# **Department of Environmental Protection**

# Maine Solid Waste Management Rules:

# **CHAPTER 418**

# **BENEFICIAL USE OF SOLID WASTES**

Last Revised:

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

**SUMMARY**: This rule establishes the rules of the Department for the beneficial use of secondary materials. Included in this 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 construction and demolition (CDD) wood into fuel occurs, that only accepts CDD wood that is generated in member municipalities, and that is owned by a municipality, a quasimunicipal 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 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.

#### 2. Beneficial Use Activities Subject to the Requirements of this Rule.

**A. Applicability**. Unless exempted from regulation under 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 06-096 C.M.R. ch. 400 (*General Provisions*), and this rule. 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 rule.

Beneficial use activities approved pursuant to this rule do not constitute disposal as defined in these rules. However, for the purposes of this rule, the placement of any waste 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

NOTE: The above definitions are specific to this rule. A comprehensive listing of definitions used throughout the various rules comprising the *Maine Solid Waste Management Rules* is found in chapter 400, section 1.

accordance with the provisions of 06-096 C.M.R.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 rule include, but are not limited to, use in an industrial or manufacturing process, use as construction fill, or use as fuel. The following 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 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 06-096 C.M.R. ch. 402 (*Transfer Stations and Storage Sites for Solid Waste*).
- **C. Processing of Secondary Material.** Beneficial use activities that include processing secondary materials are also subject to 06-096 C.M.R. ch. 409 (*Processing Facilities*).
- **D.** Agronomic Utilization of Residuals. Residual material proposed for agronomic utilization is subject to 06-096 C.M.R. ch. 419 (*Agronomic Utilization of Residuals*).
- **E.** Other Federal, State and Local Requirements. Approval of the beneficial use of a secondary material under this 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 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 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".
- **3.** Beneficial Use Activities Not Subject to the Requirements of this Rule. The following beneficial use activities are exempt from regulation under this 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 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 aged, fully hardened asphalt 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 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;
    - (3) From class A, class AA and class SA water bodies;
    - (4) On the site of generation containing less than 15% fines (material passing the #200 sieve) from representative sampling, in conformance with 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;
    - (5) From agricultural or residential ponds, ditches and drainage ways when the use occurs on the site of generation;
    - (6) Generated from normal maintenance of storm water and erosion control structures regulated under 38 M.R.S. § 420-C and § 420-D, and free from oil, grease, litter and other contaminants; and
    - (7) Containing less than 15% fines and meeting the levels of Appendix A of this rule for the listed constituents in section 7(B)(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 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,
  - (2) Coal, multi-fuel, and wood bottom ash in asphalt batching;
- M. The beneficial use of secondary material 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 Wastewater Disposal 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 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: 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 the processing facility has documented through analysis that the emulsified asphalt encapsulated contaminated soil is non-hazardous, and it is 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;
- 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 soil, and is not used on a residential, school or a property, area or facility open to the public 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.
- 4. 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 applicable standards and requirements of 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:
  - (1) 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.

- (2) The beneficial use results in no more than 16 additional vehicle trips per day; or
- (3) The project beneficially using the secondary material has 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.
- D. 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 treated to render them non-hazardous must be identified as such in the application, and the application must include information on the treatment process used and any other information relevant to the Department's review of the proposed beneficial use.
- 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, and the owner of the property where the encapsulated soil will be used agrees to comply with the project described in the notification package.

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, as documented through analysis provided by the processing facility. Hazardous wastes that have been treated to render them non-hazardous must be identified as such in the notification package, and the professional engineer must certify that the treatment used is compatible with the emulsification process;
- (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 recreation area open for use by the public;
- (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;
- (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; and
- (11) The property owner must sign the "Property Owner Agreement to Comply with Conditions for Beneficial Use of Emulsified Soils Under the Professional Engineer Certification Provision" form in Appendix C.

