

**567—108.4(455B,455D) Universally approved beneficial use determinations.** The following solid by-products may be utilized as resources in the specific manners listed provided that such utilization is in compliance with 567—108.6(455B,455D) and 567—108.7(455B,455D). Unless a user is otherwise notified by the department pursuant to 567—108.11(455B,455D), such utilization does not require further approval from the department.

**108.4(1) Alumina.** Alumina may be used as a raw material in the manufacture of cement or concrete products. Alumina includes refractory brick for the purpose of this subrule.

**108.4(2) Asphalt shingles.** Asphalt shingles that are certified, consistent with federal regulations (Reference: Appendix E, Subpart E, 40 CFR Part 763, Section 1, Polarized Light Microscopy), as not containing more than 1 percent asbestos may be used as follows:

- a. Raw material in the manufacture of asphalt products.
- b. Subbase for hard-surface road construction.
- c. Road surfacing granular material.
- d. Alternative cover material at a sanitary landfill pursuant to 567—108.8(455B,455D).

**108.4(3) Cement kiln dust.** Cement kiln dust may be used as follows:

- a. Raw material in the manufacture of absorbents.
- b. Raw material in the manufacture of cement or concrete products.
- c. Subbase for hard-surface road construction.
- d. A soil amendment pursuant to 567—Chapter 121 and the rules of the Iowa department of agriculture and land stewardship or a compost amendment.
- e. A stabilizer for manure and waste sludge.
- f. A soil stabilizer for construction purposes.
- g. Fill material pursuant to 108.6(1).

**108.4(4) Coal combustion by-products.**

a. Coal combustion fly ash and flue gas desulfurization by-products may be used as follows:

- (1) Raw material in manufactured gypsum, wallboard, plaster, or similar product.
- (2) Raw material in manufactured calcium chloride.
- (3) Raw material in the manufacture of absorbents.
- (4) Fill material pursuant to 108.6(1).
- (5) Alternative cover material at a sanitary landfill pursuant to 567—108.8(455B,455D).

b. Coal combustion fly ash or bottom ash or boiler slag may be used as follows:

- (1) Raw material in the manufacture of cement or concrete products.
- (2) Raw material to be used in mineral recovery.
- (3) Raw material in the manufacture of asphalt products.
- (4) Raw material in plastic products.
- (5) Subbase for hard-surface road construction.
- (6) Soil stabilization for construction purposes.
- (7) Fill material pursuant to 108.6(1).
- (8) Alternative cover material at a sanitary landfill pursuant to 567—108.8(455B,455D).

c. Coal combustion bottom ash may also be used as follows:

- (1) Traction agent for surfaces used by vehicles.
- (2) Sandblasting abrasive.

**108.4(5) Compost.** Cured or finished compost, as defined in 567—Chapter 105, is not solid waste and may be used for any purpose recognized by the U.S. Composting Council or the department.

**108.4(6) Foundry sand.** Foundry sand may be used as follows:

- a. Raw material in the manufacture of asphalt products.
- b. Raw material in the manufacture of cement or concrete products.
- c. Leachate control drainage material at a sanitary landfill.
- d. Subbase for hard-surface road construction.
- e. Fill material pursuant to 108.6(1).
- f. Emergency flood control use for sandbags.
- g. Alternative cover material at a sanitary landfill pursuant to 567—108.8(455B,455D).

**108.4(7) Glass.** Uncontaminated, unleaded glass may be used as follows:

- a. Raw material in the manufacture of asphalt products.
- b. Fill material pursuant to 108.6(1).
- c. Sandblasting or other abrasive.
- d. Leachate control drainage material at a sanitary landfill.
- e. Filter media.
- f. Subbase for hard-surface road construction.
- g. Alternative cover material at a sanitary landfill pursuant to 567—108.8(455B,455D).

