

(53) "Sanitary building sewer" means that part of the plumbing system beginning at the immediate outside foundation or proposed foundation wall and extending to its connection with the main of a public sewer, private sewer, private sewage disposal system or other point of disposal.

(54) "Sanitary building drain" means the lowest horizontal piping of a drainage system which receives the discharge from soil, waste and other drainage pipes inside any building and conveys same to the building sewer by gravity flow. The minimum building drain extends from the building sewer to all soil stacks.

(55) "Sanitary building subdrain" means the horizontal portion of a drainage system within a building which cannot flow by gravity to the building drain.

(56) "Solid manure storage structure" means a structure used for stacking or composting and containment of animal wastes consisting of excreta, feed losses, litter or associated soil wastes.

(57) "Specific capacity" means the continuous yield of a well at a given well water or pressure drawdown expressed in gallons per minute, per foot of drawdown.

(58) "Static water level" means that elevation of the surface of the water in a well or water pressure at the top of a well, in the case of some artesian wells, when no water is being pumped or flows therefrom. In the case of artesian wells with a positive water pressure at the top of the well, the static water elevation is determined either by a stilling pipe or pressure gauge and under either condition water elevations are referred to the elevation of the top of the well or the ground grade at the well.

(59) "Storm sewer" means any conduit used or intended to be used for conveying surface water runoff, clear water waste and subsoil drainage with such ground water as may be present.

(60) "Storm building sewer" means that part of the storm water system which receives the discharge from building storm drains and subdrains, parking lots, yard fountains and other similar sources, and conveys such waters to a public storm water system, private storm water system or other approved point of disposal.

(61) "Storm building drain" means the lowest horizontal piping which receives storm waters or other similar water from roofs, area ways, courtyards, canopies, enclosed parking ramps and other sources inside any building or structure and conveys same to the storm building sewer by gravity flow.

(62) "Storage pond" means an excavated or diked earthen structure including partially fabricated liquid manure holding tanks designed for containing animal wastes consisting of excreta, leachings, feed losses, litter, washwaters or other associated liquid wastes.

(63) "Stuffing box" means an approved receptacle in which packing may be compressed to form a watertight or airtight junction between 2 objects.

(64) "Subsoil drain" means that part of the drainage system which conveys the ground or seepage water from the footings of walls or below

the basement floor under buildings to the storm sewer or other point of disposal.

(65) "Sump" means a tank or pit which receives sewage or other liquid wastes located below the normal grade of a gravity system and which must be emptied by mechanical means.

(66) "Treatment pond" means an earth structure with sealed bottom and walls constructed for the purpose of holding sewage or other liquid waste for a period of time to reduce BOD and suspended solids.

(67) "Vertical zone of contamination" means that depth of geologic formations, generally near the ground surface, containing connecting pore spaces, crevices or similar openings, including artificial channels, such as unprotected wells, through which contaminated water may gain access to a well or the ground water body.

(68) "Watertight construction" means cased and grouted construction through firm formations like clay or rock. Through granular material like sand or gravel, it means that the casing pipe is of approved quality and assembled watertight.

(69) "Well" means an excavation or opening into the ground made by digging, boring, drilling, driving or other methods for the purpose of obtaining ground water for human consumption.

(70) "Well cap" means an approved removable non-watertight apparatus or device used to cover a well.

(71) "Well driller" means any person, firm or corporation who has duly registered as such with the department, has paid the annual registration fee and has obtained a permit to construct wells.

(72) "Well seal" means an approved removable apparatus or device used as follows:

(a) To close the well opening watertight or to establish and maintain a watertight junction between the upper terminal of protective casing or curbing of a well and the piping or equipment installed therein, so as to prevent water from entering the well; or

(b) To establish and maintain a watertight junction between the basement end of non-pressure pipe conduit, installed between a well and a building basement, and the pump piping installed within the conduit.

(73) "Well vent" means an outlet at the upper end of the well casing or basement end of a non-pressure conduit to allow equalization of air pressure in the well.

(74) "Yield" means the quantity of water which may flow or be pumped from the well per unit of time.

**History:** Cr. Register, June, 1975, No. 234, eff. 10-1-75; renum. (55) to (73) to be (56) to (74), cr. (55), Register, March, 1977, No. 255, eff. 4-1-77; cr. (12m), (20m), (30m), (34m), (35a), (35m), (40m), (46m) and (51m), am. (38) and r. (32), Register, April, 1978, No. 268, eff. 5-1-78; am. (34), renum. (34m) to be (34o), cr. (11m), (34m), (34p), (34q), (34r), (35c) and (42m), Register, October, 1981, No. 310, eff. 11-1-81; am. (24) and (40), Register, October, 1982, No. 322, eff. 11-1-82.

**NR 112.04 Approved comparable construction.** When strict compliance with this chapter appears to be impracticable, the reasons there-

for shall be communicated in writing to the department for advice and approval of comparable specifications.

