CHAPTER 90

WATER WELL PROTECTION

90.01 Definitions
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90.03 Exception
90.04 Nonconforming Uses

90.01 DEFINITIONS. The following terms are defined as used in this chapter:

1. "Deep public well" means a public well located and constructed in such a manner that there is a continuous layer of low permeability soil or rock at least five feet thick located at least 25 feet below the normal ground surface and above the aquifer from which the water is drawn.

2. "Shallow public well" means a public well located and constructed in such a manner that there is not a continuous layer of low permeability soil or rock at least five feet thick located at least 25 feet below the normal ground surface and above the aquifer from which the water is drawn.

90.02 APPLICATION. No structure or facility of the enumerated types set out in the following Table A shall be located within the distances set forth in said Table from public wells within the City.

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 and industrial discharges	400	400
Water treatment plant wastes	50	50
Well house floor drains	5	5
Sewers and Drains[2]		
Sanitary and 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 – 1,000 feet if water main or sanitary sewer pipe	0 – 75 feet: prohibited 75 – 400 feet if water main pipe 400 – 1,000 feet if water main or sanitary sewer main pipe
Water plant treatment process wastes that are treated onsite	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 pipe	0 – 25 feet: prohibited 25 – 75 feet if water main pipe 75 – 200 feet if sanitary sewer main pipe
Well house floor drains to sewers	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
Well house floor drains to surface	0 – 5 feet: prohibited 5 – 50 feet if sanitary sewer pipe	0 – 5 feet: prohibited 5 – 50 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 and earth pit privies	200	400
Concrete vaults and septic tanks	100	200
Lagoons	400	1,000
Mechanical wastewater treatment plants	200	400
Soil absorption fields	200	400

SOURCE OF CONTAMINATION	REQUIRED MINIMUM DISTANCE FROM WELL, IN FEET	
	Deep Well[1]	Shallow Well[1]
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
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	1,000
Storage tank	200	400
MISCELLANEOUS:		
Basements, pits, sumps	10	10
Cemeteries	200	200
Cisterns	50	100
Flowing streams or other surface water bodies	50	50
Railroads	100	200
Private wells	200	400
Solid waste landfills and disposal sites[4]	1,000	1,000

[1] Deep and shallow wells, as defined in IAC 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 five3 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 five feet thick, the top of which is located at least 25 feet below the normal ground surface and above the aquifer from which water is to be drawn.

[2] The 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.

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

[4] Solid 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.

90.03 EXCEPTION. Proscriptions set forth in Table A apply to all public water wells existing within the City except public water wells formerly abandoned for use by resolution of the Council.

90.04 NONCONFORMING USES. The use of structures or facilities existing as of the date of adoption of Ordinance No. 85-267 may be continued even though such use may not conform to the regulations in this chapter; in other words, such uses may be located within the distances set forth. However, such structure or facility that is not in conformance with the terms of this chapter may not be enlarged, extended, reconstructed, or substituted subsequent to the such date.

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