

## ATTACHMENT A

### **Susceptibility Analysis, Protective Strategies and Proposed Consumer Confidence Report Language for the Village of West Unity**

#### **Susceptibility Analysis:**

The aquifer that supplies drinking water to the Village of West Unity's wellfield has a low susceptibility to contamination. This determination was made because of the following reasons:

- < A confining layer of glacial till over 60 feet thick is present between the ground surface and the aquifer, offering significant protection from contaminant movement from the ground surface to the aquifer;
- < The depth to water in the sand and gravel aquifer is greater than 30 feet below the ground surface; and
- < The water quality results do not indicate that contamination has impacted the aquifer.

Water quality data collected to meet public water supply requirements provide a direct measurement for the presence of contamination in drinking water. Water quality data were evaluated using the drinking water compliance database available at Ohio EPA. The available water quality data do not indicate that contamination has impacted the shallow aquifer. Because the compliance sampling requirements are for treated water, the lack of water quality impacts is not a certain indication of the lack of contamination. This determination is limited by the sampling that is performed for the water system.

The Village of West Unity has identified 11 potential contaminant sources that lie within the determined wellhead/source water protection area for the wellfield, eight of which are within the inner management one, or one-year time-of-travel zone. The types of potential contaminant sources present include underground and above-ground storage tanks, industrial facilities, roadways, septic systems, and sanitary sewers.

Consequently, the production aquifer is protected by the confined nature of the aquifer. However, the numerous potential contaminant sources suggest that there is a potential for contamination to impact the drinking water supply, especially by direct pathways through the confining layer.

### **Protective Strategies:**

Protective strategies are activities that help protect a drinking water source from becoming contaminated or further contaminated. Implementing these activities can provide a number of long-term benefits, including protecting the health of the consumers; preserving water resources for future generations; avoiding the expense of cleaning up a contaminated water supply or finding alternative sources of water; and preserving or enhancing the economic value of the area by securing an abundant supply of clean water.

The Village of West Unity outlined some protective strategies in the 2001 report "*Wellhead Protection Plan*," prepared by the Bennett & Williams. Additional recommendations include:

**Educational Outreach:** Informing people who live, work, or own property within your protection area about the benefits of drinking water protection is very important. Although some communities develop their own educational outreach resources, assistance is available at no cost from various agencies. For example, staff from Ohio EPA's Office of Pollution Prevention can visit businesses (free of charge) and provide recommendations on how they can modify their processes, materials and practices to generate less pollution in a cost-effective and technically feasible manner. County agricultural extension agents, who are skilled at assisting farmers with technical issues, can provide advice on reducing the risk of contaminating the water supply (through proper application rates, enrollment in conservation reserve programs, and other management practices). Homeowners should also be made aware of the potential threat they can pose to the water supply. For more information on available brochures and educational information please contact the Wellhead/Drinking Water Protection staff at (614) 644-2752.

**Zoning Ordinances:** A water protection zoning ordinance is a regulatory control that typically places some restrictions or standards on activities conducted within a specified zone (in this case, the wellhead/drinking water source protection area). Such ordinances enable the municipality to require people who live or work in this area to avoid contaminating the source of the municipality's drinking water. Ordinances can help ensure best management practices are being employed at local businesses and can help reduce the volume of contaminants stored within the protection area. The Village of West Unity may want to consider working with Williams County and Brady Township to develop a zoning overlay that requires specific standards for chemical storage, handling of waste materials, and other source control strategies. Several communities in Ohio have enacted very successful water protection ordinances. Copies can be obtained by contacting Craig Smith at (614) 644-3144.

**State Routes 20, 127 and Ohio Turnpike:** There is a potential for spills along State Routes 20, 127 and the Ohio Turnpike. The Village of West Unity may want to consider contacting the local fire department and local emergency planning agency about the location

of the protection area, so that strategies can be developed to avoid spilled materials impacting the aquifer. The Village of West Unity may also consider placing signs on State Routes 20 and 127 indicating the area is a protection area (information on how to receive free signs from the Ohio Department of Transportation is attached to this letter). Posting the telephone number of the local fire department near telephones is another protection strategy the Village could consider.

The Village of West Unity should select protection strategies from the above listed recommendations and incorporate them into a drinking water source protection plan. A guidance document that describes how to develop a protection plan is attached to this letter.