

Meeting Agenda
January 12, 2010

Public Hearing Regarding City's Wellhead Protection Plan to be held at 6:30. Executive Summary and map are included in this packet for this Public Hearing. Aaron Meyer of Minnesota Rural Water Association will be our guest speaker and will be available to answer questions regarding the Wellhead Protection Plan.

1. Call to Order
2. Pledge of Allegiance
3. Consent Agenda
 1. Meeting Minutes-December 2009*
 2. Financial Reports
 1. Cash Balance Statement and Balance Sheet*
 2. Outstanding Checks and Deposits in Transit*
 3. Claims List for Approval*
 4. Accounts Receivable Report*
 5. 2009 Summary Financial Statement*
 3. Fire Department Summary*
4. Presenters, Requests and Complaints
5. Staff Reports
 1. Maintenance Report*
 2. Clerk's Report-Verbal
 3. Mayor's Forum
 4. Committee Reports
6. Unfinished Business
 1. Fire Department Clarification*
7. New Business
 1. Resolution #10-001 Official 2010 Designations*
 2. 2010 Committee Member Appointments*
 3. Fire Department Member Applications
 4. Fire Chief Pay Raise
 5. Department of Transportation Maintenance Agreement*
 6. MPFA Agreement Amendment*

Packet Item Contents

Executive Summary

The Wellhead Protection (WHP) plan for the City of Hewitt presents the actions that will be taken to manage potential contamination sources that may present a risk to the quality of the community's drinking water. The following goal has been identified to achieve this –

Promote public health, economic development and community infrastructure by ensuring a potable drinking water supply for all residents of the community, now and into the future.

The following objectives have been developed to support these goals –

- Create awareness and general knowledge about the importance of WHP in the Hewitt Community and the City of Hewitt DWSMA.
- Properly inventory and manage potential contaminant sources to protect the drinking water supply for the City of Hewitt.
- Gather additional information within the DWSMA in order to better understand the size and vulnerability of the DWSMA.
- Effectively track and report the implementation efforts and wellhead protection plan progress to all governing authorities.
- Manage the Inner Wellhead Management Zone to prevent contamination of the aquifer near the public supply wells.
- Effectively prepare the City of Hewitt for disruptions to the water distribution system.

This plan was approved by the Minnesota Department of Health (MDH) under authority granted by Minnesota Statutes, section 103I.101, subdivision 5 and through Minnesota Rules Chapter 4720.5510 to 4720.5590 relating to WHP planning. Implementation by the City of Hewitt is required by these rules and must begin within 60 days from the date the plan was approved by the MDH.

The City of Hewitt relies on one primary and one emergency backup water supply well. The following table summarizes the vulnerability of the city's wells and the source water aquifer to contamination. The city wells are considered to have a low level of aquifer vulnerability because the aquifer is protected by a significant thickness of clay-rich till and is not quickly recharged by surface water. The construction method used for Well 1 (cable tool construction with no grout drawn into the annular space) does not meet current code requirements, resulting in a construction vulnerability rating of high for this well. However, the cable tool construction method generally results in very little annular space, and it is possible that clay minerals present in the till that overlies the city's aquifer could swell to fill this space.

Table ES-1. Wells Used by the City of Hewitt

Well Number	Unique Number	Well Use	Aquifer Type	Well Depth (feet)	Construction Vulnerability	Aquifer Vulnerability
1	221436	Emergency	Sand and Gravel	150	High	Low
2	702887	Primary	Sand and Gravel	177	Low	Low

The Drinking Water Supply Management Area (DWSMA) is shown in Figure 1 and is the focus of this plan. The vulnerability of the DWSMA to contamination is based upon an assessment of the 1) geologic protection covering the aquifer, 2) rate at which the aquifer is recharged, and 3) groundwater chemistry including the presence of contaminants of human origin.

