

**06-096**

**Department of Environmental Protection**

**Maine Solid Waste Management Rules:**

**CHAPTER 418**

**BENEFICIAL USE OF SOLID WASTES**

Last Revised: ~~February 8, 2012~~

## TABLE OF CONTENTS

	Page
<u>1. Definitions</u>	
<u>2. Beneficial Use Activities Subject To The Requirements Of This Chapter Rule</u>	1
A. Applicability.....	1
B. Storage of Secondary Material.....	
C. Processing of Secondary Material.....	
D. Agronomic Utilization of Residuals.....	
E. Other Federal, State and Local Requirements.....	
F. Innovative Beneficial Use Activities.....	
G. Transition.....	
H. Prohibition.....	
<u>2.3 Beneficial Use Activities Not Subject To The Requirements Of This Chapter Rule</u>	
<u>3. General Standards For Beneficial Use</u>	
<u>5. Authorization Through Notification for the Beneficial Use of Emulsified Asphalt Encapsulated Contaminated Soil When Certified by a Professional Engineer</u>	
<u>46. Beneficial Use Permit by Rule Provisions</u> .....	
A. <u>Beneficial Use of Scrap Tire Chips as Construction Fill</u> .....	
B. <u>Limited Beneficial Use of No More Than 6,400 Tons of Emulsified Asphalt Encapsulated Oil Contaminated Soil as Construction Fill</u> .....	
C. <u>Limited Use of Tires in Structures</u> .....	
<u>57. Reduced Procedures For Select Beneficial Use Activities</u> .....	
A. <u>Reduced Procedure Beneficial Use of De-watered Dredge Material As Construction Fill Standards</u> .....	
B. <u>Reduced Procedures Beneficial Use of Multi-Fuel Boiler Ash and Bottom Ash from Wood Fired Boilers in Road Construction, Parking Lots, and Other Traveled Ways Standards</u> .....	
C. <u>Reduced Procedure Beneficial Use of Multi-Fuel Ash or Bottom Ash From Wood Fired Boilers as Flowable Fill Standards</u> .....	
D. <u>Reduced Procedure Application Requirements</u> .....	
<u>68. Fuel Substitution</u> .....	
A. <u>Standards</u> .....	
B. <u>Pre-Application Requirements</u> .....	
C. <u>Trial Burn Requirements</u> .....	
D. <u>Application Requirements</u> .....	
E. <u>Operating Requirements</u> .....	
F. <u>Additional Operating Requirements When CDD Wood Fuel Is Used</u> .....	
G. <u>Operating Manual</u> .....	
<u>79. Beneficial Use Licenses</u> .....	
A. <u>Pre-Application Requirements</u> .....	
B. <u>Risk Standard</u> .....	
C. <u>Application Requirements</u> .....	
D. <u>Records</u> .....	
<u>910. Records</u>	
<u>811. Annual Report</u> .....	
<u>Appendix A. Screening Standards for Beneficial Use</u> .....	
<u>Appendix B. Template for Authorization Form for Beneficial Use</u> .....	
<u>Appendix C.-Form for Notification of Beneficial Use of Emulsified Soil When Certified by a Professional Engineer</u>	

**Chapter 418: BENEFICIAL USE OF SOLID WASTES**

**SUMMARY:** This ~~chapter~~rule establishes the rules of the Department for the beneficial use of secondary materials. Included in this ~~chapter~~rule are exemptions, general standards for beneficial use and licensing procedures for activities subject to these regulations.

1. **Definitions.** The following terms, as used in this rule have the following meanings, unless the context indicates otherwise:

**EDD Format.** EDD means Electronic Data Deliverable; the format required by the Department for laboratory and field data submittals of a broad range of environmental data including physical, chemical, biological, and spatial, to the Maine Environmental and Geographic Analysis Database (EGAD).

**Publicly Owned Source.** Publicly owned source means a facility where the processing of CDD wood into fuel occurs, that only accepts CDD wood that is generated in member municipalities, and that is owned by a municipality, a quasi-municipal entity, a county, a public waste disposal corporation under 38 M.R.S. § 1304-B, or a refuse disposal district under 38 M.R.S. §§ 1701 to 1707.

**Source.** Source means the facility where the processing of construction or demolition debris (CDD) wood into fuel occurs.

**Wood from Construction or Demolition Debris.** Wood from construction or demolition debris" or "CDD wood" means the wood component of solid waste resulting from construction, remodeling, repair and demolition of structures.

**12. Beneficial Use Activities Subject to the Requirements of this ChapterRule.**

- A. **Applicability.** Unless exempted from regulation under ~~Section 2~~section 3 of this rule, or a project certified by a Professional Engineer through the notification provisions of section 5 of this rule, any generator, processor, industrial or manufacturing facility or other person proposing to beneficially use secondary material other than in agronomic utilization must obtain a license pursuant to the applicable provisions of Chapter 400 of these rules (*General Provisions*), CMR 06-096 C.M.R. Chapter ch. 400 (*General Provisions*), and this rule. The term "secondary material" when used in this chapter means a solid waste, separated from other solid wastes, that ~~may be suitable for beneficial use~~. The secondary material may be a product having solid waste as a constituent. When a solid waste processing, industrial or manufacturing facility is licensed to beneficially use a secondary material for fuel, raw material substitution, or as a construction material, the generator supplying the secondary material to that licensed facility is not required to obtain a beneficial use license under the provisions of this ~~Chapter~~rule.

Beneficial use activities approved pursuant to this ~~chapter~~rule do not constitute disposal as defined in these rules. However, for the purposes of this rule, the placement of any waste as fill-in a landfill (e.g. the use of processing residues or ash as alternative daily cover, shaping or grading material) constitutes disposal rather than beneficial use and must be approved by the Department in accordance with the provisions of licensed under Chapter 401 of these rules (*Landfill Siting, Design, and Operation*), CMR 06-096 C.M.R. Chapter ch. 401 (*Landfill Siting, Design, and Operation*). Except, use of a waste or waste-derived product that is purchased by a licensee for a

specific construction purpose at a landfill does not constitute disposal, provided the waste is not otherwise delivered for placement in the landfill. Waste used in landfill construction in this manner must be approved in accordance with the provisions of 06-096 C.M.R. ch. 401 as an element of the landfill construction specifications; a beneficial use license is not required.

Beneficial uses of secondary materials regulated by this ~~chapter rule~~ include, but are not limited to, use in an industrial or manufacturing process, use as construction fill, or use as fuel. The following ~~are examples of~~ ~~is a non-exclusive list of~~ examples of beneficial use activities:

- (1) Use of chipped tires in road construction or retaining wall backfill;
- (2) Facilities substituting secondary material for fossil or biomass fuel in a boiler;
- (3) Industrial, manufacturing or processing facilities substituting secondary material for virgin material;
- (4) Use of secondary material as construction fill;
- (5) Use of multi-fuel ash in road construction or flowable fill. As used in this ~~chapter rule~~, multi-fuel ash refers to the ash generated from combustion of the following fuels: wood, paper, pulp and paper sludge, coal, oil, and tire chips.; and
- (6) Cement kilns substituting secondary material for virgin material or for fuel.

**B. Storage of Secondary material.** Beneficial use activities that include storing secondary materials for greater than 90 days are also subject to ~~Chapter 402 of these rules~~ 06-096 C.M.R. ch. 402 (Transfer Stations and Storage Sites for Solid Waste), 06-096 CMR 402.

**C. Processing of Secondary material.** Beneficial use activities that include processing secondary materials are also subject to ~~Chapter 409 of these rules~~ 06-096 C.M.R. ch. 409 (Processing Facilities), CMR 06-096 Chapter 409.

**D. Agronomic Utilization of Residuals.** Residual material proposed for agronomic utilization is subject to ~~Chapter 419 of these rules~~ 06-096 C.M.R. ch. 419 (Agronomic Utilization of Residuals), CMR 06-096 Chapter 419. Agronomic utilization of a residual material and another beneficial use of the residual as a secondary material may be approved in one license.

**E. Other Federal, State and Local Requirements.** Approval of the beneficial use of a secondary material under this ~~chapter rule~~ does not necessarily constitute approval of the project using the secondary material. All beneficial use activities, including activities that are exempt under this rule, must conform to any other applicable federal, state or local requirements.

**F. Innovative Beneficial Use Activities.** The Department may grant temporary approval for a pilot project or experimental project under ~~Chapter 400, Section~~ 06-096 C.M.R. ch. 400, § 3(B)(4), “Limited Permits”. The application requirements for a limited permit will be determined on a case by case basis.

**G. Transition.**

Any ongoing beneficial use that was licensed by the Department prior to the effective date of this amended rule must comply with all applicable operating standards of the amended rule.

Existing licenses for ongoing beneficial uses must be modified to incorporate new or amended provisions of the rule. Such modifications may be made through minor revisions to these licenses. All information necessary to demonstrate compliance with applicable provisions of the rule and to modify existing licenses must be submitted to the Department for review and approval by July 31, 2006~~within 60 days of the effective date of this rule~~.

**H. Prohibition.** The beneficial use of municipal solid waste incinerator ash which contains 4 parts per trillion or greater dioxin toxic equivalents is prohibited except as provided for in the Maine Hazardous Waste, Septage and Solid Waste Management Act, 38 M.R.S. § 1304(13-C) "Use of Treated Ash in Secure Landfills".

- (1) ~~The beneficial use of municipal solid waste incinerator ash which contains 4 parts per trillion or greater dioxin toxic equivalents (EPA, 1989) is prohibited except as provided for in the Maine Hazardous Waste, Septage and Solid Waste Management Act, 38 M.R.S.A. § 1304(13-C), "Use of Treated Ash in Secure Landfills"; and~~
- (2) ~~It is unlawful for any person to use any secondary material in a manner not authorized by this rule or a license issued pursuant to this rule.~~

**23. Beneficial Use Activities Not Subject To The Requirements Of This ChapterRule.** The following beneficial use activities are exempt from regulation under this ~~chapter~~rule:

- A. The beneficial use of chipped wood from trees, brush, and other plant material generated from land clearing or timber harvesting activities provided that the material is used for fill on the same parcel of land or right-of-way where the waste is generated and the total affected area is less than ~~one (1)~~ acre, or used for fuel, mulch or erosion control;
- B. The beneficial use of inert fill as fill, drainage material in construction projects or as a raw material in cement, concrete or asphalt production;
- C. The beneficial use of processed ~~soil material and cured aged, fully hardened asphalt and soil material~~ in paving material production, and road and parking lot construction and maintenance;
- D. The beneficial use of oil-contaminated soil material that has been stabilized with emulsified asphalt as a substitute for virgin aggregate in the production of asphalt pavement;
- E. The following beneficial uses of dredge material:
  - (1) 100 cubic yards or less of ~~dredge material~~ used on the site of generation and draining into the dredged water body;
  - (2) ~~500 cubic yards or less generated during a construction or maintenance project conducted by the Maine Department of Transportation or the Maine Turnpike Authority, used on the site of generation and draining into the dredged water body;~~
  - (32) ~~Dredge material from~~From class A, class AA and class SA water bodies;
  - (43) ~~Dredge material used on~~On the site of generation containing less than 15% fines (material passing the #200 sieve) from representative sampling, in conformance with USEPA E.P.A. SW-846, Test Methods for Evaluating Solid Waste Physical and Chemical Methods, 3<sup>rd</sup> Edition, 2013, (E.P.A. SW-846) of a minimum of four samples, or one sample per acre, whichever is more frequent;

- (54) ~~Dredge material from~~ agricultural or residential ponds, ditches and drainage ways when the use occurs on the site of generation;
- (55) ~~Dredge material free from oil, grease, litter and other contaminants and that is generated Generated from normal maintenance of storm water and erosion control structures regulated under 38 M.R.S.A. Section § 420-C and Section § 420-D, and free from oil, grease, litter and other contaminants; and~~
- (56) ~~Dredge material containing~~ Containing less than 15% fines and that meeting the levels of Appendix A of this rule levels for the listed constituents in Section 5.7(A)(3) of this rule, when used as beach nourishment fill;

- F. The beneficial use of paper in the manufacture of paper and cardboard;
- G. The combustion or processing of secondary materials generated exclusively at a facility in that facility's lime kiln, cement kiln, bark and hogged fuel boiler, biomass or conventional fuel boiler, Kraft recovery boiler or sulfite process recovery boiler, and the combustion of wood wastes from land clearing or wood waste from wood products facilities at these facilities;
- H. The beneficial use of no more than 1000 whole tires in a recreation area open for use by the public;
- I. The beneficial use of no more than 1000 whole tires at a farm or a landfill as weights;
- J. The ~~household~~ beneficial use of no more than a total of 50 whole tires, each with a maximum rim size of 25 inches in diameter;
- K. The beneficial use of pre-separated paper, cardboard, glass, plastic, lumber, and scrap metal, including metal processed from white goods and junk vehicles, as a raw material in the manufacture of commercial products;
- L. The beneficial use of non-hazardous:
  - (1) ~~blast furnace slag, silica fume, and, coal, multi-fuel, and wood bottom ash; in cement production, flowable fill or concrete batching; and, of non-hazardous coal, multi-fuel, or wood bottom ash in asphalt batching.~~
  - (2) coal, multi-fuel, and wood bottom ash in asphalt batching;
- M. The beneficial use of secondary materials generated in Maine when it is exported to another state or country;
- N. The beneficial use of tire chips used in subsurface waste water disposal units as permitted in the Maine Subsurface Waste Water Wastewater Disposal Rules, Systems rules, 10-144 C.M.R. ch. 241;
- O. The beneficial use of waste from Department supervised remedial activities when the beneficial use activity occurs at the site of generation and has been found by the Department to be acceptable following a risk evaluation;

P. The beneficial use of utility poles as utility poles in another location;:

Q. Wood ash from the burning of wood wastes is not subject to the requirements of this ~~chapter rule~~ and is not considered a solid waste if the person proposing to beneficially use the wood ash submits written documentation to the department demonstrating that the wood ash is being used as an effective substitute for commercially available products. The user of the wood ash must submit this documentation initially and if the characteristics of the wood ash change;:

Note: ~~"Wood wastes" is defined at 06-096CMR 400(LLI) as the following: "Wood wastes" means brush, stumps, lumber, bark, wood chips, shavings, slabs, edgings, slash, sawdust and wood from production rejects, that are not mixed with other solid or liquid waste. For the purposes of this definition, "lumber" is entirely made of wood and is free from metal, plastics and coatings. For the purposes of paragraph Q. above, any ash resulting from the burning of wood wastes is considered wood ash. No distinction is made between fly ash and bottom ash;~~

R. The off-site beneficial use of virgin petroleum contaminated soil from Department supervised site clean-ups;:

S. The beneficial use of not more than 800 tons of emulsified asphalt encapsulated contaminated soil produced by a facility licensed by the Department as a solid waste processing facility as construction fill underneath paved roads and parking lots, and in other civil engineering applications, when used on a parcel of property in accordance with a completed Authorization Form that is in conformance with section 910 and Appendix B of this rule;:

T. The beneficial use of the granular components from spent septic system beds as construction fill, provided the spent septic system bed material is covered by a concrete or asphalt paved surface, or by at least 18 inches of natural soil, and is not used on a residential, school or public recreational property unless it was generated on that property;:

U. The beneficial use of crumb rubber smaller than 1/2 inch in size as a drainage material around foundations, retaining walls or similar areas not subject to vehicular traffic; and

V. The beneficial use of catch basin grit as construction fill, when it is free of obvious grease, petroleum or litter.

NOTE: Beneficial use activities that are exempt from this rule may be subject to the *Natural Resource Protection Act*, 38 M.R.S. §§ 480-A to 480-Z, if proposed to be located in, on, over, or adjacent to a protected natural resource.