**108.4(8) Gypsum and gypsum wallboard.**

- a. All gypsum and gypsum wallboard may be used as follows:
- (1) Raw material in the manufacture of absorbents.
  - (2) Raw material in the manufacture of other gypsum products, wallboard, plaster, or similar products.
  - (3) Alternative cover material at a sanitary landfill pursuant to 567—108.8(455B,455D).
- b. Gypsum and gypsum wallboard that have not been treated to be water-resistant or flame-retardant may be used as a calcium additive for agricultural use or soil amendment pursuant to 567—Chapter 121 or a compost amendment.

**108.4(9) Lime.** Lime produced as a by-product of public water supplies may be used as follows:

- a. A soil amendment pursuant to 567—Chapter 121 and the rules of the Iowa department of agriculture and land stewardship or a compost amendment.
- b. Raw material in the manufacture of calcium carbonate or similar substance.

**108.4(10) Lime kiln dust.** Lime kiln dust may be used as follows:

- a. Raw material in the manufacture of absorbents.
- b. Raw material in the manufacture of cement or concrete products.
- c. Subbase for hard-surface road construction.
- d. A soil amendment pursuant to 567—Chapter 121 and the rules of the Iowa department of agriculture and land stewardship or a compost amendment.
- e. A stabilizer for manure and waste sludge.
- f. A soil stabilizer for construction purposes.
- g. Fill material pursuant to 108.6(1).

**108.4(11) Paper mill sludge.** Uncontaminated, dewatered paper mill sludge may be used as follows:

- a. A fuel or energy source.
- b. Bulking agent or carbon source for composting.
- c. Animal bedding.
- d. Raw material in the manufacture of absorbents.
- e. Alternative cover material at a sanitary landfill pursuant to 567—108.8(455B,455D).

**108.4(12) Rubble.** Uncontaminated rubble such as concrete, brick, asphalt pavement, soil and rock may be used for fill, landscaping, excavation or grading or as a substitute for conventional aggregate. Asphalt, however, shall not be used for any of the aforementioned uses if the use will cause the asphalt to be placed in a waterway or wetland or any waters of the state or within the high water table.

**108.4(13) Sandblasting abrasives.** Sandblasting abrasives that do not contain lead-based paint may be used as follows:

- a. Raw material in the manufacture of cement or concrete products.
- b. Raw material in the manufacture of asphalt products.
- c. Subbase for hard-surface road construction.
- d. Raw material in the manufacture of abrasive products.
- e. Fill material pursuant to 108.6(1).
- f. Alternative cover material at a sanitary landfill pursuant to 567—108.8(455B,455D).

**108.4(14) Soil, including petroleum-contaminated soil.**

- a. Uncontaminated soil may be used for fill, landscaping, excavation or grading, or other suitable purpose.

*b.* Petroleum-contaminated soils that have been decontaminated to the satisfaction of the department pursuant to 567—Chapter 120 may be used as follows:

- (1) Fill material at the original excavation site pursuant to 108.6(1).
- (2) Alternative cover material at a sanitary landfill pursuant to 567—108.8(455B,455D).

**108.4(15) Tires.** This chapter does not pertain to tires other than those used as alternative cover material pursuant to 567—108.8(455B,455D). Refer to 567—Chapter 117 for rules regarding the beneficial use of tires.

**108.4(16) Wastewater filter sand.** Wastewater filter sand may be used as follows:

- a.* Fill material pursuant to 108.6(1).
- b.* Subbase for hard-surface road construction.

**108.4(17) Wood.** Uncontaminated, untreated or raw wood may be used as follows:

- a.* A fuel or energy source.
- b.* Bulking agent for composting.
- c.* Mulch.
- d.* Animal bedding.
- e.* Raw material in the manufacture of paper products, particle board, or similar materials.

**108.4(18) Wood ash.** Ash from the combustion of uncontaminated, untreated or raw wood may be used as follows:

- a.* A soil amendment pursuant to 567—Chapter 121.
- b.* A carbon source for composting.
- c.* Raw material in the manufacture of cement or concrete products.
- d.* Fill material pursuant to 108.6(1).