**Section 653.118 Protection of Community Water Supply Structures**

a) Information defining the location of the proposed raw water source shall be submitted.

b) The area of the site shall be sufficient to prevent adjacent structures from impairing the safety of the supply.

c) The following items shall be taken into consideration to protect water supplies from the entrance of contamination:

1) Sources of contamination include but are not limited to: privies; septic tanks; cesspools; sewers (storm, sanitary, combined and sewer service connections); subsurface seepage-disposal lines; pits or ponds receiving fluids such as surface waters, oils, and grease; and flood waters.

2) Structures to be protected include but are not limited to: wells; clear water reservoirs such as pressure equalizing reservoirs, collecting reservoirs, finished water clear wells; suction lines; gravity filters; iron removal, chlorine reaction and wet salt storage basins.

3) Minimum distances from sources of pollution are given in Table A for clay and loam soils. Minimum distances shall be increased when structures are to be located in more pervious soils. For example, the minimum distances shall be doubled when more pervious soils, such as sand and gravels, are present.

Table A – MINIMUM DISTANCES FROM SOURCES OF POLLUTION

FOR CLAY OR LOAM SOILS

|  |  |
| --- | --- |
| Cesspools, leaching sewage disposal pits  | 150' |
|  |  |
| Privies  | 150' |
|  |  |
| Septic tanks and subsurface septic tanks effluent disposal title  | 75' |
|  |  |
| Livestock, grazing areas or feedlots  | 50' |
|  |  |
| Sewers (non-watertight)  | 50' |
|  |  |
| Sewers (cast iron pipe, with leaded or mechanical joints)  | 25' |
|  |  |
| Sewers (extra-heavy cast iron pipe, asbestos-cement pressure pipe prestressed concrete pipe, or PVC pipe meeting water main standards, with pressure tested, leaded, mechanical or slip-on joints  | 10' |
|  |  |
| Washwater sumps of reinforced concrete construction  | 10' |
|  |  |
| Flood waters – A horizontal distance shall be maintained by natural earth or fill. In addition, wells shall have six inch concrete envelope completely surrounding the regular casing and extending at least 10 feet below original ground surface  | 15'\* |
|  |  |
| Flood waters – A vertical distance shall be maintained to which structure and earth protection must be carried above maximum high water elevation  | 2' |
|  |  |
| \* The Agency shall consider special structural arrangements equivalent to earthen construction for protection of the well when horizontal earth protection is impractical. |  |

d) Community water supplies having fuel storage tanks shall provide protection of all underground water works facilities from leaks which may develop or occur in the fuel tanks or fuel lines.