---

**34. General Standards For Beneficial Use.** All beneficial use activities must be licensed and operated or conducted to meet the following general standards;:

A. The use of secondary material must constitute a beneficial use as defined in 06-096 C.M.R. ch. 400, § 1(T) that: serves a legitimate beneficial purpose, does not constitute disposal or a means of discard, and performs as an acceptable and effective substitute for the raw material or commercial product it is replacing, as demonstrated through:

(1) Comparison of the physical and chemical properties of the secondary material and the material or product it is replacing, showing that the two are comparable;

- (2) Documentation that use of the secondary material will meet or exceed any relevant and generally accepted product specifications, or manufacturing, industrial use or engineering standards;
- (3) Description of the identified or reasonably likely use or market for the material that is not speculative; and
- (4) Any other relevant information.

- B. The beneficial use will not pollute any waters of the state, contaminate the ambient air, constitute a hazard to health or welfare or create a nuisance.
- C. The following applicable standards and requirements of Chapter 400 of these rules 06-096 C.M.R. ch. 400 must be met, except the traffic standards of 06-096 C.M.R. ch. 400, § 4(D) are presumed to be met if:

- (a1) The beneficial use occurs no more than once in a calendar year at the same location; or

---

NOTE: The Department will consider the duration of a construction project, up to one calendar year, to be a single beneficial use.

---

- (b2) The beneficial use results in fewer than no more than 16 additional vehicle trips per day; or
- (e3) The project beneficially using the secondary material has been permitted under another chapter of the *Solid Waste Management Rules*, or the *Site Location of Development Law*, or by a local authority, if traffic impacts associated with the beneficial use were considered. and
  - (1) Chapter 400.1 Definitions
  - (2) Chapter 400.2 Applicability
  - (3) Chapter 400.3(A), (B), (C), & (F)
  - (4) Chapter 400.4(B) Financial Ability
  - (5) Chapter 400.4(C) Technical Ability
  - (6) Chapter 400.4(D) Traffic. Except an applicant is presumed to meet the traffic standard if:
    - (7) Chapter 400.4(G) No Unreasonable Adverse Effect On Air Quality.
    - (8) Chapter 400.8 Right of Entry.
    - (9) Chapter 400.12 Criminal or Civil Record.

(10) Chapter 400.13 Variances.

D. ~~A beneficial use activity may not be located in, on, or over any protected natural resource or be located adjacent to and operated in such a manner that material or soil may be washed into any protected natural resource unless approved pursuant to Maine's *Natural Resource Protection Act*, 38 M.R.S.A. §§ 480 A to 480 Z.~~

E. ~~The beneficial use of waste in construction must be in conformance with the applicable provisions of Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices (Cumberland County Soil and Water Conservation District/Department of Environmental Protection, March, 1991) or its equivalent.~~

FD. ~~The beneficial use activity must not include the use of hazardous wastes identified pursuant to Maine's *Identification of Hazardous Waste* rule, 06-096 C.M.R. ch. 850. Hazardous wastes that have been diluted or treated to render them non-hazardous must not be beneficially used under the provisions of this rule without the Department's specific authorization.~~

E. ~~The beneficial use activity will be managed in accordance with all applicable provisions of the *Maine Erosion and Sediment Control Best Management Practices (BMPs) Manual for Designers and Engineers*, October 2016 and the *Maine Erosion and Sediment Control Practices Field Guide for Contractors*, March 2015. All necessary actions must be taken to ensure that the beneficial use activity does not result in unreasonable sedimentation or soil erosion.~~

---

NOTE: 06-096 C.M.R. ch. 400, §3 (B)(4) includes provisions related to the issuance of limited licenses, including pilot and experimental permits. 06-096 C.M.R. ch. 400, § 13 specifies the criteria for the issuance of variances to certain provisions of the *Solid Waste Management Rules*. The Department encourages consideration of the use of these provisions, when appropriate, in the development of applications for innovative projects that may not meet the letter of certain provisions of this rule, but that may support and further the goals of Maine's solid waste management hierarchy.

---

**5. Authorization Through Notification for the Beneficial Use of Emulsified Asphalt Encapsulated Contaminated Soil When Certified by a Professional Engineer.** The notification provisions established by this section apply to the beneficial use of emulsified asphalt encapsulated contaminated soil produced by a facility licensed by the Department as a solid waste processing facility (hereinafter described in this section as encapsulated soil) as construction fill underneath paved roads and parking lots, and in other civil engineering applications, when a professional engineer licensed with the State of Maine certifies through the notification form provided in Appendix C of this rule that all of the provisions of this section will be met.

By establishing these notification provisions, the Department finds that the beneficial use of encapsulated soil in strict conformity with the notification provisions will meet the general standards in section 4 of this rule.

Proposed beneficial uses of encapsulated soil as construction fill that do not meet all requirements of this section must be licensed under either section 6(B) or section 9 of this rule.

**A. Notification Requirements.** At least 5 working days prior to the initiation of the beneficial use project, a completed notification form signed and sealed by a professional engineer licensed with

the State of Maine shall be submitted to the Department. The notification must be submitted on the form provided by the Department in Appendix C of this rule. The notification must include:

- (1) The appropriate notification fee, payable to Treasurer, State of Maine;
- (2) A narrative description of the project, and the following information:
  - (a) A site plan showing where encapsulated soil will be placed;
  - (b) An U.S.G.S. 7.5 minute topographic map or equivalent map clearly marking the project location, along with the GPS coordinates of the project; and
  - (c) A cross-sectional view, with a horizontal scale of 1 inch = 5 feet and a vertical scale of 1 inch = 12 inches (unless an alternative scale is approved by the Department) of each location on the property where encapsulated soil will be placed. The cross sections must clearly indicate the location and depth of each material layer as applicable (construction fill, paved surface course, other construction, etc.) and be representative of the project as a whole; and
- (3) The amount of emulsified soil to be used in the project, and the anticipated timeframe for the beneficial use project including the expected start and completion dates.

## **B. Standards.**

- (1) The project is a beneficial use rather than disposal or discard, and all encapsulated soil beneficially used will be non-hazardous by characteristic;
- (2) The physical and chemical properties of the encapsulated soil and the material or product it is replacing must be comparable;
- (3) The encapsulated soil must meet or exceed any relevant and generally accepted product or engineering specifications;
- (4) Encapsulated soil may not be placed in standing water or in a channeled drainage flow. It may not be used to fill wetlands, be placed below the water table, or be allowed to wash into any water of the State;
- (5) All required federal, state and local approvals must be obtained prior to the beneficial use of encapsulated soil on the project property;
- (6) A concrete or asphalt paved surface, or a 6 inch layer of soil, or other material suited to the purpose of the construction, must completely cover the stabilized encapsulated soil and must be permanently maintained. No surface exposure of the encapsulated soil is allowed;
- (7) Encapsulated soil intended to be used for a project may be stored in a secured location near the project that is under the control of the property owner. All excess encapsulated soil and any residue must be removed from the project area upon completion of the project;
- (8) The beneficial use may not take place on a residential, school or public recreational property;

(9) Delivery of the encapsulated soil to the project property must:

- (a) occur during a construction period not to exceed 1 year; or
- (b) result in no more than 16 additional vehicle trips per day; or
- (c) have been permitted under another chapter of the *Solid Waste Management Rules*, the *Site Location of Development Law*, or by a local authority, if traffic impacts associated with the beneficial use were considered; and

(10) Annual reports for the previous year must be filed by February 28 for each year in which encapsulated soil is actively used or is stored on the property. The reports must include both the quantity of encapsulated soil used on the property and the quantity of encapsulated soil stored for project use at the end of the calendar year, and verification that encapsulated soil was used as certified in the notification.

#### **456. Beneficial Use Permit by Rule Provisions**

**A. Permit by Rule for Beneficial Use of Tire Chips as Construction Fill Material.** The permit-by-rule provisions of this section apply to the use of tire chips as a light weight, insulating, or free draining fill for roads, retaining walls, landslide stabilization, and other civil engineering applications where all of the standards of this section are met. Proposed beneficial uses of tire chips which do not meet the requirements of this section must be licensed under ~~Section 7~~section 89 of this ~~Rule~~rule. By establishing these provisions, the Department finds that the beneficial use of the tire chips in strict conformity with these permit-by-rule provisions will meet the general standards in ~~Section~~section 3-4 of this ~~Rule~~rule. No variances to the provisions of this section may be granted.

**1.(1) Notification Requirements.** At least 24 calendar days prior to the initiation of the proposed activity or use an applicant shall submit a signed permit-by-rule notification on a form provided by the Department. Public notice of the filing of this type of permit-by-rule notification in accordance with ~~Chapter 400, section 06-096 C.M.R. ch. 400, § -3(B)(1)(c)~~ is not required. The permit-by-rule notification must include:

- (a) The applicant's name, address, telephone number, and contact person together with the appropriate application fee;
- (b) A description of the tire chips size and the proposed use;
- (c) An U.S.G.S 7.5 minute topographic map or equivalent map clearly marking the project location. GPS coordinates of the activity shall be provided in the project description; and
- (d) For proposed travel ways (e.g. roads and parking lots), a cross-sectional view, with a horizontal scale of 1 inch = 5 feet and a vertical scale of 1 inch = 12 inches. The cross-section must clearly indicate the location and depth of each material layer as applicable (gravel, tire chips, geotextile, surface course, etc.).

**2.(2) Standards:**

- (a) **Tire Chip Specifications.** Tire chips shall conform to the specification of ASTM Standards referenced in D 6270-98 or Maine Department of Transportation type A or B tire chips.
- (b) Tire chips shall be used in a manner that is consistent with the construction project's plans and specifications.
- (b2) Geotextile. The use of geotextile, Maine Department of Transportation specification 722.01 or approved equivalent, between material layers where specified is required.;
- (e3) Tire Chip Lift Thickness. The maximum compacted thickness of each tire chip lift shall not exceed twelve (12) inches.;
- (c) Total Thickness.— The tire chip layer is restricted to shall not exceed a maximum thickness of 9.810 feet.
- (e5) **Surface Course Requirements for Unpaved Roads:**
  - (i) For travel ways subject to loading from passenger car and light truck traffic, a minimum of twelve (12) inches of natural soil material shall be placed over the tire chip layer; and
  - (ii) For travel ways subject to loading from moderate to heavy truck traffic, a minimum of eighteen (18) inches of natural soil material shall be placed over the tire chip layer.;
- (d) Cover. The tire chips shall be covered with a minimum layer of concrete or asphalt paved surface, or a minimum of 12 inches of natural soil material, concrete, pavement or other suitable material suited to the purpose of the construction, such that no waste is exposed.
- (e) **Tire Chip Storage.** Tire chips to be used may be stored in a secured location near the project that is under the control of the licensee. All excess tire chips and residue must be removed from the project area upon completion of the project.

**B. Permit By Rule For the Beneficial Use of No More than 6,400 Tons of Emulsified Asphalt Encapsulated Oil-Contaminated Soil as Construction Fill.** The permit-by-rule provisions of this section apply to the use of emulsified asphalt encapsulated oil-contaminated soil produced by a facility licensed by the Department as a solid waste processing facility (hereinafter described in this sub-section as encapsulated soil) as a construction fill underneath paved roads and parking lots, and in other civil engineering applications when used on a parcel of property in accordance with a completed Authorization Form that is in conformance with section 10 and Appendix B of this rule and where all of the standards of this section are met.

“Construction fill” (as defined in Chapter 400) means, “fill that may contain solid waste utilized to provide material for construction projects such as roads, parking lots, buildings or other structures. It does not include fill needed to re-contour an area within a landfill or where no further construction is occurring. If the construction fill contains solid waste other than inert fill, the use of the fill is regulated under Chapter 418.”

NOTE: Construction fill (as defined in 06-096 C.M.R. ch. 400) means, “fill that may contain solid waste utilized to provide material for construction projects such as roads, parking lots, buildings or other structures. It does not include fill needed to re-contour an area within a landfill or where no further construction is occurring. If the construction fill contains solid waste other than inert fill, the use of the fill is regulated under Chapter 418.”

---

Proposed beneficial uses of emulsified asphalt encapsulated oil contaminated soils encapsulated soil as construction fill which do not meet the requirements of this section must be licensed under either section 5 or Section section 7-89 of this Rulerule.

By establishing these provisions, the Department finds that the beneficial use of emulsified asphalt encapsulated oil contaminated soil encapsulated soil in strict conformity with these permit-by-rule provisions will meet the general standards in Section section 3-4 of this Rulerule. No variances to the provisions of this section may be granted.

**(1) Notification Requirements.** At least 40-24 calendar days prior to the initiation of the proposed activity or use an applicant shall submit a signed permit-by-rule notification on a form provided by the Department. Public notice of the filing of this type of permit-by-rule notification is not required, as established in Chapter 400, section 06-096 C.M.R. ch. 400 § 3(B)(1)(c). The permit-by-rule notification must include:

- (1a) The applicant's name, address, telephone number, and contact person together with the appropriate application fee;
- (1b) A description of the proposed use of the encapsulated soil as construction fill, including a site plan showing where encapsulated soil will be placed;
- (1c) An U.S.G.S 7.5 minute topographic map or equivalent map clearly marking the project location. GPS coordinates of the activity shall be provided in the project description; and
- (1d) For proposed roads, a A cross-sectional view, with a horizontal scale of 1 inch = 5 feet and a vertical scale of 1 inch = 12 inches, of each location where encapsulated soil will be placed. The cross-section(s) must clearly indicate the location and depth of each material layer as applicable (construction fill, paved surface course, other construction, etc.).

**(2) Standards**

- (2a) Emulsified asphalt encapsulated oil contaminated Encapsulated soil may not be placed in standing water or in a channelled drainage flow. It may not be used to fill any wetlands, be placed below the water table, or be allowed to wash into any water of the stateState.
- (2b) A layer of asphalt, concrete or asphalt paved surface, or a 6 inch layer of natural soil, or other material suited to the purpose of the construction, must completely cover the stabilized contaminated encapsulated soil and must be permanently maintained. No surface exposure of the encapsulated soil is allowed.

(c) Encapsulated soil intended to be used for a project may be stored in a secured location near the project that is under the control of the licensee. All excess ~~construction fill~~ ~~encapsulated soil~~ and ~~any~~ residue must be removed from the project area upon completion of the project.

(d) The beneficial use may not take place on a residential, school or ~~public recreational property~~ a property, area or facility open to the public for recreation.

(e) The beneficial use of encapsulated soil licensed under this section is limited as follows:

- (i) Encapsulated soil must not be placed to a depth of more than 24 inches above the natural ground surface;
- (ii) No more than 6,400 tons of encapsulated soil may be used on the parcel of property covered by the permit-by-rule; and
- (iii) The term of the license will be 3 years. At the end of the 3 year period, any encapsulated soil not used as construction fill must be removed from the site to a facility licensed to accept it.

(f) Annual reports must be filed for each year during the term of the license. The reports must include both the quantity of encapsulated soil used on the property and the quantity of encapsulated soil stored on the property at the end of the calendar year, and verification that encapsulated soil was used as proposed in the application.

**C. Permit By Rule For Limited Beneficial Use of Tires in Structures.** The permit-by-rule provisions of this section apply to the limited use of whole tires in structures, with each tire having a maximum rim size of 25 inches in diameter, where all of the standards of this section are met.

Proposed beneficial uses of tires which do not meet the requirements of this section or the exemptions of section 3 must be licensed under section 89 of this rule.

By establishing these provisions, the Department finds that the structural use of tires in strict conformity with these permit-by-rule provisions will meet the general standards in section 4 of this rule. No variances to the provisions of this section may be granted.