#### 6. Beneficial Use Permit by Rule Provisions.

- A. Permit by Rule for Beneficial Use of Tire Chips as Construction Fill. 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 9 of this 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 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 in accordance with 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 crosssection must clearly indicate the location and depth of each material layer as applicable (gravel, tire chips, geotextile, surface course, etc.).
- (2) Standards:
  - (a) 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.
  - (c) The tire chip layer shall not exceed a maximum thickness of 10 feet.
  - (d) The tire chips shall be covered with a concrete or asphalt paved surface, or a minimum of 12 inches of soil material, or other material suited to the purpose of the construction, such that no waste is exposed.
  - (e) 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 Contaminated Soil as Construction Fill. The permit-by-rule provisions of this section apply to the 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 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.

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 encapsulated soil as construction fill which do not meet the requirements of this section must be licensed under either section 5 or section 9 of this rule. By establishing these provisions, the Department finds that the beneficial use of encapsulated soil 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 the encapsulated soil as construction fill, including a site plan showing where encapsulated soil will be placed;
- (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) 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.
  - (a) The project must be a beneficial use rather than disposal or discard, and all encapsulated soil beneficially used must be non-hazardous by characteristic, as documented through analysis provided by the processing facility. Hazardous wastes that have been treated to render them non-hazardous must be identified as such in the notification, and the notification must include information on the treatment process used and any other information relevant to the Department's review of the proposed beneficial use.
  - (b) 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.
  - (c) 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.
  - (d) 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 encapsulated soil and any residue must be removed from the project area upon completion of the project.

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- (e) The beneficial use may not take place on a residential, school or a property, area or facility open to the public for recreation.
- (f) 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.
- (g) 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 9 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.
- 7. 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, where all of the general standards in section 4 of this rule and this section are met. Except, the beneficial use of bottom ash from wood fired boilers or multi-fuel boilers using fuel derived from CDD wood must be licensed under section 9 of this rule. Proposed beneficial uses which do not meet the requirements of this section must be licensed under section 9 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 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.

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  - (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 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. Samples shall have been collected, and analyzed within the holding times for each parameter, within 5 years of application submittal. However, if there have been significant spills, discharges, or disruptions in sediment deposition within the 5 year period, sampling and analysis is required to evaluate current conditions. 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 paragraph (3), below (mg/kg dry weight);
    - (c) PCBs and dioxin TEQ unless 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 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 sub-section:

| Arsenic (As)            | $< 16^1 \text{ mg/kg}$ |
|-------------------------|------------------------|
| Cadmium (Cd)            | < 22mg/kg              |
| Chromium (Cr+6)         | < 3.6mg/kg             |
| Lead (Pb)               | < 200 mg/kg            |
| Mercury (Hg)            | < 27 mg/kg             |
| Benz[a]anthracene       | < 13 mg/kg             |
| Benzo[b]fluoranthene    | < 13 mg/kg             |
| Benzo[k]fluoranthene    | < 134 mg/kg            |
| Benzo[a]pyrene          | < 1.3 mg/kg            |
| Chrysene                | < 1340 mg/kg           |
| Dibenz[a,h]anthracene   | < 1.3 mg/kg            |
| Indeno[1,2,3-c,d]pyrene | < 13mg/kg              |
| PCBs                    | < 2.7 mg/kg            |
| Dioxin TEQ              | < 55.8 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.
- B. Reduced Procedure Beneficial Use of De-watered Dredge Material As Beach Nourishment Fill Standards.

<sup>&</sup>lt;sup>1</sup> This the background soil level for arsenic in Maine

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- (1) Dredge material permitted for use under this section must be from a single dredging project, and the dredge material must come from a similar source (i.e. marine dredge material to a marine beach).
- (2) In order to characterize dredge material intended for beneficial use as beach nourishment fill, 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 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. Samples shall have been collected, and analyzed within the holding times for each parameter, within 5 years of application submittal. However, if there have been significant spills, discharges, or disruptions in sediment deposition within the 5 year period, sampling and analysis is required to evaluate current conditions. 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 paragraph (3), below (mg/kg dry weight);
  - (c) PCBs and dioxin TEQ unless 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) De-watered dredge material which 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 sub-section:

