

TITLE VI PHYSICAL ENVIRONMENT

CHAPTER 14 WELL PROTECTION ZONES

6-14-1 Municipal Well Control Zones
6-14-2 Well Protection

6-14-3 Non-Conforming Uses

6-14-1 MUNICIPAL WELL CONTROL ZONES. It shall be unlawful for any person, persons, group or groups of persons to erect or cause to be erected any of the following structure, uses or activities.

6-14-2 WELL PROTECTION. No structure or facility of the following enumerated and listed types shall be located within the distances hereinafter set forth from the defined public well type as listed below in Table A:

Table A : Separation Distances		
Source of Contamination	Required Minimum Distance From Well, In Feet	
	Deep Well ¹	Shallow Well ¹
WASTEWATER STRUCTURES:		
Point of Discharge to Ground Surface		
Sanitary & industrial discharges	400	400
Water treatment plant wastes	50	50
Well house floor drains	5	5
Sewers & Drains²		
Sanitary & storm sewers, drains	0-25 feet: prohibited 25-75 feet if water main pipe 75-200 feet if sanitary sewer pipe	0-25 feet: prohibited 25-75 feet if water main pipe 75-200 feet if sanitary sewer main pipe
Sewer force mains	0-75 feet: Prohibited 75-400 feet if water main pipe 400-1000 feet if water main or sanitary sewer pipe	0-75 feet: Prohibited 75-400 feet if water main pipe 400-1000 feet if water main or sanitary sewer main pipe

Table A : Separation Distances		
Source of Contamination	Required Minimum Distance From Well, In Feet	
	Deep Well ¹	Shallow Well ¹
Water plant treatment process wastes that are treated on site	0-5 feet: prohibited 5-50 feet if sanitary sewer pipe	0-5 feet: prohibited 5-50 feet if sanitary sewer main pipe
Water plant wastes to sanitary sewer	0-25 feet: prohibited 25-75 feet if water main pipe 75-200 feet if sanitary sewer main pipe	0-25 feet: prohibited 25-75 feet if water main pipe 75-200 feet if sanitary sewer pipe
Well house floor drains to sewers	0-25 feet: prohibited 25-75 feet if water main pipe 75-200 feet if sanitary sewer main pipe	0-25 feet: prohibited 25-75 feet if water main pipe 75-200 feet if sanitary sewer main pipe
Land Disposal Of Treated Wastes		
Irrigation of wastewater	200	400
Land application of solid wastes ³	200	400
Other		
Cesspools & earth pit privies	200	400
Concrete vaults & septic tanks	100	200
Lagoons	400	1000
Mechanical wastewater treatment plants	200	400
Soil absorption fields	200	400
CHEMICALS:		
Chemical application to ground surface	100	200
Chemical & mineral storage above ground	100	200
Chemical & mineral storage on or under ground	200	400
Transmission pipelines (such as fertilizer, liquid petroleum, or anhydrous ammonia)	200	400
ANIMALS:		
Animal Pasturage	50	50
Animal Enclosure	200	400
Earthen silage storage trench or pit	100	200

Table A : Separation Distances		
Source of Contamination	Required Minimum Distance From Well, In Feet	
	Deep Well ¹	Shallow Well ¹
Animal Wastes		
Land application of liquid or slurry	200	400
Land application of solids	200	400
Solids stockpile	200	400
Storage basin or lagoon	400	1000
Storage tank	200	400
MISCELLANEOUS:		
Basements, pits, sumps	10	10
Cemeteries	200	200
Cisterns	50	100
Flowing streams or other surface water	50	50
Railroads	100	200
Private wells	200	400
Solid waste landfills and disposal sites ⁴	1000	1000

¹Deep and shallow wells, as defined in 567-40.2(455b): a deep well is a well located and constructed in such a manner that there is a continuous layer of low permeability soil or rock at least 5 feet thick located at least 25 feet below the normal ground surface and above the aquifer from which water is to be drawn. A shallow well is a well located and constructed in such a manner that there is not a continuous layer of low permeability soil or rock (or equivalent retarding mechanism acceptable to the department) at least 5 feet thick, the top of which is located at least 25 feet below the normal ground surface and above the aquifer from which the water is to be drawn.

²The separation distances are dependent upon two factors: the type of piping that is in the existing sewer or drain, as noted in the table, and that the piping was properly installed in accordance with the standards.

³Solid wastes are those derived from the treatment of water or wastewater. Certain types of solid wastes from water treatment process may be land-applied within the separation distances on an individual, case-by-case basis.

⁴Solid waste means garbage, refuse, rubbish, and other similar discarded solid or semisolid materials, including but not limited to such materials resulting from industrial, commercial, agricultural, and domestic activities.

6-14-3 NONCONFORMING USES. The use of the structures or facilities existing as of the date of adoption of this Ordinance may be continued even though such use may not conform with the regulations of this article, in other words may be located within the distances set forth. However, such structure or facility which is not in conformance with the terms of this Ordinance, may not be enlarged, extended, reconstructed, or substituted subsequent to the date of this adoption of this Ordinance.