**(1) Notification Requirements.** At least 24 calendar days prior to the initiation of the proposed activity or use an applicant shall submit a signed permit-by-rule notification on a form provided by the Department. Public notice of the filing of this type of permit-by-rule notification is not required, as established in 06-096 C.M.R. ch. 400, § 3(B)(1)(c). The permit-by-rule notification must include:

- (a) The applicant's name, address, telephone number, and contact person together with the appropriate application fee;
- (b) A description of the proposed use of tires, including information on the type of structure to be constructed with tires;
- (c) An estimate of the number of tires proposed to be used in the structure;

- (d) An U.S.G.S 7.5 minute topographic map or equivalent map clearly marking the project location. GPS coordinates of the activity shall be provided in the project description; and
- (e) Information in sufficient detail to describe how tires will be placed to build the proposed structure.

---

NOTE: Please contact the Department prior to submission of a permit-by-rule for tire structures for guidance on information needed for the proposed project.

---

**(2) Standards.**

- (a) Tires may not be placed in standing water or in a channeled drainage flow. Tires may not be used to fill wetlands, or be placed below the water table or in any water of the State.
- (b) Tires intended to be used for a project may be stored in a secured location near the project that is under the control of the licensee. All excess tires must be removed from the project area upon completion of the project.
- (c) The structural use of tires licensed under this section is limited as follows:
  - (i) No more than 1000 whole tires (each having a maximum rim size of 25 inches in diameter) may be used on the parcel of property covered by the permit-by-rule; and
  - (ii) The construction must be completed within 3 years.
- (d) Annual reports must be filed for each year during the term of the license. The reports must include both the quantity of whole tires used on the property and the quantity of whole tires stored on the property at the end of the calendar year, and verification that tires were used as proposed in the application.

**567. Reduced Procedures For Select Beneficial Use Activities.** The reduced procedure provisions of this section apply to the beneficial use of non-hazardous multi-fuel ash as flowable fill or as construction fill in traveled ways (e.g. roads and parking lots), and to dredge material, and bottom ash from wood fired boilers, where all of the general standards in section 3-4 of this rule and this section are met. Except, the beneficial use of bottom ash from wood fired boilers or from multi-fuel boilers using fuel derived from construction and demolition debris CDD wood must be licensed under section 7-89 of this rule. Proposed beneficial uses which do not meet the requirements of this section must be licensed under section 7-8 of this rule.

**A. Reduced Procedure Beneficial Use of De-watered Dredge Material As Construction Fill Standards.**

- (1) Dredge material permitted for use under this section must not be used in a non-residential settings, playgrounds, or school yards, and must be completely and permanently covered by a concrete or asphalt paved surface, or by 6 inches of a compacted soil material.

(2) In order to characterize dredge material intended for beneficial use, representative samples shall be collected and analyzed prior to dredging in conformance with E.P.A. SW-846. A minimum of 4 samples per site or ~~one~~1 sample per acre shall be collected unless an alternative sampling plan is otherwise approved by the Department; information on sediment depth represented by each sample shall be provided. Composite samples for analysis may be approved by the Department on a case-by-case basis. Analysis must be for the following parameters:

- (a) Total metals (mg/kg dry wgt.) including Arsenic (As), Cadmium (Cd), Chromium (Cr), Lead (Pb), and Mercury (Hg);
- (b) Semi-volatiles listed in ~~§5.A~~Paragraph (3), below (mg/kg dry weight);
- (c) PCBs and dioxin TEQ unless ~~otherwise approved~~waived by the Department, and organopesticides from commercial and agricultural ponds greater than 1/4 acre (mg/kg dry weight); and
- (d) Other parameters as required by the Department.

(3) Dewatered dredge material which ~~are~~is non-hazardous and which contains constituent levels less than the following levels (totals) may be beneficially used in accordance with the provisions of this section:

<u>Arsenic (As)</u>	< <u>29.16</u> mg/kg
<u>Cadmium (Cd)</u>	< <u>8.055</u> mg/kg
<u>Chromium (Cr+6)</u>	< <u>38.255</u> mg/kg
<u>Lead (Pb)</u>	< <u>800.170</u> mg/kg
<u>Mercury (Hg)</u>	< <u>60.255</u> mg/kg
<u>Benz[a]anthracene</u>	< <u>2.013</u> mg/kg
<u>Benzo[b]fluoranthene</u>	< <u>5.013</u> mg/kg
<u>Benzo[k]fluoranthene</u>	< <u>49.013</u> mg/kg
<u>Benzo[a]pyrene</u>	< <u>8.035</u> mg/kg
<u>Chrysene</u>	< <u>160.130</u> mg/kg
<u>Dibenz[a,h]anthracene</u>	< <u>2.035</u> mg/kg
<u>Indeno[1,2,3-c,d]pyrene</u>	< <u>14.0</u> mg/kg
<u>PCBs</u>	< <u>0.741.2</u> mg/kg
<u>Dioxin TEQ</u>	< <u>16.50</u> pg/g

- (4) Total chromium or lead levels exceeding 100 mg/kg, or mercury levels exceeding 4 mg/kg indicate that the dredge material may be hazardous waste. Further analysis of those parameters for TCLP is necessary.
- (5) ~~Any non hazardous dredge material with constituent levels exceeding those in paragraph (3) of this subsection by less than a factor of two may be beneficially used as construction fill provided that the dredge material are combined with borrow material at a proportion which will lower the contaminant levels below the levels in paragraph (3).~~

**B. Reduced Procedure Beneficial Use of Multi-Fuel Boiler Ash or Bottom Ash from Wood Fired Boilers as Construction Fill in Road Construction, Parking Lots and otherOther Traveled Ways Standards.**

- (1) The applicant must obtain written permission from the owner of the property on which the ash is to be beneficially used.
- (2) The discharge of phosphorus must not cause adverse ~~affects~~ effects to surface waters.
- (3) The ash must be handled to prevent human exposure to ash dust by keeping the ash in a moist condition or by other approved means.
- (4) The filled area must be covered by ~~a concrete or asphalt paved surface, or a minimum of six (6) inches of compacted natural soil material or other approved uncontaminated material suited to the purpose of the construction, or by asphalt or concrete pavement.~~ The covering must be maintained in its original condition.

**C. Reduced Procedure Beneficial Use of Multi-Fuel Boiler Ash or ~~Bottom Ash from Wood Fired Boilers~~ as Flowable Fill Standards.**

- (1) The filled area must be a minimum of 100 feet from drinking water supplies.
- (2) The filled area must be covered by ~~a concrete or asphalt paved surface, or a minimum of six (6) inches of compacted natural soil material or other approved uncontaminated material suited to the purpose of the construction, or by asphalt or concrete pavement.~~ The covering must be maintained in its original condition.

**D. Reduced Procedure Application Requirements.** The Department finds that the beneficial use of non-hazardous dredge material, ~~bottom ash from wood fired boilers~~, and multi-fuel boiler ash as construction fill or flowable fill licensed under ~~this~~ these reduced procedures will meet the general standards of ~~Section~~ section 3-4 of this rule because of the limited likelihood of adverse environmental or human health impact, provided that the applicant submits information sufficient to meet the standards and submission requirements of ~~section 3-4~~ and this section. The applicant shall submit to the Department, on forms provided by the Department, the following information:

- (1) A description of the secondary material and its proposed use:-
- (2) Information regarding the physical and chemical characteristics of the secondary material, including all analytical results:-
- (3) The quantities, by weight and/or volume of the secondary material:-
- (4) An U.S.G.S. 7.5 minute topographic map or equivalent map clearly marking the location(s) of the beneficial use activity. GPS coordinates of the activity shall be provided in the project description:-
- (5) If applicable, a copy of the information on proper use that will be provided to the users of the secondary material:-
- (6) For beneficial use of dredge materials, Aa handling and use plan including provisions for storage and de-watering of the dredge material. It must provide that the storage will not pose a hazard to public health and that the storage or beneficial use of the dredge material will not result in any illegal discharge of sediments or contaminants to waters of the State:-

- (7) ~~If the~~ For beneficial use of ash or dredge material is proposed, a construction drawing for the location(s) of the beneficial use activity, with the property boundary and the location of ash or dredge material ~~shown on the~~ in plan, and representative cross section views clearly marked and noted on the drawing. The cross-section must clearly indicate the location and depth of each material layer as applicable (gravel, ash geotextile, surface course, etc.);
- (8) ~~If~~ For the beneficial use of ash is proposed, written permission from the owner of the property on which the ash is to be beneficially used ~~must be submitted~~; and;
- (9) ~~If~~ For the beneficial use of ash as a construction material, ~~under paragraph B is proposed~~, documentation that the beneficial use is not within the watershed of a water body classified GP-A; or, if the beneficial use is in a class GP-A watershed, a phosphorus control plan that minimizes adverse ~~effects~~ effects to surface waters must also be submitted.

**678. Fuel Substitution.** Any person proposing to beneficially use secondary materials as a fuel in a boiler or cement kiln designed to combust conventional fuels, including fossil or biomass fuels, must obtain a license pursuant to the requirements of this section and the general standards of section 4 of this rule.

**A. Standards.** In addition to the *General Standards for Beneficial Use* in section 4 of this rule, the following standards apply to facilities beneficially using secondary materials as fuel:

- (1) The substitution of secondary material(s) for conventional fuels used in a boiler or cement kiln shall not exceed 50% of total fuel by weight combusted on an average annual basis;
- (2) A licensee may beneficially use as a fuel substitute only the type and quantity of secondary material specifically licensed or allowed under this rule;
- (3) A licensee may not accept CDD wood as a fuel unless the facility's Quality Assurance / Quality Control Plan specifically provides that the source(s) of the CDD wood fuel has implemented a plan for the identification and removal of arsenic and pentachlorophenol treated wood (including but not limited to utility poles) prior to processing of the CDD wood into fuel. Acceptable methods for the removal of arsenic and pentachlorophenol wood are the use of PAN Indicator Stain, X-ray Fluorescence technology, personnel specifically trained to recognize treated wood, or other methods approved by the Department;.
- (4) In order to characterize secondary material proposed for fuel use, unless specifically waived by the Department, a trial burn of the secondary material blended with the existing fuels shall be conducted; and
- (5) A licensee shall not deliver ash that is hazardous by analysis to a non-hazardous solid waste facility for disposal.

**B. Pre-Application Requirements.** A person proposing to license fuel substitution under this section shall request a pre-application meeting with the Department. The pre-application meeting will include a discussion of the fuel substitution proposal, and provide an opportunity for the applicant to receive guidance on the trial burn procedure and characterization of the proposed substitute fuel.

At least 14 days prior to the pre-application meeting, the applicant shall submit the following information to the Department:

- (1) A proposed trial burn procedure;
- (2) The estimated maximum annual quantity of the secondary material proposed for combustion;
- (3) Information outlining how the secondary material will be transported, stored, and otherwise managed; and
- (4) Information outlining how bypass and residues will be stored and otherwise managed, including how residues will be characterized and disposed.

### **C. Trial Burn Requirements.**

- (1) Prior to conducting a trial burn, the applicant shall notify the Department's Bureau of Air Quality of the proposed trial burn.
- (2) The following information must be submitted to the Bureau of Remediation and Waste Management at the pre-application meeting, and a minimum of 10 working days prior to the planned start of the trial burn:
  - (a) Results of the characterization of secondary material to be used for the trial burn, including a minimum of 4 samples from a stockpile of at least 400 tons from each source for each proposed fuel, and 1 sample for each additional 400 tons acquired for the trial burn, if a trial burn of more than 400 tons is proposed. For CDD wood fuel, each sample must be a composite of 20 one quart samples representative of the trial period. Large particle size solid fuel must be pulverized and thoroughly mixed prior to sample reduction and analysis using a Department approved method. Enough fuel must be available to conduct a trial burn for each proposed fuel blend to allow sampling over an 8 hour period. The characterization results for secondary materials proposed to be used as fuel may be obtained from the source, provided the results are representative of the secondary material on an ongoing basis. Fuel blended from proposed secondary materials and the conventional fuel combusted at the facility must be characterized by the applicant, unless this requirement is waived by the Department, by analysis for the parameters below:
    - (i) TCLP metals;
    - (ii) Total Arsenic and Lead;
    - (iii) Physical characterization using Department approved methods; and
    - (iv) Other parameters as required by the Department.
  - (b) Information outlining the objectives of the trial burn, how the secondary material for the trial burn will be transported, stored, and otherwise managed, the quantity of secondary material to be burned, the scheduled times and dates of the trial burn, a protocol for characterization of the fuel blend(s) to be used during the trial burn that includes collection of 1 sample per 400 tons of each different blend of fuel provided a minimum of 4 samples are taken, and an ash testing program needed to adequately characterize ash constituents and levels of pollutants; and

(3) The trial burn will be conducted per the submitted trial burn procedure, and approvals obtained from both the Bureau of Air Quality and the Bureau of Remediation and Waste Management.

**D. Application Requirements.** The following information must be included in an application for fuel substitution submitted to the Department, on an application form provided by the Department:

- (1) A description of the secondary material proposed for fuel use;
- (2) The results of the trial burn, and any other appropriate information regarding the suitability of the secondary material for fuel use;
- (3) An Operations Manual prepared in accordance with the requirements of this section;
- (4) An U.S.G.S. 7.5 minute topographic map or equivalent map clearly showing the property boundary and location on that property of the boiler or cement kiln proposing the fuel substitution. GPS coordinates of the activity shall be provided in the project description; and
- (5) A signed contract or letter of intent from a facility(ies) licensed to accept all residues and bypass wastes.

**E. Operating Requirements.** All new and existing licensees must comply with the following operating requirements:

- (1) The licensee shall ensure that activities associated with the combustion of secondary materials do not contaminate ground or surface water;
- (2) The licensee shall prepare and maintain an operating manual of current policies and procedures related to the beneficial use of the secondary material as a fuel substitute. The operating manual shall include all information that would enable supervisory and operating personnel, and persons evaluating the beneficial use, to determine what sequence of operation, plans, diagrams, policies, procedures and legal requirements must be followed for orderly and successful operation on a daily and yearly basis. The manual must address all items contained in this section. The licensee shall take whatever measures are necessary to familiarize all personnel responsible for beneficial use with relevant sections of the operating manual, and shall provide and document regular training for personnel on the handling and management of secondary materials used as substitute fuels, and residues from the combustion of blended fuel;
- (3) The licensee shall maintain a valid contract or agreement with a solid waste facility approved to accept bypassed waste and/or residues from the boiler or cement kiln. A waste characterization program for residues shall be included in the operating manual. All residues shall be characterized in accordance with the applicable provisions of 06-096 C.M.R. ch. 405, § 6;
- (4) The licensee shall undertake suitable measures to control dust, litter (including fines from fuel and ash) and odors resulting from the use of secondary material as a fuel;
- (5) Storage Requirements:

- (a) All fuel substitution licensed under this section must occur at a facility designed and operated to collect, store and handle ash in enclosed buildings, or the equivalent (e.g., covered conveyors and transfer points, leak proof containers, tanks), to prevent fugitive dust emissions and to prevent direct exposure of the ash to the weather during collection, storage, handling and transport off site;
- (b) Storage areas for secondary material for use as substitute fuel shall be clearly identified and public access excluded;
- (c) Secondary material that cannot be used as substitute fuel by the boiler or cement kiln shall be removed and disposed at a facility licensed to accept it at least weekly unless other procedures have been reviewed and approved by the Department; and
- (d) Licensees shall manage fuel according to the fuel management plan;

(6) The licensee shall draft and implement a Quality Assurance/Quality Control (QA/QC) Plan which will ensure that secondary materials used by the facility will remain consistent with the facility's fuel substitution license and applicable fuel quality standards in this rule. All sampling and analysis required in this section of the rule shall be done using Department approved methods, and in conformance with the requirements of the license(s) and applicable provisions of 06-096 C.M.R. ch. 405, § 6. If CDD wood fuel is licensed as a substitute fuel, the QA/QC Plan shall include the specific elements listed in sub-section F, below;

(7) Fuel Management Plan Requirements. The following shall be included in a plan for management of secondary materials used as fuel:

- (a) A detailed description of the fuel storage area and its operation including: an asphalt or concrete base pad shown in plan view along with typical cross sections; provisions for leachate management, collection and disposal; and control of wind blown fines;
- (b) A description of fuel flow through the facility that provides for consumption of oldest fuel first and a plan view of the storage pad at a minimum scale of 1"=50' that depicts the sequence of fuel flow, oldest to newest, throughout the pad area;
- (c) Procedures for blending or metering in fuel;
- (d) Procedures for minimizing fuel stockpile volume and fuel fire risk for the duration of planned shutdowns;
- (e) For facilities that store fuel outside, an Environmental Monitoring Program designed and implemented in accordance with the applicable provisions of 06-096 C.M.R. ch. 405, unless the Department determines a program is not required; and
- (f) A storage pad inspection and maintenance program that provides for annual inspection and repair of the pad.