| Fines                   | < 15%                  |
|-------------------------|------------------------|
| Arsenic (As)            | $< 16^2 \text{ mg/kg}$ |
| Cadmium (Cd)            | < 22mg/kg              |
| Chromium (Cr+6)         | < 3.6 mg/kg            |
| Lead (Pb)               | < 200 mg/kg            |
| Mercury (Hg)            | < 27mg/kg              |
| Benz[a]anthracene       | < 13mg/kg              |
| Benzo[b]fluoranthene    | < 13mg/kg              |
| Benzo[k]fluoranthene    | < 134 mg/kg            |
| Benzo[a]pyrene          | < 1.3 mg/kg            |
| Chrysene                | < 1340 mg/kg           |
| Dibenz[a,h]anthracene   | < 1.3mg/kg             |
| Indeno[1,2,3-c,d]pyrene | < 13mg/kg              |
| PCBs                    | < 2.7mg/kg             |
| Dioxin TEQ              | < 55.8 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.

<sup>&</sup>lt;sup>2</sup> This is the background soil level for arsenic in Maine

- (5) If analysis demonstrates that the dredge material contains levels of the constituents at or above those listed in paragraph (3), above, an applicant may submit a demonstration that the proposed beach nourishment project does not pose a significant risk to public health or an unreasonable threat to the natural environment. A demonstration must include the following elements:
  - (a) Representative samples of the sand/soil in the area of the beach where dredge material is proposed to be used must be collected and analyzed in conformance with E.P.A. SW-846. A minimum of 4 samples within the area to be nourished (or 1 sample per acre if the area is greater than 4 acres) shall be collected unless an alternative sampling plan is otherwise approved by the Department; information on the sampling locations (horizontal and vertical) shall be provided. Samples shall have been collected, and analyzed within the holding times for each parameter, within 5 years of application submittal. However, if there have been significant spills, discharges, or disruptions in sediment deposition within the 5 year period, sampling and analysis is required to evaluate current conditions. Composite samples for analysis may be approved by the Department on a case-by-case basis. Analysis must be for all constituents listed in paragraph (3) where the dredge material contains levels at or above the standards in paragraph (3);
  - (b) A discussion of the risks and drawbacks associated with use of the dredge material, including consideration that use of the dredge material may cause degradation at other areas when erosion of the dredge material occurs; and
  - (c) An evaluation of the risk that the proposed beneficial use of the dredge material poses to public health or the natural environment at the site where it is proposed to be used.

# C. Reduced Procedure Beneficial Use of Multi-Fuel Boiler Ash as Construction Fill in Road Construction, Parking Lots and Other 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 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 6 inches of compacted soil material or other material suited to the purpose of the construction. The covering must be maintained in its original condition.

#### D. Reduced Procedure Beneficial Use of Multi-Fuel Boiler Ash 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 6 inches of compacted soil material or other material suited to the purpose of the construction. The covering must be maintained in its original condition.

- **E. Reduced Procedure Application Requirements.** The Department finds that the beneficial use of non-hazardous dredge material, and multi-fuel boiler ash as construction fill or flowable fill licensed under these reduced procedures will meet the general standards of section 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 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, a 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) For beneficial use of ash or dredge material, 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 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) For the beneficial use of ash, written permission from the owner of the property on which the ash is to be beneficially used; and
  - (9) For the beneficial use of ash as a construction material, 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 to surface waters must also be submitted.
- 8. 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:

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- (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 plain 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 the date the laboratory analyses are 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) Unless an alternative sampling program is approved by the Department, a minimum of 4 composite samples collected on 4 different days, over a period of no fewer than 15 and no more than 30 consecutive days is necessary to certify each new source;
    - (iv) 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.

Facilities that process fewer than 4 times per year and produce a total of less than 10,000 tons per year may instead 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.
- (v) 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) Unless an alternative plan is approved by the Department, 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. Two 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, the characterization meets the requirements below and an agreement that is acceptable to the person who contracted for the data has been reached, 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% |

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| <ul><li>(d) #4 minus fines (for publicly owned sources regulated under the<br/>Maine Solid Waste Management Rules)</li></ul> | <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 |
|-----|---------|-----------|
|     |         |           |

- Lead <375 mg/kg (b)
- (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;

NOTE: When a source learns CDD wood fuel has failed to meet the physical fuel characterization standards, it will test the split sample required to be retained under 06-096 C.M.R. ch. 405, §6(C)(6)(a)(vi).

