

## 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 <sup>1</sup>  | Shallow Well <sup>1</sup>  |
| <b>WASTEWATER STRUCTURES:</b>        |   |  |
| Point of Discharge to Ground Surface |   |  |
| Sanitary & industrial discharges     | 400   | 400  |
| Water treatment plant wastes         | 50  | 50   |
| Well house floor drains              | 5   | 5  |
| Sewers & Drains <sup>2</sup>         |   |  |
| Sanitary & storm sewers, drains      | 0-25 feet: prohibited<br>25-75 feet if water main pipe<br>75-200 feet if sanitary sewer pipe                  | 0-25 feet: prohibited<br>25-75 feet if water main pipe<br>75-200 feet if sanitary sewer main pipe                  |
| Sewer force mains                    | 0-75 feet: Prohibited<br>75-400 feet if water main pipe<br>400-1000 feet if water main or sanitary sewer pipe | 0-75 feet: Prohibited<br>75-400 feet if water main pipe<br>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 <sup>1</sup>  | Shallow Well <sup>1</sup>   |
| Water plant treatment process wastes that are treated on site                       | 0-5 feet: prohibited<br>5-50 feet if sanitary sewer pipe  | 0-5 feet: prohibited<br>5-50 feet if sanitary sewer main pipe                                     |
| Water plant wastes to sanitary sewer  | 0-25 feet: prohibited<br>25-75 feet if water main pipe<br>75-200 feet if sanitary sewer main pipe | 0-25 feet: prohibited<br>25-75 feet if water main pipe<br>75-200 feet if sanitary sewer pipe      |
| Well house floor drains to sewers   | 0-25 feet: prohibited<br>25-75 feet if water main pipe<br>75-200 feet if sanitary sewer main pipe | 0-25 feet: prohibited<br>25-75 feet if water main pipe<br>75-200 feet if sanitary sewer main pipe |
| <b>Land Disposal Of Treated Wastes</b>  |   |   |
| Irrigation of wastewater  | 200   | 400   |
| Land application of solid wastes <sup>3</sup>                                       | 200   | 400   |
| <b>Other</b>  |   |   |
| 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   |
| <b>CHEMICALS:</b>   |   |   |
| 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   |
| <b>ANIMALS:</b>   |   |   |
| 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 <sup>1</sup>                       | Shallow Well <sup>1</sup> |
| <b>Animal Wastes</b>                                  |  |                           |
| 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                       |
| <b>MISCELLANEOUS:</b>                                 |  |                           |
| 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 <sup>4</sup> | 1000   | 1000                      |

<sup>1</sup>Deep 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.

<sup>2</sup>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.

<sup>3</sup>Solid 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.

<sup>4</sup>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.

**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.