(8) A hazardous and special waste exclusion plan shall be developed and implemented in accordance with the requirements of 06-096 C.M.R. ch. 400, § 9, using the template in Appendix A of 06-096 C.M.R. ch. 400.

**F. Additional Operating Requirements When CDD Wood Fuel Is Used.** All new and existing licensees that accept CDD wood fuel must comply with the following operating requirements:

- (1) In addition to the specific elements listed in sub-section E (7), above, the fuel management plan shall include:
  - (a) A size limit on wood fuel pile(s) containing CDD wood fuel to no more than 8 weeks of fuel; and
  - (b) A fire safety action plan that includes procedures for monitoring internal pile temperatures or the use of thermal imaging devices or other technology that provide for maintaining internal pile temperatures less than 185 degrees Fahrenheit. The fire safety action plan must describe procedures and equipment that will be used when internal pile temperatures meet or exceed 185 degrees Fahrenheit or in the event of a pile fire. The fire safety action plan shall be submitted to the local fire safety authority for its review. If that authority makes recommendations concerning the plan, those recommendations shall be included in the plan prior to submittal to the Department. The Department may waive the requirement for a fire safety action plan upon a showing that such a plan is not warranted due to small volumes of CDD wood fuel proposed to be stored and/or short residency times in storage;
- (2) QA/QC Plan Elements. To ensure that CDD wood fuel and blended fuel used by the facility will remain consistent with the fuel quality standards of this section, the QA/QC Plan shall address the following elements:
  - (a) CDD wood fuel elements:
    - (i) Sampling for physical characterization of substitute fuel may be contracted by either the source or the licensee. All work involved in certifying that the fuel meets the standards for CDD wood fuel must be done by a qualified third party, independent from the fuel source and the licensee. For the purpose of this requirement, independent of the source and the licensee means personnel certifying the fuel are not in the direct employment of the source or the licensee. The third party must be employed by a company under a contractual relationship with the source or the licensee, and the company must offer the same services to multiple parties. Physical characterization results shall be provided to both the source and the licensee by the independent third party within 3 days of being reported;
    - (ii) Physical sampling and analysis must be done in conformance with procedures established in 06-096 C.M.R. ch. 405, § 6(C)(6), using laboratories certified for the required analyses, if applicable. Statistical analysis of characterization data shall be performed in accordance with 06-096 C.M.R. ch. 405, § 6(C)(6). Analytical results shall be submitted to the Department in EDD format;
    - (iii) A minimum of 4 composite samples collected over a period of no fewer than 15 and no more than 30 consecutive days is necessary to certify each new source. Annually thereafter, each source must be recertified. For recertification, a minimum of 1 composite sample per 10,000 tons received in the last calendar year is required; however, annual recertification must be based on a minimum of 4 samples per source. Each sample must be a composite of a minimum of 20 one

quart samples. Publicly owned facilities that process fewer than 4 times per year must collect either:

- a. a total of 3 samples during the year, where each of the 3 samples is a composite of a minimum of 20 one quart samples; or
- b. a total of 2 replicate samples during each processing event, where each replicate sample is a composite of a minimum of 30 one quart samples taken from different horizontal and vertical locations in the stockpile.

(iv) For each source, the following information must be documented:

- a. The name, location and a detailed description of the fuel processing methodology;
- b. The compliance history for the past 5 years;
- c. The estimated tons per year of fuel the source generates;
- d. The estimated tons per year of fuel that will be supplied to the licensee;
- e. A determination that the source has a program equivalent to the licensee's Hazardous and Special Waste Exclusion Plan, and that the source has procedures for the removal of hazardous waste, arsenic and pentachlorophenol treated, charred or burned wood prior to processing fuel;
- f. A description of the method by which the licensee will evaluate and accept or reject the fuel certification information provided by the independent third party fuel inspector;
- g. Documentation that the source supplies CDD wood fuel that meets or exceeds the CDD fuel quality standards in this section; and
- h. A description of the method to inspect and accept or reject each load of CDD wood fuel.

(b) Blended fuel elements:

- (i) Physical sampling of the blended fuel may be done either by a qualified contractor, or by employees of the licensee who are trained in sampling techniques; and
- (ii) On a monthly basis the designated sampler shall collect and properly store an 8-hour composite sample of the approved blended fuel from the conveyor feeding the boiler. Three subsequent monthly composites shall be combined for a quarterly composite, and the quarterly composite shall be analyzed for the chemical parameters arsenic and lead.

(3) Fuel Quality Standards for CDD Wood. Analytical data from a proposed source of processed CDD wood must be examined by the licensee and the source found to consistently produce a product that meets or exceeds the following CDD wood fuel quality standards prior to blending with other fuels at the licensee's facility. Analytical data that is available from the

CDD wood fuel processor, provided it is representative of the CDD wood fuel generated by the CDD wood fuel processor at that time and the characterization meets the requirements below, may be used to demonstrate compliance with the following CDD wood fuel quality standards:

- (a) Non-combustible fraction exclusive of rocks, brick, and concrete <1%
- (b) Plastics <1%
- (c) CCA (chromated copper arsenate) treated wood <2%
- (d) #4 minus fines (for publicly owned sources regulated under the *Maine Solid Waste Management Rules*) <20%
- (e) #4 minus fines (for sources other than publicly owned) <15%

(4) Fuel Quality Standards for Blended Fuel. The fuel quality standards below must be met by the fuel substitution licensee after any blending of secondary materials with conventional fuels and prior to combustion.

- (a) Arsenic <50 mg/kg
- (b) Lead <375 mg/kg

(5) Failure to Meet the Fuel Quality Standards. If sampling conducted under the provisions of the QA/QC Plan detects fuel that fails to meet the fuel quality standards, the licensee or source shall:

- (a) Notify the Bureau of Remediation and Waste Management of the failed result(s) as soon as possible, but within 24 hours after the detection;
- (b) Using the split sample collected at the same time as the sample that failed, retest within 3 days of receipt of notification of non-compliance with the standards. Conduct: a statistical analysis in conformance with the approved QA/QC Plan of the data from the sampling and testing program; identification of the sources which may have caused or contributed to the possible deterioration of the fuel quality; and an assessment of possible errors, such as errors in sampling, analysis or mathematical problems with the test data;
- (c) Within 24 hours of the detection, characterize ash onsite in accordance with the ash sampling and characterization plan, and notify the disposal facility that samples of fuel failed to meet the fuel quality standards;

---

NOTE: If hazardous waste ash is disposed, the licensee may be responsible for management of the ash under the applicable provisions of 38 M.R.S. §§ 1301 through 1319-Y; and the *Hazardous Waste Management Rules*, 06-096 C.M.R. ch. 850 through ch. 858.

---

- (d) Within 24 hours of the detection, characterize stored CDD wood fuel from the same source as the failed test in accordance with the QA/QC Plan;

- (e) Notify the Bureau of Remediation and Waste Management of the results/status of the evaluation conducted in accordance with (b) through (d), above, within 3 days of its completion;
- (f) If the evaluation conducted by the licensee confirms that the fuel does not meet the "Fuel Quality Standards for CDD Wood" in sub-section F(2), above, notify the source(s) of the substandard fuel. If the evaluation is conducted by the source, notify the licensee of the substandard fuel. Combustion of CDD wood fuel from that source shall cease until its fuel is demonstrated to be compliant with the CDD fuel standards. Within 14 days of the notification, either the licensee or the source shall submit to the Bureau of Remediation and Waste Management for its review a report describing and documenting correction of the circumstances or conditions that caused the fuel to become non-compliant with the fuel quality standards; and
- (g) Acceptance of fuel from a source may commence only after the report required pursuant to sub-division (f), above, is approved by the Bureau of Remediation and Waste Management; or the Bureau of Remediation and Waste Management concludes after review of the sampling and analytical results or the evaluation conducted in accordance with (b) through (e), above, that continued acceptance of the fuel does not pose an unreasonable risk to public health or the environment.

**6. Fuel Substitution.** Any person proposing to beneficially use secondary materials as a fuel in a boiler or cement kiln designed to combust conventional fuels, including fossil or biomass fuels, must obtain a license pursuant to the requirements of this section and the general standards of section 3 of this rule. The substitution of secondary material(s) for conventional fuels used in a boiler or cement kiln shall not exceed 50% of total fuel by weight combusted on an average annual basis.

For the purpose of this rule, "wood from construction or demolition debris" or "CDD wood" means the wood component of solid waste resulting from construction, remodeling, repair and demolition of structures.

**A. Application Requirements.** The following information must be submitted to the Department in an application for a fuel substitution permit.

- (1) A description of the secondary material proposed for fuel use.
- (2) An Operations Manual in accordance with the requirements of this Section.
- (3) The most recent, full size U.S. Geological Survey topographic map (7.5 minute series, if available), or equivalent map of the area, showing the property boundary and location on that property of the boiler or cement kiln proposing the fuel substitution. GPS coordinates of the activity shall be provided in the project description.
- (4) A signed contract or letter of intent from a facility licensed to accept all residues and by pass wastes.
- (5) A hazardous and special waste handling and exclusion plan in accordance with the provisions of Chapter 400, section 9 of these rules.
- (6) The results of a trial burn, unless such a burn is specifically waived by the Department, and any other appropriate information regarding the suitability of the waste for fuel use. Trial

~~burns and the submission of related information shall be conducted in accordance with the following provisions:~~

~~(a) Prior to conducting a trial burn, the applicant shall notify the Department's Bureau of Air Quality of the proposed test burn. The following information must be submitted to the Division of Solid Waste Management, as a Letter of Intent, a minimum of ten (10) working days prior to the start of the trial burn:~~

- ~~(i) The estimated maximum annual quantity of the secondary material proposed for combustion.~~
- ~~(ii) Results of the characterization of the secondary material, including a minimum of one sample for each 100 tons of waste for the first 400 tons from each source for each proposed fuel or fuel blend proposed for study during the trial, and one sample for each 1,000 tons thereafter for the parameters below:~~
  - ~~a. TCLP metals parameters;~~
  - ~~b. total Arsenic, Lead, Asbestos and PCB;~~
  - ~~c. physical characterization using Department approved methods; and,~~
  - ~~d. other parameters as required by the Department.~~

~~For CDD wood fuel, each sample must be a composite of 20 one quart samples representative of the trial period, large particle size solid fuel must be pulverized and thoroughly mixed prior to sample reduction and analysis using a Department approved method. Enough fuel must be available to conduct a trial burn for each proposed fuel blend to allow sampling over an 8 hour period.~~

~~(iii) Information outlining the objectives of the trial burn, how the secondary material waste will be transported, stored, and otherwise managed, the quantity of waste to be burned, the scheduled times and dates of the trial burn, and an ash testing program needed to adequately characterize ash constituents and levels of pollutants.~~

~~(b) The trial burn will be conducted per the submitted Letter of Intent and approval obtained from the Bureau of Air Quality Control.~~

**B. Operating Requirements.** Each licensee must comply with the following operating requirements:

- ~~(1) **Residue and Waste.** The licensee shall maintain a valid contract or agreement with a solid waste facility approved to accept by passed waste and/or residues from the boiler or cement kiln.~~
- ~~(2) **Dust, Litter and Odor Control.** The licensee shall undertake suitable measures to control dust, litter (including fines from fuel and ash) and odors resulting from the use of secondary material as a fuel.~~
- ~~(3) **Storage Requirements**~~

- (a) ~~All fuel substitution licensed under this section must occur at a boiler or cement kiln designed and operated to collect, store and handle ash in enclosed buildings, or the equivalent (e.g., covered conveyors and transfer points, leak proof containers, tanks), to prevent fugitive dust emissions and to prevent direct exposure of the ash to the weather during collection, storage, handling and transport off site.~~
- (b) ~~Storage areas for secondary material for use as substitute fuel shall be clearly identified and public access excluded.~~
- (c) ~~Secondary material that cannot be used as substitute fuel by the boiler or cement kiln shall be removed and disposed of at a licensed facility at least weekly unless other procedures have been reviewed and approved by the Department.~~
- (d) ~~Licensees shall manage fuel according to a fuel management plan which shall be included in the Operations Manual for the facility. The fuel management plan shall include:~~
  - (i) ~~A detailed description of the fuel storage area and its operation including: an asphalt or concrete base pad shown in plan view along with typical cross sections; provisions for leachate management, collection and disposal; and, control of wind blown fines;~~
  - (ii) ~~For CDD wood fuel, limitation of the fuel pile size to no more than 8 weeks of fuel;~~
  - (iii) ~~Description of fuel flow through the facility that provides for consumption of oldest fuel first and a plan view of the storage pad at a minimum scale of 1"=50' that depicts the sequence of fuel flow, oldest to newest, throughout the pad area;~~
  - (iv) ~~Procedures for blending fuel;~~
  - (v) ~~Procedure for the minimization of fuel stockpile volume and fuel fire risk for the duration of planned shutdowns;~~
  - (vi) ~~For CDD wood fuel, a Fire Safety Action Plan that includes procedures for monitoring internal pile temperatures or the use of thermal imaging devices or other technology that provide for maintaining internal pile temperatures less than 185 degrees Fahrenheit. The Fire Safety Action Plan must describe procedures and equipment that will be used when internal pile temperatures meet or exceed 185 degrees F or in the event of a pile fire. The Fire Safety Action Plan shall be submitted to the local fire safety authority for its review. If that authority makes recommendations concerning the plan, those recommendations shall be included in the plan prior to submittal to the Department. The Department may waive the requirement for a Fire Safety Action Plan upon a showing that such a plan is not warranted due to small volumes of CDD wood fuel proposed to be stored and/or short residency times in storage.~~
  - (vii) ~~For facilities that store fuel outside, an Environmental Monitoring Program designed and implemented in accordance with Chapter 405;~~
  - (viii) ~~A storage pad inspection and maintenance program that provides for annual inspection and repair of the pad.~~

**(4) Acceptable Secondary Materials**

- (a) **General Standard.** The licensee may beneficially use as a fuel substitute only the type and quantity of secondary material specifically licensed or allowed under this chapter.
- (b) **Prohibited Materials.** A licensee may not accept CDD wood as a fuel unless the Quality Assurance / Quality Control Plan required by Section 6(B)(4)(d) specifically provides that the source(s) of the wood fuel has implemented a plan for the removal of arsenic and pentachlorophenol treated wood (including but not limited to utility poles) prior to processing of the CDD wood into fuel.
- (c) **Standards for CDD Wood Fuel.** Sources of processed construction or demolition debris wood must be examined by the licensee and found to consistently produce a product that meets or exceeds the wood fuel quality standards in (i) below prior to blending with other fuels. The fuel quality standards in (ii) below must be met after any blending and prior to combustion. As used in this subsection, "source" means the facility where the processing of CDD wood into fuel occurs; and "publicly owned source" means a facility where the processing of CDD wood into fuel occurs that only accepts CDD wood that is generated in member municipalities, and that is owned by a municipality, a quasi-municipal entity, a county, a public waste disposal corporation under 38 MRA Section 1304 B, or a refuse disposal district under 38 MRSA Section 1701 et seq.