(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(3), 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.
- **9.** 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 5, 6, 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 14 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 06-096 C.M.R. ch. 405, § 6(A), (B), and (C). The analytical requirements of 06-096 C.M.R. ch. 405, § 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 4 of this rule, the beneficial use of the secondary material must not result in a greater risk than that posed by current 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 X 10<sup>-6</sup> 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, and no additional evaluation of risk is necessary.
- 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) 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) 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 A of 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 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;
- 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 06-096 C.M.R. ch. 400 and not disposal, and that it meets the general standards for beneficial use of section 4 of this rule;

- (5) 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) 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) 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
- (9) A draft Authorization Form, prepared using the template in Appendix B of this rule, on proper use for distribution of the secondary material.

#### 10. 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.
- 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:
  - (1) A description of the type and composition of the secondary material(s) placed as construction fill; and
  - (2) The location, extent, and depth of the secondary material(s) deposited.
- 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 secondary 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.

11. 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 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.

 STATUTORY AUTHORITY:
 38 M.R.S. §§341-D(1-C) 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

#### **APPENDIX** A

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

The values in Appendix A were derived using the standard risk assessment protocols of the U.S.E.P.A. Acceptable risk levels were set at one-half the risk standard used by the Department for clean up of sites contaminated with hazardous substances; that is, Appendix A levels are set at the risk standard of this rule. Appendix A screening levels are set at the lowest level for all the routes of exposure that most likely will drive the risk at beneficial use sites: incidental ingestion of the secondary material, skin contact with the secondary material, inhalation of the secondary material in dust or paper, or leaching of contaminants from the secondary material into groundwater and the subsequent ingestion of the groundwater. For the direct ingestion, contact, and inhalation routes of exposure, values were calculated using the methodology in U.S.E.P.A.'s Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites (June 2017). For the leaching to groundwater pathway, levels were calculated using the methodology in Appendix D of the Department's Remediation Guidelines for Petroleum Contaminated Sites in Maine (amended May 23, 2014). This methodology uses the SESOIL and AT123D models, and the 34 chemicals where this approach determined the screening level are marked by double asterisks in the line number column. The 5 hydrocarbon fractions marked by triple asterisks in the line number column were also based on the leaching to groundwater pathway.

| Line No. | CAS No Dash | Chemical                    | Waste Concentration |
|----------|-------------|-----------------------------|---------------------|
| 1 **     | 630206      | 1,1,1,2-Tetrachloroethane   | 0.041               |
| 2 **     | 71556       | 1,1,1-Trichloroethane       | 128                 |
| 3 **     | 79345       | 1,1,2,2-Tetrachloroethane   | 0.0046              |
| 4 **     | 79005       | 1,1,2-Trichloroethane       | 0.0023              |
| 5        | 92524       | 1,1-Biphenyl                | 60                  |
| 6 **     | 75343       | 1,1-Dichloroethane          | 0.23                |
| 7 **     | 75354       | 1,1-Dichloroethene          | 7.2                 |
| 8        | 87616       | 1,2,3-Trichlorobenzene      | 73                  |
| 9 **     | 120821      | 1,2,4-Trichlorobenzene      | 0.2                 |
| 10       | 96128       | 1,2-Dibromo-3-chloropropane | 0.077               |
| 11 **    | 95501       | 1,2-Dichlorobenzene         | 5.5                 |
| 12 **    | 107062      | 1,2-Dichloroethane          | 0.0088              |
| 13 **    | 156592      | 1,2-Dichloroethene (cis)    | 0.28                |
| 14 **    | 156605      | 1,2-Dichloroethene (trans)  | 4.5                 |
| 15       | 78875       | 1,2-Dichloropropane         | 104                 |
| 16       | 528290      | 1,2-Dinitrobenzene          | 7.4                 |
| 17       | 106990      | 1,3-Butadiene               | 2.3                 |
| 18 **    | 541731      | 1,3-Dichlorobenzene         | 0.045               |
| 19       | 142289      | 1,3-Dichloropropane         | 1830                |
| 20       | 542756      | 1,3-Dichloropropene 65      |                     |
| 21       | 99650       | 1,3-Dinitrobenzene 7.4      |                     |
| 22 **    | 106467      | 1,4-Dichlorobenzene 0.09    |                     |
| 23       | 100254      | 1,4-Dinitrobenzene 7.4      |                     |
| 24       | 123911      | 1,4-Dioxane                 | 63                  |

