§ 267.1101 What design and operating standards must my containment building meet?

Your containment building must comply with the design and operating standards in this section. EPA will consider standards established by professional organizations generally recognized by the industry such as the American Concrete Institute (ACI) and the American Society of Testing Materials (ASTM) in judging the structural integrity requirements of this section.
(a) The containment building must be completely enclosed with a floor, walls, and a roof to prevent exposure to the elements, (e.g., precipitation, wind, run-on), and to assure containment of managed wastes.

(b) The floor and containment walls of the unit, including the secondary containment system, if required under §267.1103, must be designed and constructed of manmade materials of sufficient strength and thickness to:

(1) Support themselves, the waste contents, and any personnel and heavy equipment that operates within the unit.

(2) Prevent failure due to:

(i) Pressure gradients, settlement, compression, or uplift.

(ii) Physical contact with the hazardous wastes to which they are exposed.

(iii) Climatic conditions.

(iv) Stresses of daily operation, including the movement of heavy equipment within the unit and contact of such equipment with containment walls.

(v) Collapse or other failure.

(c) All surfaces to be in contact with hazardous wastes must be chemically compatible with those wastes.

(d) You must not place incompatible hazardous wastes or treatment reagents in the unit or its secondary containment system if they could cause the unit or secondary containment system to leak, corrode, or otherwise fail.

(e) A containment building must have a primary barrier designed to withstand the movement of personnel, waste, and handling equipment in the unit during the operating life of the unit and appropriate for the physical and chemical characteristics of the waste to be managed.

(f) If appropriate to the nature of the waste management operation to take place in the unit, an exception to the structural strength requirement may be made for light-weight doors and windows that meet these criteria:

(1) They provide an effective barrier against fugitive dust emissions under §267.1102(d).

(2) The unit is designed and operated in a fashion that assures that wastes will not actually come in contact with these openings.

(g) You must inspect and record in the facility’s operating record, at least once every seven days, data gathered from monitoring equipment and leak detection equipment, as well as the containment building and the area immediately surrounding the containment building to detect signs of releases of hazardous waste.

(h) You must obtain certification by a qualified registered professional engineer that the containment building design meets the requirements of §§267.1102, 267.1103, and paragraphs (a) through (f) of this section.

§ 267.1102 What other requirements must I meet to prevent releases?

You must use controls and practices to ensure containment of the hazardous waste within the unit, and must, at a minimum:

(a) Maintain the primary barrier to be free of significant cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be released from the primary barrier.

(b) Maintain the level of the stored/treated hazardous waste within the containment walls of the unit so that the height of any containment wall is not exceeded.

(c) Take measures to prevent personnel or by equipment used in handling the waste from tracking hazardous waste out of the unit. You must designate an area to decontaminate equipment, and you must collect and properly manage any rinsate.

(d) Take measures to control fugitive dust emissions such that any openings (doors, windows, vents, cracks, etc.) exhibit no visible emissions (see 40 CFR part 60, appendix A, Method 22—Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares). In addition, you must operate and maintain all associated particulate collection devices (for example, fabric filter, electrostatic precipitator) with sound air pollution control practices. You must effectively maintain this state of no visible emissions at all times during routine operating and maintenance conditions, including when vehicles and personnel are entering and exiting the unit.