**(i) Fuel Quality Standards for CDD Wood**

- a. non-combustible fraction exclusive of rocks, brick, and concrete <1%
- b. plastics <1%
- c. CCA (chromated copper arsenate) treated wood <1.5%
- d. #4 minus fines (for publicly owned sources regulated under the Maine Solid Waste Management Rules) 20%
- e. #4 minus fines (for sources other than publicly owned) 10%
- f. asbestos <1%

**(ii) Fuel Quality Standards for Blended Biomass Wood Fuel**

- g. arsenic <50 mg/kg
- h. lead <375 mg/kg
- i. PCB <0.74 mg/kg

- (d) The licensee shall provide the Department with a Quality Assurance/Quality Control Plan for assuring that CDD wood fuel used by the facility will remain consistent with the standards above. The QA/QC plan shall be included in the Operations Manual for the facility. The plan shall include the following elements:

- (i) All work involved in certifying that the fuel meets standards in paragraph 4(c) of this section for CDD wood fuel must be done by a qualified third party, independent from**

~~the fuel source and the licensee. A minimum of 4 composite samples over a thirty day period per source is necessary to certify a new source. Annually thereafter, each source must be recertified. A minimum of 1 composite sample per 10,000 tons or if less than 40,000 tons is received from a source each year, 4 samples per year. Each sample must be a composite of a minimum of 20 one quart samples; Facilities that process fewer than 4 times per year must sample once per processing event.~~

- ~~(ii) Sampling and analysis required by Section 6(B) shall be done using Department approved methods. Physical sampling and analysis must be done in conformance with procedures established in Chapter 405, section 6(C)(6).~~
- ~~(iii) For each source, provide:~~
  - ~~a. the name, location and a detailed description of the fuel processing methodology;~~
  - ~~b. the compliance history for the past five years;~~
  - ~~c. the estimated tons per year of fuel the source generates;~~
  - ~~d. the estimated tons per year of fuel that will be supplied to the licensee;~~
  - ~~e. a determination that each source has a program equivalent to the licensee's Hazardous and Special Waste Exclusion Plan referenced in Section 6(A)(5) of this rule for the removal of hazardous waste, arsenic and pentachlorophenol treated, charred or burned wood prior to processing fuel;~~
  - ~~f. a description of the method by which the facility will evaluate and accept or reject the fuel certification information provided by the third party fuel inspector.~~
  - ~~g. documentation that each source supplies CDD wood fuel that meets or exceeds the standards in 6(B)(4)(c)(i) of this rule.~~
  - ~~h. a description of the method to inspect and accept or reject each load of CDD fuel.~~
- ~~(iv) On a monthly basis the boiler operator shall collect an 8 hour composite sample of the approved blended fuel from the conveyor feeding the boiler, combine 3 monthly composites for a quarterly composite, and analyze for chemical parameters listed in subsection 6(B)(4)(c)(ii) of this rule.~~
- ~~(v) When the sampling conducted under sub-section 6(B)(4)(e)(iv) above detects fuel that fails to meet the CDD fuel standards the licensee shall:~~
  - ~~a. Retest within 7 days of receipt of notification of non-compliance with the standards and conduct: a statistical analysis in conformance with the approved QA/QC plan, of the data from the sampling and testing program; an evaluation of sources which may have caused or contributed to the possible deterioration of the fuel quality; and, an evaluation of possible errors, such as errors in sampling, analysis or mathematical problems with the test data;~~
  - ~~b. Notify the Department of the results of the evaluation within 7 days of its completion;~~

- e. If the evaluation confirms that the fuel does not meet the CDD fuel standards of Section (B)(4)(e), notify the source(s) of the substandard fuel;
- d. Request submission of a report from the source(s) within 14 days of the notification provided pursuant to Section 6(B)(4)(d)(v)(e) above, for submission to and review by the Department, describing and documenting correction of the circumstances or conditions that caused the fuel to become non-compliant with the CDD wood fuel standards; and;
- e. Cease acceptance of fuel from the source(s) if: the report requested pursuant to Section 6(B)(4)(d)(v)(d) above is not submitted to the Department within 14 days of the licensee's notification to the source(s); the report required pursuant to Section 6(B)(4)(v)(d) above is not approved by the Department; or the Department determines after review of the sampling and analytical results and the evaluation required in Section 6(B)(4)(d)(v)(b) above, that continued acceptance of the substandard fuel poses an unreasonable risk to public health or the environment.

### **(3) Boiler Operation**

Facilities burning CDD wood fuel in their boilers shall:

- (a) comply with stack testing requirements as specified by the Bureau of Air Quality; and,
- (b) operate the boiler to meet all applicable emission standards and operate the particulate control device to Best Practical Treatment standards as specified by the Bureau of Air Quality.

---

NOTE: Facilities burning secondary materials in their boilers must comply with all applicable licensing and operating requirements of the Bureau of Air Quality.

---

**C. Operating Manual.** The licensee shall prepare and maintain an operating manual of current policies and procedures related to the beneficial use of the waste as a fuel substitute. The operating manual must include all information that would enable supervisory and operating personnel, and persons evaluating the beneficial use, to determine what sequence of operation, plans, diagrams, policies, procedures and legal requirements must be followed for orderly and successful operation on a daily and yearly basis. The manual must address all items contained in this Section. The licensee shall take whatever measures are necessary to familiarize all personnel responsible for beneficial use with relevant sections of the operating manual.

**789. Beneficial Use Licenses.** The requirements of this section apply to proposals for beneficial use of secondary materials which do not qualify for exemption under section 3, or licensing under Sections sections 4, 5, or 6, or 7 or 8 of this rule.

**A. Pre-Application Requirements.** A person proposing to license the beneficial use of a secondary material under this section shall request a pre-application meeting with the Department, unless the Department has previously issued a full license to the generator of the secondary material for the beneficial use of the secondary material. The pre-application meeting will include a discussion of

the beneficial use proposal, and provide an opportunity for the applicant to receive guidance on risk assessment and/or risk management measures that may be required.

At least ~~two weeks~~<sup>14</sup> days prior to the pre-application meeting, the applicant shall submit the following information to the Department:;

- (1) A description of the secondary material and its proposed use. This must include sufficient information to demonstrate that the proposed project is a beneficial use:;
- (2) Information regarding the physical, chemical and, where appropriate, biological characteristics of the secondary material:;
- (3) Results of analytical testing of the secondary material conducted in accordance with the requirements of ~~Chapter 06-096 C.M.R. ch. 405, section § 6(A), (B), and (C)~~. The analytical requirements of ~~Chapter 06-096 C.M.R. ch. 405, section § 6(C)~~ must be modified with Departmental approval to reflect all constituents that may reasonably be thought to be present and which may pose a risk to human health or the environment:;
- (4) The quantities, by weight and/or volume of the secondary material:;
- (5) A description of any risk management techniques being considered:; and
- (6) If it is known that a risk assessment is necessary, a description of the proposed protocol for conducting the risk assessment.

**B. Risk Standard.** In addition to the general standards in ~~Section section 3-4~~ of this rule, the beneficial use of the secondary material must not result in a greater risk than that posed by current ~~construction~~ practices and materials, or in an aggregate risk to a highly exposed individual under the proposed use or all future planned uses exceeding an Incremental Lifetime Cancer Risk of  $5 \times 10^{-6}$  and a Hazard Index of 1/2. Any secondary material which does not contain levels of constituents in excess of the levels listed in Appendix A of this rule is deemed to meet this risk standard for those constituents.

**C. Application Requirements.** The applicant shall submit to the Department, on application forms provided by the Department, the following information, unless the Department determines during the pre-application review that certain information is not required:

---

NOTE: When the Department has previously issued a license pursuant to the requirements of this section, it will generally be sufficient in a new application subsequently filed to rely on previous relevant waste characterization, and risk management/risk assessment information. Please reference the pertinent existing beneficial use license number in your application.

---

- (1) If the Department determines during the pre-application review, required for all licenses under this section, that the location of the beneficial use activity must be identified in managing the risks of the proposed activity, a An U.S.G.S. 7.5 minute topographic map or smaller scale equivalent map clearly marking the location(s) of the beneficial use activities, when the Department has determined that consideration of the location of the beneficial use activity is necessary to manage the risks of the proposed activity:;

(2) ~~If applicable~~ A copy of the waste characterization plan and a copy of the laboratory results of analyses demonstrating that the secondary material is non-hazardous;.

(3) If analysis demonstrates that the secondary material contains levels of the constituents in excess of those listed in Appendix Aof this rule, a demonstration that the proposed beneficial use of the waste does not pose a significant risk to public health or an unreasonable threat to the natural environment. This demonstration may be made through a risk assessment and/or through risk management techniques such as waste treatment, project design or site selection. Risk assessments and risk management evaluations are to be conducted specific to the type of waste, and its proposed use and location. The evaluation of risk assessment may include a discussion of the risks and drawbacks, an assessment of similar applications of the waste proposed for beneficial use, an analysis demonstrating that the chemical constituents of the secondary material are present at levels equal to or less than those existing on the proposed site of beneficial use, and/or a discussion of the relative risks in comparison with the usual methods of disposal and recycling and/or the usual construction methods and materials used in Maine. ~~Risk assessments must conform to the Department's guidance document, "Guidance Manual for Human Health Risk Assessments", revised 1994.~~

---

NOTE: Please refer to the DEP/CDC guidance document "Guidance for Human Health Risk Assessments for Hazardous Substance Sites in Maine", when preparing a demonstration that the proposed beneficial use of the waste does not pose a significant threat to public health or an unreasonable threat to the natural environment.

---

(4) A demonstration that the nature of the proposed use of the waste constitutes a beneficial use as defined in ~~Chapter 06-096 C.M.R. ch. 400 and not disposal, Section 1(T)~~ and that it meets the general standards for beneficial use ~~under of Section section 34 of this rule~~;.

(5) ~~If applicable~~ A brief description of the siting, design and operation of the facility which is proposing to use the secondary material and the product(s) produced, and the manner in which the secondary material will be used. In the case of a manufacturing facility, a general description of the facility's manufacturing system must be submitted, including process flow diagrams. The complexity and degree of detail of the description will vary depending on the magnitude and complexity of the process;.

(6) A description of how the secondary material will be stored and handled prior to and during its use;.

(7) ~~If requested by the Department, f~~Financial assurance in the form of a letter of credit, escrow account, or other approved financial security to finance the cost of potential remediation or disposal of the secondary material;.

(8) ~~If applicable, a technical comparison of the secondary material and the virgin material it is replacing. An evaluation must demonstrate how that the physical and chemical properties of the materials are comparable and that the secondary material will serve as an acceptable substitute for the analogous raw material, or that the secondary material meets or exceeds the applicable generally accepted product specifications and standards for that product. This demonstration may include a discussion of the risks and drawbacks and an assessment of similar applications of the proposed beneficial use.~~

(98) Proposed acceptance limits for secondary materials, using physical, chemical and biological parameters as appropriate to the type(s) of secondary materials and the raw materials being

used to produce the waste-derived product; and product quality assurance/quality control procedures to be used to affirm the waste-derived product meets the proposed standards; and,

(109) A draft copy of the information Authorization Form, prepared using the template in Appendix B of this rule, on proper use that will be for distributed distribution with of the secondary material.

#### **D910. Records**

**A. Authorization Form.** When required by a license term or condition, or the terms of an exemption from licensing, a generator of secondary materials shall provide to its clients a completed Authorization Form, prepared using the template in Appendix B of this rule. The generator shall maintain a file with copies of all Authorization Forms issued, and provide it to the Department upon request. Generators must retain each Authorization Form for 3 years. Persons receiving an Authorization Form(s) shall either keep the form(s) on the property where the secondary material is beneficially used or on file at its local office, and provide the Authorization Form(s) to the Department upon request. Persons receiving Authorization Forms must retain them for 3 years after the secondary material is last received at the property.

(1) **B. Deed Notice.** A licensee for the beneficial use of a secondary material used as construction fill shall, when required by license term or condition, prepare and record in the Registry of Deeds or another permanent record approved by the Department, the following information:

- (a1) A description of the type and composition of the wastesecondary material(s) placed as construction fill, and
- (b2) The location, extent, and depth of the wastesecondary material(s) deposited.

(2) **C. Deed Restriction.** Dependent upon the nature of the risk posed by the secondary material used as construction fill, the Department may require the licensee to prepare and record a deed restriction that prohibits the wastesecondary material(s) from being uncovered or disturbed in any way without the prior written approval of the Department or other appropriate agency of the State of Maine.

**81011. Annual Report.** For licensed, on-going beneficial use activities, the licensee shall submit, for review and approval, an annual report to the Department using the form provided by the Department. This report must contain a summary of activity during the past year, including the quantity of secondary material used by the generator or an affiliate, distributed or and received for beneficial use, the sources and types of the secondary material received, and the results of any required testing or on-going characterization. For reports that include fuel substitution, any new source(s) of substitute fuel must be identified. Where required by license condition, the licensee is required to include in the annual report the locations of the beneficial use activity for the past year.

---

**FISCAL NOTE:** The proposed revisions to the rules will not impose any additional cost on municipalities or counties. The Department also evaluated alternatives to reduce possible economic

---

~~burdens to small business when drafting the proposed revisions. The revisions being proposed will reduce economic burdens to small businesses through greater accuracy and clarity in the rules.~~

---

STATUTORY AUTHORITY: 38 M.R.S.A Sections §§341-D(1-BC) and 1304 (1,1-B & 13)

EFFECTIVE DATE: November 2, 1998

AMENDED: September 6, 1999

AMENDED: June 16, 2006 – filing 2006-258

AMENDED: February 8, 2012 – filing 2012-13

DRAFT

## APPENDIX A

SCREENING STANDARDS FOR BENEFICIAL USE  
(mg/kg, dry weight)

(Appendix A values are derived from the Maine Remedial Action Guidelines (RAGs) for Sites Contaminated with Hazardous Substances (February 5, 2016). Specifically, Appendix A values are equal to one-half the concentration of a RAG listed chemical, using the lowest value among the concentration values for the soil exposure pathways and scenarios for the chemical.)