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| Line No. | CAS No Dash | Chemical                    | Waste Concentration |
|----------|-------------|-----------------------------|---------------------|
| 25       | 75683       | 1-Chloro-1,1-difluoroethane | 10000               |
| 26       | 93765       | 2,4,5-T                     | 737                 |
| 27       | 93721       | 2,4,5-TP                    | 590                 |
| 28       | 95954       | 2,4,5-Trichlorophenol       | 7370                |
| 29       | 88062       | 2,4,6-Trichlorophenol       | 74                  |
| 30       | 118967      | 2,4,6-Trinitrotoluene       | 42                  |
| 31       | 120832      | 2,4-Dichlorophenol          | 221                 |
| 32       | 105679      | 2,4-Dimethylphenol          | 1470                |
| 33       | 51285       | 2,4-Dinitrophenol           | 147                 |
| 34       | 121142      | 2,4-Dinitrotoluene          | 20                  |
| 35       | 576261      | 2,6-Dimethylphenol          | 44                  |
| 36       | 606202      | 2,6-Dinitrotoluene          | 4.2                 |
| 37       | 95578       | 2-Chlorophenol              | 426                 |
| 38       | 95487       | 2-Cresol                    | 3690                |
| 39 **    | 91576       | 2-Methylnaphthalene         | 2.7                 |
| 40       | 91941       | 3,3-Dichlorobenzidine       | 14                  |
| 41       | 108394      | 3-Cresol                    | 3690                |
| 42       | 106478      | 4-Chloroaniline             | 32                  |
| 43       | 106445      | 4-Cresol                    | 2570                |
| 44 **    | 83329       | Acenaphthene                | 78                  |
| 45 **    | 208968      | Acenaphthylene              | 74                  |
| 46 **    |             |                             | 47                  |
| 47       | 75058       | Acetonitrile                | 2290                |
| 48       | 107028      | Acrolein                    | 0.3                 |
| 49       | 107131      | Acrylonitrile               | 7                   |
| 50       | 15972608    | Alachlor                    | 113                 |
| 51       | 309002      | Aldrin                      | 0.46                |
| 52       | 107051      | Allyl chloride              | 33                  |
| 53       | 7429905     | Aluminum                    | 14400               |
| 54 **    | 120127      | Anthracene                  | 825                 |
| 55       | 7440360     | Antimony                    | 37                  |
| 56       | 12674112    | Aroclor 1016                | 4.8                 |
| 57       | 7440382     | Arsenic                     | 7.9                 |
| 58       | 1912249     | Atrazine                    | 28                  |
| 59       | 7440393     | Barium                      | 10000               |
| 60 **    | 71432       | Benzene                     | 0.029               |
| 61       | 56553       | Benzo(a)anthracene          | 13                  |
| 62       | 50328       | Benzo(a)pyrene              | 1.3                 |
| 63       | 205992      | Benzo(b)fluoranthene        | 13                  |
| 64       | 191242      | Benzo(g,h,i)perylene        | 2090                |
| 65       | 207089      | Benzo(k)fluoranthene        | 134                 |
| 66       | 65850       | Benzoic acid                | 6200                |
| 67       | 100447      | Benzyl chloride             | 17                  |
| 68       | 7440417     | Beryllium                   | 58                  |

