

1513.0420 INSTALLATION OF STORAGE TANKS ABOVEGROUND.

Subpart 1. **Foundations.** Tanks must be supported on noncombustible foundations designed to accommodate the type of tank being used.

Subp. 2. **Water protection.** Adequate protection against flotation or other water damage must be provided wherever high flood water might occur.

Subp. 3. **Freezing protection.** Tanks storing product at less than 32 degrees Fahrenheit must be supported in such a way, or heat must be supplied, to prevent the effects of freezing and subsequent frost heaving of the soil.

Subp. 4. **Liquid containment system.** The area surrounding a refrigerated tank or group of tanks must be provided with drainage or must be diked or provided with other secondary containment systems to prevent accidental discharge of liquid from spreading to uncontrolled areas.

Subp. 5. **Drainage.** If drainage is employed, a slope of not less than one percent must be provided. The drainage system must terminate in an impounding basin having a capacity as large as the largest tank served.

Subp. 6. **Rain water.** Provision must be made for the drainage of rain water from the dike or impounding area. Drainage must be provided with a positive means to stop the flow.

Subp. 7. **Dike capacity.** If a dike is employed, the capacity of the diked enclosure must be 110 percent of the capacity of the largest tank served. When computing the volume of the dike, allowance must be made for the volume displaced by all other containers in the diked area.

Subp. 8. **Walls.** The walls of a diked enclosure or the wall of an impounding basin used in a drainage system must be of earth, steel, concrete, or other suitable material designed to be liquid tight and to withstand the hydrostatic pressure and temperature. Earth walls must have a flat top at least two feet wide. The slope must be stable and consistent with the angle of repose of the earth used.

Subp. 9. **Grading.** The ground in an impounding basin or within a diked enclosure, should be graded so that small spills or the early part of a large spill will accumulate at one side or corner, thereby contacting only a relatively small area of ground and exposing a relatively small area of ground and exposing a relatively small surface area for heat gain. Shallow channels in the ground surface or low curbs of earth can help guide the liquid to these low areas without contacting a large ground area.

Statutory Authority: *MS s 18C.121*

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