Line No.	CAS No Dash	Chemical	Waste Concentration
1	630206	1,1,1,2-Tetrachloroethane	0.1
2	71556	1,1,1-Trichloroethane	260
3	79345	1,1,2,2-Tetrachloroethane	0.013
4	79005	1,1,2-Trichloroethane	0.05
5	92524	1,1-Biphenyl	4250
6	75343	1,1-Dichloroethane	0.48
7	75354	1,1-Dichloroethene	1.25
8	87616	1,2,3-Trichlorobenzene	210
9	120821	1,2,4-Trichlorobenzene	4.3
10	96128	1,2-Dibromo-3-chloropropane	1.6
11	95501	1,2-Dichlorobenzene	5.5
12	107062	1,2-Dichloroethane	0.018
13	156592	1,2-Dichloroethene (cis)	0.07
14	156605	1,2-Dichloroethene (trans)	1.2
15	78875	1,2-Dichloropropane	195
16	528290	1,2-Dinitrobenzene	6.5
17	106990	1,3-Butadiene	2.1
18	541731	1,3-Dichlorobenzene	0.0375
19	142289	1,3-Dichloropropane	1700
20	542756	1,3-Dichloropropene	70
21	99650	1,3-Dinitrobenzene	6.5
22	106467	1,4-Dichlorobenzene	2.15
23	100254	1,4-Dinitrobenzene	6.5
24	123911	1,4-Dioxane	55
25	75683	1-Chloro-1,1-difluoroethane	5000
26	93765	2,4,5-T	650
27	93721	2,4,5-TP	550
28	95954	2,4,5-Trichlorophenol	5000
29	88062	2,4,6-Trichlorophenol	65
30	118967	2,4,6-Trinitrotoluene	33.5
31	120832	2,4-Dichlorophenol	200
32	105679	2,4-Dimethylphenol	1350
33	51285	2,4-Dinitrophenol	135
34	121142	2,4-Dinitrotoluene	17.5
35	576261	2,6-Dimethylphenol	40
36	606202	2,6-Dinitrotoluene	8
37	95578	2-Chlorophenol	425

<b>Line No.</b>	<b>CAS No Dash</b>	<b>Chemical</b>	<b>Waste Concentration</b>
38	95487	2-Cresol	<u>3350</u>
39	91576	2-Methylnaphthalene	<u>1.8</u>
40	91941	3,3-Dichlorobenzidine	<u>12</u>
41	108394	3-Cresol	<u>3350</u>
42	106478	4-Chloroaniline	<u>27</u>
43	106445	4-Cresol	<u>335</u>
44	83329	Acenaphthene	<u>85</u>
45	208968	Acenaphthylene	<u>34</u>
46	67641	Acetone	<u>5000</u>
47	75058	Acetonitrile	<u>1600</u>
48	107028	Acrolein	<u>42.5</u>
49	107131	Acrylonitrile	<u>13</u>
50	15972608	Alachlor	<u>95</u>
51	309002	Aldrin	<u>0.32</u>
52	107051	Allyl chloride	<u>340</u>
53	7429905	Aluminum	<u>85000</u>
54	120127	Anthracene	<u>1200</u>
55	7440360	Antimony	<u>34</u>
56	12674112	Aroclor 1016	<u>2.45</u>
57	7440382	Arsenic	<u>0.7</u>
58	1912249	Atrazine	<u>23.5</u>
59	7440393	Barium	<u>5000</u>
60	71432	Benzene	<u>0.255</u>
61	56553	Benzo(a)anthracene	<u>1.3</u>
62	50328	Benzo(a)pyrene	<u>0.13</u>
63	205992	Benzo(b)fluoranthene	<u>1.3</u>
64	191242	Benzo(g,h,i)perylene	<u>1850</u>
65	207089	Benzo(k)fluoranthene	<u>13</u>
66	65850	Benzoic acid	<u>5000</u>
67	100447	Benzyl chloride	<u>41.5</u>
68	7440417	Beryllium	<u>170</u>
69	111444	Bis(2-chloroethyl)ether	<u>4.9</u>
70	117817	Bis(2-Ethylhexyl)phthalate	<u>385</u>
71	75274	Bromodichloromethane	<u>115</u>
72	75252	Bromoform	<u>700</u>
73	74839	Bromomethane	<u>120</u>
74	85687	Butyl benzyl phthalate	<u>2850</u>
75	DEP2041	C11-C22 Aromatics	<u>230</u>
76	DEP2042	C19-C36 Aliphatics	<u>5000</u>
77	DEP2038	C5-C8 Aliphatics	<u>700</u>
78	DEP2040	C9-C10 Aromatics	<u>37.5</u>
79	DEP2039	C9-C12 Aliphatics	<u>1350</u>
80	DEP2043	C9-C18 Aliphatics	<u>1350</u>
81	7440439	Cadmium	<u>5.5</u>
82	86748	Carbazole	<u>270</u>
83	75150	Carbon disulfide	<u>5000</u>
84	56235	Carbon tetrachloride	<u>0.275</u>
85	57749	Chlordane	<u>18</u>

<u>Line No.</u>	<u>CAS No Dash</u>	<u>Chemical</u>	<u>Waste Concentration</u>
<u>86</u>	<u>115286</u>	<u>Chlorendic acid</u>	<u>0.02</u>
<u>87</u>	<u>108907</u>	<u>Chlorobenzene</u>	<u>0.55</u>
<u>88</u>	<u>67663</u>	<u>Chloroform</u>	<u>230</u>
<u>89</u>	<u>74873</u>	<u>Chloromethane</u>	<u>5000</u>
<u>90</u>	<u>16065831</u>	<u>Chromium (+3)</u>	<u>5000</u>
<u>91</u>	<u>18540299</u>	<u>Chromium (+6)</u>	<u>255</u>
<u>92</u>	<u>218019</u>	<u>Chrysene101</u>	<u>130</u>
<u>93</u>	<u>7440484</u>	<u>Cobalt</u>	<u>25.5</u>
<u>94</u>	<u>7440508</u>	<u>Copper</u>	<u>1200</u>
<u>95</u>	<u>57125</u>	<u>Cyanide</u>	<u>50</u>
<u>96</u>	<u>72548</u>	<u>DDD</u>	<u>22.5</u>
<u>97</u>	<u>72559</u>	<u>DDE</u>	<u>16</u>
<u>98</u>	<u>50293</u>	<u>DDT</u>	<u>19</u>
<u>99</u>	<u>53703</u>	<u>Dibenz(a,h)anthracene</u>	<u>0.13</u>
<u>100</u>	<u>132649</u>	<u>Dibenzofuran</u>	<u>65</u>
<u>101</u>	<u>124481</u>	<u>Dibromochloromethane</u>	<u>85</u>
<u>102</u>	<u>84742</u>	<u>Dibutyl phthalate</u>	<u>5000</u>
<u>103</u>	<u>75718</u>	<u>Dichlorodifluoromethane</u>	<u>5000</u>
<u>104</u>	<u>60571</u>	<u>Dieldrin</u>	<u>0.34</u>
<u>105</u>	<u>84662</u>	<u>Diethyl phthalate</u>	<u>5000</u>
<u>106</u>	<u>88857</u>	<u>Dinoseb</u>	<u>65</u>
<u>107</u>	<u>1746016</u>	<u>Dioxin-Like Compounds - TEQ</u>	<u>0.00005</u>
<u>108</u>	<u>115297</u>	<u>Endosulfan</u>	<u>400</u>
<u>109</u>	<u>72208</u>	<u>Endrin</u>	<u>20</u>
<u>110</u>	<u>75003</u>	<u>Ethyl chloride</u>	<u>850</u>
<u>111</u>	<u>100414</u>	<u>Ethylbenzene</u>	<u>0.405</u>
<u>112</u>	<u>106934</u>	<u>Ethylene dibromide</u>	<u>3.55</u>
<u>113</u>	<u>206440</u>	<u>Fluoranthene</u>	<u>2500</u>
<u>114</u>	<u>86737</u>	<u>Fluorene</u>	<u>60</u>
<u>115</u>	<u>76448</u>	<u>Heptachlor</u>	<u>0.65</u>
<u>116</u>	<u>1024573</u>	<u>Heptachlor epoxide</u>	<u>0.6</u>
<u>117</u>	<u>118741</u>	<u>Hexachlorobenzene</u>	<u>3.4</u>
<u>118</u>	<u>87683</u>	<u>Hexachlorobutadiene</u>	<u>65</u>
<u>119</u>	<u>319846</u>	<u>Hexachlorocyclohexane, alpha (alpha-BHC)</u>	<u>0.85</u>
<u>120</u>	<u>319857</u>	<u>Hexachlorocyclohexane, beta (beta-BHC)</u>	<u>3</u>
<u>121</u>	<u>58899</u>	<u>Hexachlorocyclohexane, gamma (Lindane)</u>	<u>0.305</u>
<u>122</u>	<u>67721</u>	<u>Hexachloroethane</u>	<u>46.5</u>
<u>123</u>	<u>121824</u>	<u>Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)</u>	<u>49</u>
<u>124</u>	<u>193395</u>	<u>Indeno(1,2,3-cd)pyrene</u>	<u>1.3</u>
<u>125</u>	<u>7439896</u>	<u>Iron</u>	<u>60000</u>
<u>126</u>	<u>7439921</u>	<u>Lead</u>	<u>170</u>
<u>127</u>	<u>121755</u>	<u>Malathion</u>	<u>1350</u>
<u>128</u>	<u>7439965</u>	<u>Manganese</u>	<u>2050</u>
<u>129</u>	<u>7487947</u>	<u>Mercuric chloride &amp; other inorganic mercury compounds</u>	<u>25.5</u>
<u>130</u>	<u>72435</u>	<u>Methoxychlor</u>	<u>335</u>

<b>Line No.</b>	<b>CAS No Dash</b>	<b>Chemical</b>	<b>Waste Concentration</b>
<u>131</u>	<u>78933</u>	<u>Methyl ethyl ketone</u>	<u>5000</u>
<u>132</u>	<u>108101</u>	<u>Methyl isobutyl ketone</u>	<u>5000</u>
<u>133</u>	<u>80626</u>	<u>Methyl methacrylate</u>	<u>5000</u>
<u>134</u>	<u>1634044</u>	<u>Methyl tert-butyl ether</u>	<u>0.095</u>
<u>135</u>	<u>75092</u>	<u>Methylene chloride</u>	<u>500</u>
<u>136</u>	<u>7439987</u>	<u>Molybdenum</u>	<u>425</u>
<u>137</u>	<u>91203</u>	<u>Naphthalene</u>	<u>0.85</u>
<u>138</u>	<u>7440020</u>	<u>Nickel</u>	<u>255</u>
<u>139</u>	<u>106945</u>	<u>n-Propyl bromide</u>	<u>95</u>
<u>140</u>	<u>2691410</u>	<u>Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetra (HMX)</u>	<u>3350</u>
<u>141</u>	<u>117840</u>	<u>Octyl Phthalate, di-n-</u>	<u>800</u>
<u>142</u>	<u>56382</u>	<u>Parathion</u>	<u>400</u>
<u>143</u>	<u>1336363</u>	<u>PCBs</u>	<u>1.2</u>
<u>144</u>	<u>87865</u>	<u>Pentachlorophenol</u>	<u>10</u>
<u>145</u>	<u>14797730</u>	<u>Perchlorate</u>	<u>10</u>
<u>146</u>	<u>1763231</u>	<u>Perfluorooctane sulfonate</u>	<u>5.5</u>
<u>147</u>	<u>335671</u>	<u>Perfluorooctanoic acid</u>	<u>0.15</u>
<u>148</u>	<u>85018</u>	<u>Phenanthrene</u>	<u>48.5</u>
<u>149</u>	<u>108952</u>	<u>Phenol</u>	<u>5000</u>
<u>150</u>	<u>129000</u>	<u>Pyrene</u>	<u>1850</u>
<u>151</u>	<u>7782492</u>	<u>Selenium</u>	<u>425</u>
<u>152</u>	<u>7440224</u>	<u>Silver</u>	<u>425</u>
<u>153</u>	<u>100425</u>	<u>Styrene</u>	<u>5000</u>
<u>154</u>	<u>127184</u>	<u>Tetrachloroethene</u>	<u>1.35</u>
<u>155</u>	<u>298022</u>	<u>Thimet (Phorate)</u>	<u>13.5</u>
<u>156</u>	<u>108883</u>	<u>Toluene</u>	<u>4.05</u>
<u>157</u>	<u>79016</u>	<u>Trichloroethene</u>	<u>0.115</u>
<u>158</u>	<u>75694</u>	<u>Trichlorofluoromethane</u>	<u>5000</u>
<u>159</u>	<u>7440622</u>	<u>Vanadium</u>	<u>600</u>
<u>160</u>	<u>108054</u>	<u>Vinyl acetate</u>	<u>5000</u>
<u>161</u>	<u>593602</u>	<u>Vinyl bromide</u>	<u>650</u>
<u>162</u>	<u>75014</u>	<u>Vinyl chloride</u>	<u>0.0065</u>
<u>163</u>	<u>1330207</u>	<u>Xylene</u>	<u>13</u>
<u>164</u>	<u>7440666</u>	<u>Zinc</u>	<u>5000</u>

No.	Contaminant	CAS	Waste Conc. (Milligrams per Kilogram)
1	Acephate	30560191	912.5
2	Acetochlor	34256821	2000
3	Acetone	67641	20
4	Acetone cyanohydrin	75865	78.75
5	Acetonitrile	75058	587.5
6	Acetophenone	98862	9750
7	Acifluorfen	62476599	1250
8	Acrolein	107028	2000
9	Acrylamide	79061	1.75
10	Acrylic acid	79107	48750
11	Acrylonitrile	107131	15
12	Alachlor	15972608	100
13	Alar	1596845	15000
14	Aldicarb	116063	97.5
15	Aldicarb-sulfone	1646884	97.5
16	Aldrin	309002	0.475
17	Ally	74223646	25000
18	Allyl alcohol	107186	487.5
19	Allyl chloride	107051	4875
20	Aluminum	7429905	97500
21	Aluminum phosphide	20859738	38.75
22	Amdro	67485294	28.75
23	Ametryn	834128	875
24	**Aminodinitrotoluenes	0	5.875
25	m-Aminophenol	591275	6875
26	4-Aminopyridine	504245	2
27	Amitraz	33089611	250
28	Ammonium sulfamate	7773060	20000
29	Aniline	62533	1375
30	Antimony and compounds	7440360	6.25
31	Antimony pentoxide	1314609	48.75
32	Antimony potassium tartrate	304610	87.5
33	Antimony tetroxide	1332316	38.75
34	Antimony trioxide	1309644	38.75
35	Apello	74115245	1250
36	Aramite	140578	325
37	Arsenic (as carcinogen)	7440382	5.375
38	Assure	76578148	875
39	Asulam	3337711	4875
40	Atrazine	1912249	36.25

44	Avermectin B1	65195553	38.75
42	Azobenzene	103333	72.5
43	Barium and compounds	7440393	2000
44	Baygon	114261	387.5
45	Bayleton	43121433	2875
46	Baythroid	68359375	2500
47	Benefin	1861401	28750
48	Benomyl	17804352	4875
49	Bentazon	25057890	250
50	Benzaldehyde	100527	9750
51	Benzene	71432	0.375
52	Benzenethiol	108985	0.975
53	Benzidine	92875	0.035
54	Benzoic acid	65850	500
55	Benzotrichloride	98077	0.6125
56	Benzyl alcohol	100516	28750
57	Benzyl chloride	100447	47.5
58	Beryllium and compounds	74404117	1.875
59	Bidrin	141662	9.75
60	Biphenthrin (Talstar)	82657043	1500
61	1,1-Biphenyl	92524	4875
62	Bis(2-chloroethyl)ether	111444	0.005
63	Bis(2-chloroisopropyl)ether	18601	113.75
64	Bis(chloromethyl)ether	542881	0.03625
65	Bis(2-chloro-1-methylethyl)ether	0	113.75
66	Bis(2-ethylhexyl)phthalate (DEHP)	117817	575
67	Bisphenol A	80057	4875
68	Boron (and borates)	7440428	8750
69	Bromodichloromethane	75274	7.5
70	Bromoform (tribromomethane)	75252	10
71	Bromomethane	74839	137.5
72	4-Bromophenyl phenyl ether	101553	5625
73	Bromophos	2104963	487.5
74	Bromoxynil	1689845	2000
75	Bromoxynil-octanoate	1689992	2000
76	1-Butanol	71363	21.25
77	Butyl benzyl phthalate	85687	1162.5
78	Butylate	2008415	4875
79	n-Butylbenzene	104518	975
80	sec-Butylbenzene	135988	975
81	tert-Butylbenzene	98066	975
82	Butylphthalyl butylglycolate	85701	97500
83	Cacodylic acid	75605	287.5
84	Cadmium and compounds	7440439	10
85	Caprolactam	105602	48750
86	Captafol	2425061	925