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| Line No. | CAS No Dash | Chemical                              | Waste Concentration |
|----------|-------------|---------------------------------------|---------------------|
| 69       | 111444      | Bis(2-chloroethyl)ether               | 2.83                |
| 70       | 117817      | Bis(2-Ethylhexyl)phthalate            | 452                 |
| 71       | 75274       | Bromodichloromethane                  | 28                  |
| 72       | 75252       | Bromoform                             | 555                 |
| 73       | 74839       | Bromomethane                          | 84                  |
| 74       | 85687       | Butyl benzyl phthalate                | 3330                |
| 75 ***   | DEP2041     | C11-C22 Aromatics                     | 230                 |
| 76       | DEP2042     | C19-C36 Aliphatics                    | 10000               |
| 77 ***   | DEP2038     | C5-C8 Aliphatics                      | 700                 |
| 78 ***   | DEP2040     | C9-C10 Aromatics                      | 37.5                |
| 79 ***   | DEP2039     | C9-C12 Aliphatics                     | 1350                |
| 80 ***   | DEP2043     | C9-C18 Aliphatics                     | 1350                |
| 81       | 7440439     | Cadmium                               | 22                  |
| 82       | 86748       | Carbazole                             | 317                 |
| 83       | 75150       | Carbon disulfide                      | 2010                |
| 84 **    | 56235       | Carbon tetrachloride                  | 0.096               |
| 85       | 57749       | Chlordane                             | 20                  |
| 86 **    | 115286      | Chlorendic acid                       | 0.57                |
| 87 **    | 108907      | Chlorobenzene                         | 1.2                 |
| 88       | 67663       | Chloroform                            | 47                  |
| 89       | 74873       | Chloromethane                         | 4450                |
| 90       | 16065831    | Chromium (+3)                         | 10000               |
| 91       | 18540299    | Chromium (+6)                         | 3.6                 |
| 92       | 218019      | Chrysene101                           | 1340                |
| 93       | 7440484     | Cobalt                                | 27                  |
| 94       | 7440508     | Copper                                | 1700                |
| 95       | 57125       | Cyanide                               | 19                  |
| 96       | 72548       | DDD                                   | 26                  |
| 97       | 72559       | DDE                                   | 23                  |
| 98       | 50293       | DDT                                   | 22                  |
| 99       | 53703       | Dibenz(a,h)anthracene                 | 1.3                 |
| 100      | 132649      | Dibenzofuran                          | 85                  |
| 101      | 124481      | Dibromochloromethane                  | 97                  |
| 102      | 84742       | Dibutyl phthalate                     | 7370                |
| 103      | 75718       | Dichlorodifluoromethane 2350          |                     |
| 104      | 60571       | Dieldrin 0.4                          |                     |
| 105      | 84662       | Diethyl phthalate                     | 10000               |
| 106      | 88857       | Dinoseb 74                            |                     |
| 107      | 1746016     | Dioxin-Like Compounds - TEQ 0.0000558 |                     |
| 108      | 115297      | Endosulfan 548                        |                     |
| 109      | 72208       | Endrin                                | 22                  |
| 110      | 75003       | Ethyl chloride                        | 7370                |
| 111 **   | 100414      | Ethylenere 0.22                       |                     |
| 112      | 106934      | Ethylene dibromide                    | 1.4                 |

