

CITY OF HARBOR SPRINGS WELLHEAD PROTECTION PROGRAM PLAN

I. PURPOSE AND SCOPE

The purpose of the City of Harbor Springs Area Wellhead Protection Program is to protect the City's public water supply system from contamination. This protection is provided by determining the groundwater areas that contribute to the existing municipal wells. This area is called the wellhead protection area (WHPA). Once the wellhead protection area is defined, existing and potential sources of groundwater contamination within the area are identified. Finally, methods to manage the wellhead protection area and minimize the threat to existing and future municipal water supply wells are considered and implemented if appropriate.

The MDEQ's Wellhead Protection Program was developed in response to the 1986 Amendments to the Federal Safe Drinking Water Act. This Wellhead Protection Program is voluntary and is implemented on a local level through coordination of a Wellhead Protection Team consisting of local representatives.

Guidelines have been established for the Wellhead Protection Program by the Water Division of the MDEQ. The Wellhead Protection Program (WHPP) being developed for City of Harbor Springs is based on these MDEQ guidelines.

MDEQ WHPP guidelines include the following seven major elements, which are detailed in this written plan:

- Wellhead protection area delineation
- Potential sources of groundwater contamination
- Wellhead protection area management
- Contingency plans
- New wells evaluation
- Roles and responsibilities
- Public participation and education

The lead agency for the WHPP is City of Harbor Springs. The City has been actively pursuing wellhead protection activities since 2001, when a formal wellhead protection program was initiated by completing an investigation of its existing municipal well fields, compiling data which described hydrogeologic conditions and groundwater flow directions, and identifying existing and potential sources of contamination upgradient of its existing well field location. In 2002, the City completed the delineation of the wellhead protection areas for the City's four production wells.

The City's Wellhead Protection Areas are illustrated in Figure 1. As illustrated in Figure 1, the WHPAs for the well fields extend to the north/northeast, into West Traverse, Little Traverse, Pleasantview and Friendship Townships. A map of the WHPA is located at the MDEQ Water Division, Wellhead Protection Unit website (www.michigan.gov/deq and search for "Wellhead Protection Maps").

This written plan also identifies several known and potential sources of contamination within and near the WHPA. Since the 10-year delineated wellhead protection area is located, in part, in the adjacent Township jurisdictions, the implementation and long-term success of the program will depend on the inter-governmental cooperation of the adjacent communities, and on the voluntary assistance of landowners within the WHPA.