87	Captan	133062	2250
88	Carbaryl	63252	9750
89	Carbofuran	1563662	487.5
90	Carbon disulfide	75150	40
91	Carbon tetrachloride	56235	0.875
92	Carbosulfan	55285148	975
93	Carboxin	5234684	9750
94	Chloral	75876	200
95	Chloramben	133904	1500
96	Chloranil	118752	20
97	Chlordane	57749	22.5
98	Chlorimuron-ethyl	90982324	2000
99	Chlorine	7782505	9750
100	Chloreacetaldehyde	107200	675
101	Chloreacetic acid	79118	200
102	4-Chloroaniline	106478	0.875
103	Chlorobenzene	108907	1.25
104	Chlorobenzilate	510156	30
105	p-Chlorobenzoic acid	74113	20000
106	4-Chlorobenzotrifluoride	98566	2000
107	2-Chloro-1,3-butadiene (chloroprene)	126998	2000
108	1-Chlorobutane	109693	38750
109	Chlorodibromomethane	124481	5
110	Chloroethane	75003	2750
111	2-Chloroethyl vinyl ether	110758	2500
112	Chloroform	67663	7.5
113	Chloromethane	74873	612.5
114	4-Chloro-2-methylaniline hydrochloride	3165933	17.5
115	4-Chloro-2-methylaniline	95692	13.75
116	beta-Chloronaphthalene	91587	7875
117	o-Chloronitrobenzene	88733	325
118	p-Chloronitrobenzene	100005	437.5
119	2-Chlorophenol	95578	5
120	Chlorothalonil	1897456	725
121	o-Chlorotoluene	95498	2000
122	Chlorpropham	101213	20000
123	Chlorpyrifos	2921882	287.5
124	Chlorpyrifos-methyl	5598130	975
125	Chlorsulfuron	64902723	4875
126	Chlorthiophos	60238564	78.75
127	Chromium III and compounds	16065831	97500
128	Chromium VI and compounds	18540299	47.5
129	Cobalt	7440484	5875
130	Copper and compounds	7440508	1500
131	Crotonaldehyde	123739	4.25
132	Cumene	98828	9750

133	Cyanides:	N/A	9.5	N/A
134	Barium cyanide	542621	50	
135	Calcium cyanide	592018	50	
136	Chlorine cyanide	506774	50	
137	Copper cyanide	544923	487.5	
138	Cyanazine	21725462	9.5	
139	Cyanogen	460195	3875	
140	Cyanogen bromide	506683	8750	
141	Cyanogen chloride	506774	4875	
142	Free cyanide	57125	2000	
143	Hydrogen cyanide	74908	2000	
144	Potassium cyanide	151508	4875	
145	Potassium silver cyanide	506616	20000	
146	Silver cyanide	506649	9750	
147	Sodium cyanide	143339	3875	
148	Thiocyanate	0	9750	
149	Zinc cyanide	557211	4875	
150	Cyclohexanone	108941	487500	
151	Cyclohexylamine	108918	20000	
152	Cyhalothrin/Karate	68085858	487.5	
153	Cypermethrin	52315078	975	
154	Cyromazine	66215278	737.5	
155	Dacthal	1861321	975	
156	Dalapon	75990	2875	
157	Danitol	39515418	2500	
158	DDD	72548	33.75	
159	DDE	72559	23.75	
160	DDT	50293	23.75	
161	Decabromodiphenyl ether	1163195	975	
162	Demeton	8065483	3.875	
163	Diallate	2303164	125	
164	Diazinon	333415	87.5	
165	Dibenzofuran	132649	387.5	
166	1,4-Dibromobenzene	106376	975	
167	1,2-Dibromo-3-chloropropane	96128	5.75	
168	1,2-Dibromoethane	106934	0.09375	
169	Dibutyl phthalate	84742	9750	
170	Dicamba	1918009	2875	
171	1,2-Dichlorobenzene	95501	21.25	
172	1,3-Dichlorobenzene	541734	8750	
173	1,4-Dichlorobenzene	106467	25	
174	3,3'-Dichlorobenzidine	91941	0.0875	
175	Dichlorodifluoromethane	75718	20000	
176	1,1-Dichloroethane	75343	28.75	
177	1,2-Dichloroethane (EDC)	107062	0.25	
178	1,1-Dichloroethylene	75354	0.75	

179	1,2-Dichloroethylene (cis)	156592	0.5
180	1,2-Dichloroethylene (trans)	156605	0.875
181	1,2-Dichloroethylene (mixture)	540590	875
182	2,4-Dichlorophenol	120832	1.25
183	2,4-Dichlorophenoxyacetic Acid (2,4-D)	94757	975
184	4-(2,4-Dichlorophenoxy)butyric Acid	94826	787.5
185	1,2-Dichloropropane	78875	0.375
186	2,3-Dichloropropanol	616239	287.5
187	1,3-Dichloropropene	542756	0.05
188	Dichlorves	62737	27.5
189	Dicofol	115322	18.75
190	Dicyclopentadiene	77736	2875
191	Diieldrin	60571	0.05
192	Diethyl phthalate	84662	587.5
193	Diethylene glycol, monoethyl ether	111900	200000
194	Diethylformamide	617845	1075
195	Di(2-ethylhexyl)adipate	103231	6625
196	Diethylstilbestrol	56531	0.00175
197	Difenoquat (Avenge)	43222486	7875
198	Diflubenzuron	35367385	2000
199	Diisopropyl methylphosphonate (DIMP)	1445756	7875
200	Dimethipin	55290647	2000
201	Dimethoate	60515	20
202	3,3'-Dimethoxybenzidine	119904	575
203	2,4-Dimethylaniline hydrochloride	21436964	13.75
204	2,4-Dimethylaniline	95681	10.625
205	N,N-Dimethylaniline	121697	200
206	3,3'-Dimethylbenzidine	119937	0.8625
207	N,N-Dimethylformamide	68122	9750
208	1,1-Dimethylhydrazine	57147	3.125
209	1,2-Dimethylhydrazine	540738	0.2125
210	2,4-Dimethylphenol	105679	11.25
211	2,6-Dimethylphenol	576261	58.75
212	3,4-Dimethylphenol	95658	97.5
213	Dimethyl phthalate	131113	975000
214	Dimethyl terephthalate	120616	9750
215	1,2-Dinitrobenzene	528290	38.75
216	1,3-Dinitrobenzene	99650	9.75
217	1,4-Dinitrobenzene	100254	38.75
218	4,6-Dinitro- <i>o</i> -cyclohexyl phenol	131895	200
219	4,6-Dinitro-2-methylphenol	534521	9.75
220	2,4-Dinitrophenol	51285	0.375
221	Dinitrotoluene mixture	0	11.75
222	2,4-Dinitrotoluene	121142	0.001
223	2,6-Dinitrotoluene	606202	0.000875
224	Dineoseb	88857	97.5

225	di-n-Octyl phthalate	117840	2000
226	1,4-Dioxane	123911	725
227	Diphenamid	957517	2875
228	Diphenylamine	122394	2500
229	1,2-Diphenylhydrazine	122667	40
230	Diquat	85007	212.5
231	Direct black 38	1937377	0.925
232	Direct blue 6	2602462	0.9875
233	Direct brown 95	16071866	0.8625
234	Disulfoton	298044	3.875
235	1,4-Dithiane	505293	975
236	Diuron	330541	200
237	Dodine	2439103	387.5
238	Endosulfan	115297	22.5
239	Endothall	145733	2000
240	Endrin	72208	1.25
241	Epichlorohydrin	106898	812.5
242	Ethepron (2-chloroethyl phosphonic acid)	16672870	487.5
243	Ethion	563122	48.75
244	2-Ethoxyethanol acetate	111159	28750
245	2-Ethoxyethanol	110805	38750
246	Ethyl acrylate	140885	162.5
247	EPTC (S-Ethyl dipropylthiocarbamate)	759944	2500
248	Ethyl acetate	141786	87500
249	Ethylbenzene	100414	16.25
250	Ethylene cyanohydrin	109784	28750
251	Ethylene diamine	107153	2000
252	Ethylene glycol	107211	200000
253	Ethylene oxide	75218	7.875
254	Ethylene thiourea (ETU)	96457	67.5
255	Ethyl ether	60297	20000
256	Ethyl methacrylate	97632	8750
257	Ethyl p-nitrophenyl phenylphosphorothioate	2104645	0.975
258	Ethylphthalyl ethyl glycolate	84720	287500
259	Express	10120	787.5
260	Fenamiphos	22224926	25
261	Fluometuron	2164172	1250
262	Fluoride	7782414	5875
263	Fluoridone	59756604	7875
264	Flurprimidol	56425913	2000
265	Flutolanil	66332965	5875
266	Fluvalinate	69409945	975
267	Folpet	133073	2250
268	Fomesafen	72178020	42.5
269	Fenofos	944229	200

270	Formaldehyde	50000	20000
271	Formic Acid	64186	200000
272	Fosetyl-al	39148248	287500
273	Furan	110009	97.5
274	Furazolidone	67458	2.125
275	Furfural	98011	287.5
276	Furium	531828	0.1625
277	Furmecyclox	60568050	262.5
278	Glufosinate-ammonium	77182822	38.75
279	Glycidaldehyde	765344	38.75
280	Glyphosate	1071836	9750
281	Haloxyfop-methyl	69806402	4.875
282	Harmony	79277273	1250
283	HCH (alpha)	319846	1.25
284	HCH (beta)	319857	4.375
285	HCH (gamma) Lindane	58899	6.125
286	HCH-technical	608731	4.375
287	Heptachlor	76448	1.75
288	Heptachlor epoxide	1024573	0.875
289	Hexabromobenzene	87821	200
290	Hexachlorobenzene	118741	5
291	Hexachlorobutadiene	87683	25
292	Hexachlorocyclopentadiene	77474	500
293	Hexachlorodibenzo-p-dioxin mixture	19408743	0.00125
294	Hexachloroethane	67721	6.25
295	Hexachlorophene	70304	28.75
296	Hexahydro-1,3,5-trinitro-1,3,5-triazine	121824	72.5
297	n-Hexane	110543	5875
298	2-Hexanone	73663715	3875
299	Hexazinone	51235042	3250
300	Hydrazine, hydrazine sulfate	302012	2.625
301	Hydrogen sulfide	7783064	287.5
302	Hydroquinone	123319	3875
303	Imazalil	35554440	1250
304	Imazaquin	81335377	25000
305	Iprodione	36734197	3875
306	Iron	7439896	28750
307	Isobutanol	78831	28750
308	Isophorone	78591	6.25
309	Isoepropalin	33820530	1500
310	Isopropyl methyl phosphonic acid	1832548	9750
311	Isoxaben	82558507	4875
312	Kepone	143500	0.4375
313	Lactofen	77501634	200
314	Lead	7439924	375
315	Linuron	330552	200

316	Lithium	7439932	2000
317	Londax	83056996	20000
318	Malathion	121755	2000
319	Maleic anhydride	108316	9750
320	Maleic hydrazide	123331	48750
321	Malononitrile	109773	2
322	Mancozeb	8018017	2875
323	Maneb	12427382	487.5
324	Manganese and compounds	7439965	2250
325	Mephosfolan	950107	8.75
326	Mepiquat chloride	24307264	2875
327	Mercuric chloride	7487947	28.75
328	Mercury (inorganic)	7439976	1.2
329	Mercury (methyl)	22967926	1.2
330	Mephos	150505	2.875
331	Mephos oxide	78488	2.875
332	Metalaxy	57837191	5875
333	Methacrylonitrile	126987	9.75
334	Methamidophos	10265926	4.875
335	Methanol	67561	48750
336	Methidathion	950378	97.5
337	Methomyl	16752775	2500
338	Methoxychlor	72435	200
339	2-Methoxyethanol acetate	110496	200
340	2-Methoxyethanol	109864	97.5
341	2-Methoxy-5-nitroaniline	99592	175
342	Methyl acetate	79209	97500
343	Methyl acrylate	96333	2875
344	2-Methylaniline hydrochloride	636215	43.75
345	2-Methylaniline	95534	33.75
346	Methyl chlorocarbonate	79221	97500
347	4-(2-Methyl-4-chlorophenoxy) butyric acid	94815	975
348	2-Methyl-4-chlorophenoxyacetic acid	94746	48.75
349	2-(2-Methyl-4-chlorophenoxy)propionic acid	93652	97.5
350	Methylene bromide	74953	0.25
351	Methylene chloride	75092	0.25
352	4,4'-Methylene bis(2-chloroaniline)	101144	61.25
353	4,4'-Methylenebisbenzeneamine	101779	32.5
354	4,4'-Methylene bis(N,N'-dimethyl)aniline	101611	175
355	Methyl ethyl ketone	78933	58750
356	Methyl hydrazine	60344	7.25
357	Methyl isobutyl ketone	108104	7875
358	Methyl methacrylate	80626	7875
359	2-Methyl-5-nitroaniline	99558	237.5

360	Methyl parathion	298000	25
361	2-Methylphenol (o-cresol)	95487	18.75
362	3-Methylphenol (m-cresol)	108394	4875
363	4-Methylphenol (p-cresol)	106445	487.5
364	Methyl styrene (mixture)	25013154	587.5
365	Methyl styrene (alpha)	98839	6875
366	Methyl tertbutyl ether (MTBE)	1634044	487.5
367	Metolachlor (Dual)	51218452	15000
368	Metribuzin	21087649	2500
369	Mirex	2385855	4.375
370	Molinate	2212671	200
371	Molybdenum	7439987	487.5
372	Monochloramine	10599903	9750
373	Naled	300765	200
374	2-Naphthylamine	91598	0.06125
375	Napropamide	15299997	9750
376	Nickel refinery dust	0	162.5
377	Nickel and compounds	7440020	162.5
378	Nitrapyrin	1929824	150
379	Nitrate	14797558	162500
380	Nitric oxide	10102439	9750
381	Nitrite	14797650	9750
382	2-Nitroaniline	88744	5.875
383	3-Nitroaniline	99092	287.5
384	4-Nitroaniline	100016	287.5
385	Nitrobenzene	98953	0.125
386	Nitrofurantoin	67209	6875
387	Nitrofurazone	59870	5.375
388	Nitrogen dioxide	10102440	97500
389	4-Nitrophenol	100027	787.5
390	N-Nitrosodi-n-butylamine	924163	1.5
391	N-Nitrosodiethanolamine	1116547	2.875
392	N-Nitrosodiethylamine	55185	0.05375
393	N-Nitrosodimethylamine	62759	0.1625
394	N-Nitrosodiphenylamine	86306	12.5
395	N-Nitroso di-n-propylamine	621647	1.1375
396	N-Nitroso-N-ethylurea	759739	0.0575
397	N-Nitroso-N-methylethylamine	10595956	0.3625
398	N-Nitrosopyrrolidine	930552	3.75
399	m-Nitrotoluene	99081	2000
400	o-Nitrotoluene	88722	975
401	p-Nitrotoluene	99990	975
402	Norflurazon	27314132	3875
403	NuStar	85509199	68.75
404	Octabromodiphenyl ether	32536520	287.5

