Chromated Copper Arsenate and Creosol, an active ingredient of Creosote, is an indicator of Creosote.

- (e) The plan shall also identify testing procedures and protocols, testing frequency, and maximum contaminant limits based upon the proposed end uses.
- (f) Wood chips generated for use as a fuel for boilers and wood-fired power plants must meet the requirements for those facilities. The facility operating plan must indicate all wood fuel facilities to be utilized.

7.4.00 APPLICABILITY

- (a) All new facilities that process construction and demolition debris must comply with the provisions of the Rules and Regulations.
- (b) Within ninety (90) days from the effective date of these regulations all existing facilities that process construction and demolition debris that:
 - (1) Accept greater than 50 tons/day of construction and demolition debris must apply for a solid waste management facility license.
 - (2) Accept 50 tons/day or less of construction and demolition debris must submit a completed "License Exemption Form", with all required information to demonstrate compliance with the Rules and Regulations.

Rule 7.00-Appendix "A"
**Registration of Processing Facilities that Accept 50 Tons/Day or Less of
Construction and Demolition Debris**

License Exemption Form

Pursuant to Rule 7.1.01(b) processing facilities that accept only 50 tons/day or less of construction and demolition debris, as construction and demolition debris is defined by these Rules and Regulations, are exempt from the requirement of obtaining a solid waste management facility license, however, they are not exempt from complying with all other applicable requirements, which shall include submission of all applicable required information for approval, for the construction and operation of a construction and demolition debris processing facility, and are subject to the Rules and Regulations for such facilities.

Facility Name: _____

Owner's Name(s): _____

Operator Name(s): _____
(if different/title)

Facility Address: _____
(street, city, zip code)

Assessor's Plat/Lot Number: _____

Mailing Address: _____
(if different) (street, city, zip code)

Owner/Operator _____ Date _____

Owner/Operator _____ Date _____

An operating plan, per Rule 7.1.05, must accompany this form, to address compliance with Rules 7.2.00 (Operating Standards) and 7.3.00 (Reuse, Sampling and Testing Requirements). In addition, all facilities are required to establish a closure fund or closure bond with the Department as per Rule 7.2.08.

The foregoing "Solid Waste Regulation No. 7- Facilities that Process Construction and Demolition Debris" of the "Rules and Regulations for Composting Facilities and Solid Waste Management Facilities, January 1997 and as amended April 2001", after due notice, are hereby adopted as amended and filed with the Secretary of State this _____ day of _____ to become effective twenty (20) days thereafter, in accordance with the provisions of Chapters 2-1, 2-22, 2-23, 5-51, 23-18.8, 23-18.9, 23-19, 23-19.1, 23-23, 23-63, 37-15.1, 42-17.1, 42-17.6, 42-35, 44-27, and 46-12 of the General Laws of Rhode Island of 1956, as amended.

Date

Jan H. Reitsma, Director

Department of Environmental Management

Public Notice on: _____

Public Workshops on: _____

Filing Date: _____

Effective Date: _____