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| Line No. | CAS No Dash | Chemical  | Waste Concentration |
|----------|-------------|---|---------------------|
| 113      | 206440      | Fluoranthene  | 2790                |
| 114 **   | 86737       | Fluorene  | 75                  |
| 115      | 76448       | Heptachlor  | 1.6                 |
| 116      | 1024573     | Heptachlor epoxide                                    | 0.83                |
| 117      | 118741      | Hexachlorobenzene                                     | 1.7                 |
| 118      | 87683       | Hexachlorobutadiene                                   | 38                  |
| 119      | 319846      | Hexachlorocyclohexane, alpha (alpha-<br>BHC)          | 1                   |
| 120      | 319857      | Hexachlorocyclohexane, beta (beta-BHC)                | 3.5                 |
| 121      | 58899       | Hexachlorocyclohexane, gamma (Lindane)                | 1.5                 |
| 122      | 67721       | Hexachloroethane                                      | 61                  |
| 123      | 121824      | Hexahydro-1,3,5-trinitro-1,3,5-triazine<br>(RDX)      | 71                  |
| 124      | 193395      | Indeno(1,2,3-cd)pyrene                                | 13                  |
| 125      | 7439896     | Iron  | 63900               |
| 126      | 7439921     | Lead  | 200                 |
| 127      | 121755      | Malathion   | 1470                |
| 128      | 7439965     | Manganese   | 151                 |
| 129      | 7487947     | Mercuric chloride & other inorganic mercury compounds | 27                  |
| 130      | 72435       | Methoxychlor  | 369                 |
| 131      | 78933       | Methyl ethyl ketone                                   | 5460                |
| 132      | 108101      | Methyl isobutyl ketone                                | 3740                |
| 133      | 80626       | Methyl methacrylate                                   | 1950                |
| 134 **   | 1634044     | Methyl tert-butyl ether                               | 0.079               |
| 135      | 75092       | Methylene chloride                                    | 538                 |
| 136      | 7439987     | Molybdenum  | 456                 |
| 137 **   | 91203       | Naphthalene   | 0.078               |
| 138      | 7440020     | Nickel  | 530                 |
| 139      | 106945      | n-Propyl bromide                                      | 84                  |
| 140      | 2691410     | Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetra<br>(HMX)   | 4500                |
| 141      | 117840      | Octyl Phthalate, di-n-                                | 737                 |
| 142      | 56382       | Parathion   | 60                  |
| 143      | 1336363     | PCBs  | 2.7                 |
| 144      | 87865       | Pentachlorophenol 12                                  |                     |
| 145      | 14797730    | Perchlorate   | 65                  |
| 146 **   | 375735      | Perfluorobutane sulfonic acid (PFBS)                  | 1.9                 |
| 147 **   | 1763231     | Perfluorooctane sulfonate (PFOS)                      | 0.0052              |
| 148 **   | 335671      | Perfluorooctanoic acid (PFOA)                         | 0.0025              |
| 149 **   | 85018       | Phenanthrene  | 83                  |
| 150      | 108952      | Phenol 10000  |                     |
| 151      | 129000      | Pyrene 2090   |                     |
| 152      | 7782492     | Selenium  | 456                 |

| Line No. | CAS No Dash | Chemical               | Waste Concentration |
|----------|-------------|------------------------|---------------------|
| 153      | 7440224     | Silver                 | 456                 |
| 154      | 100425      | Styrene                | 9270                |
| 155 **   | 127184      | Tetrachloroethene      | 0.76                |
| 156      | 298022      | Thimet (Phorate)       | 15                  |
| 157 **   | 108883      | Toluene                | 10                  |
| 158 **   | 79016       | Trichloroethene        | 0.035               |
| 159      | 75694       | Trichlorofluoromethane | 3060                |
| 160      | 7440622     | Vanadium               | 265                 |
| 161      | 108054      | Vinyl acetate          | 115                 |
| 162      | 593602      | Vinyl bromide          | 9.8                 |
| 163 **   | 75014       | Vinyl chloride         | 0.0053              |
| 164 **   | 1330207     | Xylene                 | 2.5                 |
| 165      | 7440666     | Zinc 10000             |                     |

## **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 Section 10

#### AUTHORIZATION FORM FOR BENEFICIAL USE

| Generator of Secondary Material | Beneficial Use Location |
|---------------------------------|-------------------------|
| Facility Name                   | Facility Name           |
| Street Address                  | 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 channeled drainage flow;
- in a protected natural resource;
- below the water table; or
- where it may wash into any water of the state.

If the Department issued a permit-by-rule or license authorizing the beneficial use of this secondary material, a copy of the document is attached. The Department license  $\Box$  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**

#### FORMS 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 150



State of Maine Dept. of Environmental Protection Division of Materials Management 17 SHS, Augusta, ME 04333 TEL 207.287-7688 FAX (207) 287-7826

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

#### 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 owner of the property where the encapsulated soil will be used must sign the attached form agreeing to comply with the project as described in this notification.