	Octahydro-1357-tetranitro-1357-tetrazocine		
405	Octamethylpyrophosphoramide	2691410	4875
406	Oryzalin	152169	200
407	Oxadiazon	19044883	4875
408	Oxamyl	19666309	487.5
409	Oxyfluorfen	23135220	2500
410	Paclobutrazol	42874033	287.5
411	Paraquat	76738620	1250
412	Parathion	4685147	437.5
413	Pebulate	56382	587.5
414	Pendimethalin	1114712	4875
415	Pentabromo-6-chlorocyclohexane	40487421	3875
416	Pentabromodiphenyl ether	87843	350
417	Pentachlorobenzene	32534819	200
418	Pentachloronitrobenzene	608935	78.75
419	Pentachlorophenol	82688	31.25
420	Permethrin	87865	0.375
421	Phenmedipham	52645531	4875
422	Phenol	13684634	25000
423	m-Phenylenediamine	108952	125
424	o-Phenylenediamine	108452	587.5
425	p-Phenylenediamine	95545	175
426	Phenylmercuric acetate	106503	18750
427	2-Phenylphenol	62384	7.875
428	Phorate	90437	4125
429	Phosmet	298022	20
430	Phosphine	732116	2000
431	Phosphorus (white)	7803512	28.75
432	p-Pthalic acid	7723140	2
433	Phthalic anhydride	100210	97500
434	Picloram	85449	200000
435	Pirimiphos-methyl	1918021	6875
436	Polybrominated biphenyls	29232937	975
437	Polychlorinated biphenyls (PCBs)	0	0.9
438	Aroclor 1016	1336363	4
439	Aroclor 1254	12674112	6.875
440	Polychlorinated terphenyls (PCTs)	11097691	2
441	Polynuclear aromatic hydrocarbons	61788338	1.75
442	Acenaphthene	N/A	N/A
443	Anthracene	83329	712.5
444	Benz[a]anthracene	120127	15000
445	Benz[b]fluoranthene	56553	11
446	Benz[k]fluoranthene	205992	11
447	Benzo[a]pyrene	207089	110
448	Carbazole	50328	1.1
449		86748	7.5

450	Chrysene	218019	1100
451	Dibenz[ah]anthracene	53703	1.1
452	Fluoranthene	206440	3875
453	Fluorene	86737	3875
454	Indeno[1,2,3-cd]pyrene	193395	11
455	2-Methylnaphthalene	91576	3875
456	Naphthalene	91203	105
457	Pyrene	129000	2875
458	Prechloraz	67747095	53.75
459	Profluralin	26399360	587.5
460	Prometon	1610180	1500
461	Prometryn	7287196	387.5
462	Pronamide	23950585	7375
463	Propachlor	1918167	1250
464	Propanil	709988	487.5
465	Propargite	2312358	2000
466	Propargyl alcohol	107197	200
467	Propazine	139402	2000
468	Propham	122429	2000
469	Propiconazole	60207904	1250
470	n-Propylbenzene	103651	975
471	Propylene glycol	57556	1000000
472	Propylene glycol, monoethyl ether	52125538	68750
473	Propylene glycol, monomethyl ether	107982	68750
474	Propylene oxide	75569	33.75
475	Pursuit	81335775	25000
476	Pydrin	51630581	2500
477	Pyridine	110861	97.5
478	Quinalphos	13593038	48.75
479	Quinoline	91225	0.6625
480	Resmethrin	10453868	2875
481	Ronnel	299843	4875
482	Rotenone	83794	387.5
483	Savey	78587050	2500
484	Selenious Acid	7783008	487.5
485	Selenium	7782492	6.25
486	Selenourea	630104	487.5
487	Sethoxydim	74051802	8750
488	Silver and compounds	7440224	42.5
489	Simazine	122349	66.25
490	Sodium azide	26628228	387.5
491	Sodium diethyldithiocarbamate	148185	30
492	Sodium fluoroacetate	62748	2
493	Sodium metavanadate	13718268	97.5
494	Strontrium, stable	7440246	58750
495	Strychnine	57249	28.75

496	Styrene	100425	5
497	Systhane	88671890	2500
498	2,3,7,8-TCDD (dioxin TEQ)	1746016	.0000039
499	Tebuthiuron	34014181	6875
500	Temephos	3383968	2000
501	Terbacil	5902512	1250
502	Terbufos	13071799	2.5
503	Terbutryn	886500	97.5
504	1,2,4,5-Tetrachlorobenzene	95943	28.75
505	1,1,1,2-Tetrachloroethane	630206	312.5
506	1,1,2,2-Tetrachloroethane	79345	0.0375
507	Tetrachloroethylene (PCE)	127184	0.75
508	2,3,4,6-Tetrachlorophenol	58902	2875
509	p,a,a,a-Tetrachlorotoluene	5216251	0.4
510	Tetrachlorovinphos	961115	337.5
511	Tetraethylthiopyrophosphate	3689245	48.75
512	Tetraethyl lead	78002	0.00975
513	Thallic oxide	1314325	6.875
514	Thallium	0	7.875
515	Thallium acetate	563688	8.75
516	Thallium carbonate	6533739	7.875
517	Thallium chloride	7791120	7.875
518	Thallium nitrate	10102451	8.75
519	Thiobencarb	28249776	975
520	2-(Thiocyanomethylthio)-benzothiazole	21564170	2875
521	Thiofanox	39196184	28.75
522	Thiophanate-methyl	23564058	7875
523	Thiram	137268	487.5
524	Tin and compounds	0	58750
525	Titanium	7440326	387500
526	Titanium dioxide	13643677	387500
527	Toluene	108883	15
528	Toluene-2,4-diamine	95807	2.5
529	Toluene-2,5-diamine	95705	58750
530	Toluene-2,6-diamine	823405	20000
531	p-Toluidine	106490	42.5
532	Toxaphene	8001352	7.25
533	Tralomethrin	66841256	737.5
534	Triallate	2303175	1250
535	Triasulfuron	82097505	975
536	1,2,4-Tribromobenzene	615543	487.5
537	Tributyltin oxide (TBTO)	56359	28.75
538	2,4,6-Trichloroaniline hydrochloride	33663502	275
539	2,4,6-Trichloroaniline	634935	237.5
540	1,2,4-Trichlorobenzene	120824	6.25
541	1,1,1-Trichloroethane	71556	2.5

542	1,1,2-Trichloroethane	79005	0.25
543	Trichloroethylene (TCE)	79016	0.75
544	Trichlorofluoromethane	75694	28750
545	2,4,5-Trichlorophenol	95954	337.5
546	2,4,6-Trichlorophenol	88062	2.5
547	2,4,5-Trichlorophenoxyacetic acid	93765	975
548	2-(2,4,5-Trichlorophenoxy)propionic acid	93721	787.5
549	1,1,2-Trichloropropane	598776	487.5
550	1,2,3-Trichloropropane	96184	1.1375
551	1,2,3-Trichloropropene	96195	487.5
552	1,1,2-Trichloro-1,2,2-trifluoroethane	76131	1000000
553	Tridiphane	58138082	287.5
554	Trifluralin	1582098	1037.5
555	1,2,4-Trimethylbenzene	95636	4875
556	1,3,5-Trimethylbenzene	108678	4875
557	Trimethyl phosphate	512561	212.5
558	1,3,5-Trinitrobenzene	99354	2875
559	Trinitrophenylmethylnitramine	479458	975
560	2,4,6-Trinitrotoluene	118967	262.5
561	Uranium (soluble salts)	7440611	287.5
562	Vanadium	7440622	687.5
563	Vanadium pentoxide	1314621	875
564	Vanadium sulfate	36907423	2000
565	Vernam	1929777	97.5
566	Vinclozolin	50471448	2500
567	Vinyl acetate	108054	212.5
568	Vinyl chloride	75014	0.125
569	Warfarin	81812	28.75
570	m-Xylene	108323	262.5
571	o-Xylene	95476	237.5
572	Xylene (mixed)	1330207	262.5
573	Zinc	7440666	2800
574	Zinc phosphide	1314847	28.75
575	Zineb	12122677	4875

**APPENDIX B****TEMPLATE FOR AUTHORIZATION FORM**  
**FOR BENEFICIAL USE**

use in conjunction with the requirements of  
the following sections of this rule:

Section 3(S)  
Section 6(B)  
Section 9  
Section 10

**AUTHORIZATION FORM FOR BENEFICIAL USE****Generator of Secondary Material**

Facility Name

Street Address

**Beneficial Use Location**

Facility Name

Street Address

GPS Coordinates:

Contact Name

Contact Name

Contact phone number

Contact phone number

As the generator of the secondary material, I hereby certify that the Department of Environmental Protection has authorized the beneficial use of this secondary material through:

beneficial use exemption for no more than 800 tons of construction fill per parcel; or  
 DEP permit-by-rule or license number

Unless any necessary permit is obtained from the Department, this secondary material may not be placed in the following locations:

- in standing water;
- in a channelized drainage flow;
- in a protected natural resource;
- below the water table; or
- where it may wash into any water of the state.

A copy of the Department license authorizing the beneficial use of this secondary material is attached. The Department license  does  does not include additional conditions for the use of this secondary material that you are required to meet.

---

Signature of Generator Representative

Title

---

Printed Name

Date

As the beneficial user of the secondary material, I hereby certify that I have received this authorization and will comply with the terms of this form and, if applicable, any relevant terms of the beneficial use license for this material. I understand that the secondary material must remain at the location specified above, and that I must either keep this form at the location where the beneficial use occurs, or at my local office for a 3 year period. I understand the form must be made available to the Department upon request.

---

Signature of Beneficial User

Date

---

Printed Name

**APPENDIX C**

**FORM TO BE SUBMITTED FOR AUTHORIZATION THROUGH**  
**NOTIFICATION FOR THE BENEFICIAL USE OF EMULSIFIED ASPHALT**  
**ENCAPSULATED CONTAMINATED SOIL WHEN CERTIFIED**  
**BY A PROFESSIONAL ENGINEER**

**use with beneficial uses authorized under**  
**section 5 of this rule**

MEDEP USE ONLY  
Date received: \_\_\_\_\_  
Notification complete: \_\_\_\_\_  
Tracking number: \_\_\_\_\_  
Project analyst: \_\_\_\_\_  
(date of form)

State of Maine  
Dept. of Environmental Protection  
Division of Materials Management  
17 State House Station, Augusta, ME 04333  
TEL. (207) 287-7688 FAX (207) 287-7826



## NOTIFICATION OF BENEFICIAL USE OF EMULSIFIED SOIL WHEN CERTIFIED BY A PROFESSIONAL ENGINEER

This notification form is to be filed when authorization is sought for the use of emulsified asphalt encapsulated contaminated soil (encapsulated soil), and a professional engineer licensed with the State of Maine has certified the beneficial use of the encapsulated soil as construction fill underneath paved roads and parking lots, or in another civil engineering application. The licensed professional engineer must sign and seal this notification form certifying that all provisions of 06-096 C.M.R. ch.418 § 5 will be met.

The notification submitter must send a complete notification, including the required supporting documentation and the appropriate notification fee, at least 5 working days prior to the start of the beneficial use project. This notification may be typed or printed, and must be easily legible. A fill-in version of this form is available at <http://www.state.me.us/dep/waste/solidwaste/beneficialuse.html>. An incomplete notification is not acceptable and therefore not of record. Submit only one project notification per form, to the following address:

Attn: Susan A. Alderson  
BRWM Division of Materials Management  
Department of Environmental Protection  
17 State House Station  
Augusta, ME 04333-0017  
or, electronically to  
[susan.a.alderson@maine.gov](mailto:susan.a.alderson@maine.gov)  
(electronic submittals will not be complete until  
the required fee is received by the MEDEP)

Physical Location of Project: \_\_\_\_\_  
\_\_\_\_\_

Contact Person: \_\_\_\_\_

Telephone: \_\_\_\_\_ Email: \_\_\_\_\_

GPS Coordinates: \_\_\_\_\_  
\_\_\_\_\_

Professional Engineer's Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
\_\_\_\_\_

Telephone: \_\_\_\_\_ Email: \_\_\_\_\_

I certify under penalty of law that to the best of my knowledge the information contained in this notification is true, accurate and complete, and that this project complies with all provisions of 06-096 C.M.R. ch.418 § 5. I certify that the project owner authorizes the Department to enter the property that is the subject of this notification, at reasonable hours, including buildings, structures or conveyances on the property, to determine the accuracy of the information provided herein.

(seal below)

\_\_\_\_\_  
Signature \_\_\_\_\_ Date \_\_\_\_\_

**Criteria for Authorization through Notification of the  
Beneficial Use of Emulsified Soil as Construction Fill**

All provisions of 06-096 C.M.R. ch. 418 § 5 must be met for this notification of project certification by a professional engineer to be valid. If the answer to any criterion listed below is no, then the project cannot be initiated under the notification process. Please contact the Department's Division of Materials Management for guidance on the type of licensing action needed.

<u>PROJECT HAS BEEN PLANNED, DESIGNED AND WILL BE IMPLEMENTED TO ACHIEVE THE FOLLOWING:</u>		
	<u>YES</u>	<u>NO</u>
1. The project is a beneficial use rather than disposal or discard, and all encapsulated soil beneficially used will be non-hazardous by characteristic. [§ 5(A)(4)]		
2. The physical and chemical properties of the encapsulated soil and the material it is replacing are comparable. [§ 5(B)(1)]		
3. The encapsulated soil will meet or exceed any relevant and generally accepted product or engineering specifications. [§ 5(B)(2)]		
4. The encapsulated soil will not be placed in standing water or in a channelled drainage flow. It will not be used to fill wetlands, be placed below the water table, or be allowed to wash into any water of the State. [§ 5(B)(3)]		
5. All required federal, state and local approvals have been obtained. [§ 5(B)(4)]		
6. Stabilized encapsulated soil will be completely and permanently covered with a concrete or asphalt paved surface, or a 6 inch layer of soil or other material suited to the purpose of the construction. There will be no surface exposure of the encapsulated soil. [§ 5(B)(5)]		
7. Any storage of encapsulated soil prior to placement will be in a secure location near the project that is under the control of the property owner. All excess encapsulated soil and any residue will be removed from the project area upon completion of the project. [§ 5(B)(6)]		
8. The beneficial use project is not on a residential, school or public recreational property. [§ 5(B)(7)]		
9. Vehicle traffic associated with delivery of encapsulated soil to the project property will be limited to no more than 16 vehicle trips per day, unless the traffic associated with the beneficial use project was found acceptable during a review by the Maine Dept. of Transportation. [§ 5(B)(8)]		
10. Annual reports for the previous year will be filed by February 28 for each year of the beneficial use project. The reports will include both the quantity of encapsulated soil used on the property and the quantity of encapsulated soil stored for project use at the end of the calendar year, and verification that encapsulated soil was used as certified in this notification.		

**Additional Information To Be Included In This Notification**

1. A narrative description of the proposed use of the encapsulated soil as construction fill, and a site plan showing where encapsulated soil will be placed;
2. An U.S.G.S. 7.5 minute topographic map or equivalent map clearly marking the project location, along with the GPS coordinates of the project;
3. A cross-sectional view, with a horizontal scale of 1 inch = 5 feet and a vertical scale of 1 inch = 12 inches (unless an alternative scale is approved by the Department) of each location on the property where encapsulated soil will be placed. The cross sections must clearly indicate the location and depth of each material layer as applicable (construction fill, paved surface course, other construction, etc.) and be representative of the project as a whole; and
4. The amount of emulsified soil to be used in the project, and the anticipated timeframe for the beneficial use project including start and completion dates.

