

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).