**History:** Cr. Register, June, 1975, No. 234, eff. 10-1-75.

**NR 112.05 Existing installations.** Existing well, pump, pressure tank, pit, subsurface pumphouse and reservoir installations that conform to s. NR 112.23 are acceptable. Noncomplying existing well, pump, pressure tank, pit, subsurface pumphouse and reservoir installations shall be corrected to comply with s. NR 112.23 or the specifications in this chapter for new construction.

**History:** Cr. Register, June, 1975, No. 234, eff. 10-1-75.

**NR 112.06 Contracts for nonconforming installations.** Well drillers and pump installers shall ensure that the construction and reconstruction of wells or appurtenances thereto or the installation of pumping equipment adheres to all the applicable provisions of this chapter or to approved comparable requirements. Well drillers and pump installers shall not enter into any agreement, written or oral, for such construction, reconstruction or installation which does not require compliance with all applicable provisions of this chapter or with approved comparable requirement.

**History:** Cr. Register, June, 1975, No. 234, eff. 10-1-75.

**NR 112.07 Well location.** (1) **GENERAL.** Where a well is constructed to supply ground water for human consumption and preparation of food products, such well shall be located:

(a) In such manner that the well and its surroundings can be kept in a sanitary condition.

(b) At the highest point on the premises consistent with the general layout and surroundings, but in any case protected against surface water flow and flooding.

(c) As far removed from any known or probable source of contamination as the general layout of the premises and the surroundings permit.

(2) **RELATION TO CONTAMINATION SOURCES.** Unless modified by written department approval under NR 112.04, minimum separating distances between wells or reservoirs and sources of contamination shall be maintained as follows:

(a) Eight feet between well or reservoir and cast iron or equivalent sanitary or storm building sewer or sanitary or storm building drain or a basement floor drain connected to a cast iron or equivalent sanitary building sewer or sanitary building drain; cast iron or equivalent sub-drain; cast iron or equivalent sewage sump; cast iron or equivalent milkhouse floor drain; cast iron or equivalent drain from a conventional silo or glass lined storage facility, cast iron or equivalent sewer conducting manure juices to point of disposal.

(b) Ten feet between well and independent clear water waste drain, rainwater downspout outlet, cistern, hydrant drain, or similar unit; building foundation-drain connected to independent clear water waste drain or other subsoil drain; nonconforming existing or unapproved new well pit, pump pit, pressure-tank pit, pressure-tank access pit or subsurface pumphouse; nonconforming reservoir except that for school water

systems, high capacity water systems and sewage treatment plant water systems there shall be a minimum separating distance of 20 feet between a well or reservoir and a well pit, pump pit, pressure-tank pit, pressure-tank access pit, or subsurface pumphouse.

(c) Fifteen feet between well and sewer-connected foundation drain.

(d) Twenty-five feet between well or reservoir and watertight grease basin, septic tank, holding tank, subdrain other than cast iron or equivalent pipe; sewage sump other than cast iron or equivalent material; sanitary building or storm building sewer other than cast iron or equivalent material; sanitary building or storm building drain other than cast iron or equivalent material; floor drain connected to sanitary building sewer or drain of other than cast iron or equivalent pipe material; lake or stream shoreline; below-ground swimming pool except that for school water systems and high capacity water systems the minimum separating distance between a well and a lake or stream shoreline shall be 60 feet.

(e) Twenty-five feet between well or reservoir and watertight barn gutter; animal barn pen with concrete floor; glass-lined storage facility without pit; conventional silo without pit but with concrete floor and proper drain; watertight, milkhouse floor drain other than cast iron or equivalent material; watertight, conventional silo drain or glass-lined storage facility drain other than cast iron or equivalent material; watertight nonpressurized sewer other than cast iron or equivalent material conveying manure juices; pressure pipe used to convey manure, providing the pipe is PVC pipe meeting ASTM specification D-2241, with standard dimension ratio of 21 or less; or pressure pipe meeting the requirements of s. NR 110.13 (6) (f) or 111.71.

(f) Twenty-five feet between well or reservoir and a pressurized sewer, other than a street sanitary or storm sewer or similar sanitary or storm sewer piping comprising part of the drainage system on public or private property, for which the required minimum separating distance between a well or reservoir and such sewers is specified in par. (h).

(g) Fifty feet between well or reservoir and seepage pit, seepage bed, seepage trench or other similar sewage or waste water disposal unit; privy; pet-waste pit disposal unit; animal yard, animal shelter, animal enclosure or animal lot; conventional silo with pit; glass-lined storage facility with pit; outlet of watertight milkhouse drain; seepage pit for drain of conventional silo or glass-lined storage facility; pressure pipe used to convey manure if the pipe does not meet the specifications listed in par. (e); loose-jointed field-drain pipe lines except that for school water supply systems, there shall be a minimum separating distance of 200 feet between a well or reservoir and seepage pit, seepage bed, seepage trench or similar sewage or waste water disposal unit.

(h) Fifty feet between well or reservoir and street sanitary or storm sewer; similar sanitary or storm sewer piping comprising part of the drainage system on public or private property except that for sewage treatment plant wells, there shall be a minimum separating distance of 150 feet between a well or reservoir and a gravity or pressurized collector, branch or trunk sewer.