The notification submitter must send a complete notification, including the required supporting documentation, the appropriate notification fee and the signed property owner form, 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:  | Geraldine Travers                      |   |
|--------|--|---|
|        | BRWM Division of Materials Management  | or, electronically to                             |
|        | Department of Environmental Protection | geraldine.travers@maine.gov                       |
|        | 17 State House Station                 | (electronic submittals will not be complete until |
|        | Augusta, ME 04333-0017                 | the required fee is received by the MEDEP)        |
| Physic | cal Location of Project:               |   |
| Conta  | ct Person:                             |   |
|        |  | Email:  |
|        | Coordinates:                           |   |
|        |  |   |
| Profes | ssional Engineer's Name:               |   |
|        | ng Address:                            |   |
|        |  |   |
| Telep  | hone:                                  | _ 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)

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.

| PROJECT HAS BEEN PLANNED, DESIGNED AND WILL BE IMPLEMENTED TO ACHIEVE THE F   | OLLOWIN | NG: |
|---|---------|-----|
|   | YES     | NO  |
| 1. The project is a beneficial use rather than disposal or discard, and all encapsulated soil                                 |         |     |
| beneficially used will be non-hazardous by characteristic as documented through analysis                                      |         |     |
| provided by the processing facility. Hazardous wastes that have been treated to render them non-                              |         |     |
| hazardous must be identified as such in the notification package, and the professional engineer                               |         |     |
| must certify that the treatment used is compatible with the emulsification process. [§ $5(B)(1)$ ]                            |         |     |
| 2. The physical and chemical properties of the encapsulated soil and the material it is replacing are comparable. [§ 5(B)(2)] |         |     |
| 3. The encapsulated soil will meet or exceed any relevant and generally accepted product or                                   |         |     |
| engineering specifications. [§ 5(B)(3)]   |         |     |
| 4. The encapsulated soil will not be placed in standing water or in a channeled 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. [ $\S$ 5(B)(4)]   |         |     |
| 5. All required federal, state and local approvals have been obtained. [§ 5(B)(5)]  |         |     |
| 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. [ $\S$ 5(B)(6)]                                     |         |     |
| 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)(7)]   |         |     |
| 8. The beneficial use project is not on a residential, school or recreation area open to the public.                          |         |     |
| [§ 5(B)(8)]   |         |     |
| 9. Vehicle traffic associated with delivery of encapsulated soil to the project property will be limited                      |         |     |
| to a construction period of 1 year or less, or no more than 16 vehicle trips per day, or unless the                           |         |     |
| traffic associated with the beneficial use project has been permitted under another chapter of the                            |         |     |
| Solid Waste Management Rules, the Site Location of Development Law, or by a local authority. [§                               |         |     |
| 5(B)(9)]  |         |     |
| 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.   |         |     |
| 11. A signed property owner agreement to comply with project described in this notification is                                |         |     |
| attached.   |         |     |
| 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.

#### PROPERTY OWNER AGREEMENT TO COMPLY WITH CONDITIONS for BENEFICIAL USE OF EMULSIFIED SOILS UNDER the PROFESSIONAL ENGINEER CERTIFICATION PROVISIONS

#### The property owner agrees to the following conditions:

- 1. Approval of Variations from Plans. This notification is dependent upon and limited to the proposals and plans contained in the notification package submitted to the Department. Any variation from these plans, proposals, and supporting documents requires submittal of a new notification package prior to implementation.
- 2. Compliance with All Applicable Laws. The property owner shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, statutes, regulations, and orders prior to or during construction and operation, as appropriate.
- **3.** Compliance with All Terms of the Notification Package. The property owner shall submit all reports, including annual reports, and information requested by the Department demonstrating compliance with all provisions of the notification package submitted to the Department.
- 4. Initiation of Beneficial Use Within Two Years. If the beneficial use activity is not begun within two years of the Department's receipt of the notification package, the notification lapses and a new notification package must be submitted to the Department.
- 5. Notification Package Included in Contract Bids. A copy of the notification package submitted to the Department must be included in or attached to all contract bid specifications for the beneficial use project.
- 6. Fees. The project owner must comply with annual reporting fee requirements of the Department's rules.

I certify under penalty of law that the description of the beneficial use project on my property is true, accurate and complete, and that I agree to comply with the conditions of certification listed above. I also certify that I authorize the Department to enter the property that is the subject of this notification package, at reasonable hours, including buildings, structures or conveyances on the property, to ensure compliance with the notification package.

Signature

Date