Table ES-2 presents the priorities that the City of Hewitt has assigned to managing potential contamination sources that have been inventoried within its DWSMA. The inventory was based on 1) the DWSMA vulnerability, 2) information contained in various state agency databases, and 3) information that the city collected about current and historical land uses. Potential contamination sources that were assigned a high risk were given priority for inventory in the highly vulnerable portion of the DWSMA. The risk assigned to a potential source was based on the 1) quantity of a potential contaminant attributed to the source and 2) contaminant’s toxicity to people.

Table ES-2. Priority Assigned to Types of Potential Contamination Sources

Potential Contamination Sources within DWSMA	Priority Assigned by the Public Water Supplier	Point source – number
Municipal Water Supply Wells	High	2
Drilled Domestic Well (inactive, unsealed)	High	1

The following table illustrates the WHP measures that the City of Hewitt has identified to meet the goals of its WHP plan. Further discussion of these measures and those of state and local governments are presented in the Objectives and Plan of Action section of this plan.

Table ES-3 Summary of Wellhead Protection Measures Implemented by this Plan

Action Priority	Description	Objective Addressed	Cost	Implementation Time Frame												
				2009	2010	2011	2012	2013	2014	2015	2016	2017	2018			
Action 1	The City of Hewitt will notify the residents and businesses in Hewitt that the City has an approved wellhead protection plan and share with them the general themes included in the plan. The City will share this information via their city newsletter and through a newspaper article.	A	Staff Time, \$30	•												
Action 2 Priority	Compile a comprehensive packet of “fact sheets” addressing the potential contaminant sources found within the DWSMA. The packets will be located at the City Offices. Contact your MRWA or MDH Planner for assistance on organizing packets.	A, B	Staff Time, \$30	•	•											
Action 3 Priority	Develop and mail educational materials to the owners of wells within the DWSMA regarding WHP efforts and Best Management Practices (BMPs) they can implement (i.e. well management etc...). Materials to be distributed will come from Action 2.	A, B	Staff Time, \$20	•							•					
Action 4	The City of Hewitt will provide materials for the MRWA Essay and Poster Contest and the MRWA Video Contest to the appropriate teachers at the Bertha - Hewitt Public School and encourage/support their efforts and participation.	A	Staff Time	•	•	•	•	•	•	•	•	•	•	•	•	•
Action 5	The City will post signs along their transportation corridors to notify the public of the location of their DWSMA.	A	Staff Time, \$150-\$200		•	•										
Action 6	The City of Hewitt will provide WHP educational materials on the City’s website.	A	Staff Time		•	•										

Table ES-3 Summary of Wellhead Protection Measures Implemented by this Plan (cont.)

Action Priority	Description	Objective Addressed	Cost	Implementation Time Frame										
				2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Action 7 Priority	<p>Collaborate with the MDH Source Water Protection Unit in the identification of new high-capacity wells that are proposed for construction within the DWSMA or within one mile of the DWSMA. The WHP Manager will alert the MDH Source Water Protection Unit upon learning about the pending construction or use of a high capacity well in this area. Potential impacts will be evaluated by MDH.</p> <p>If a high capacity well is identified within the DWSMA the wellhead protection manager will contact the well owner and provide them a map of the DWSMA and discuss the possible impact the high capacity well might have on the City of Hewitt's drinking water supply.</p>	B	Staff Time	•	•	•	•	•	•	•	•	•	•	•
Action 8	No Class V wells were identified during the potential contaminant source inventory process. However, if the City should locate one within their DWSMA in the future, the City will share the location of the potential Class V well with MDH and follow the recommendations set forth by MDH.	B	Staff Time	On-going										
Action 9	Mail MNDOT and the County Highway Department a map of the DWSMA and ask that they take into consideration this area when they are conducting road maintenance (i.e. storm water or diversions, fuel and construction equipment management and maintenance, chemical use, etc.).	B	Staff Time		•									
Action 10 Priority	Through direct correspondence with the County Emergency Manager, MPCA, and the local fire department and first responders alert them to the location of the DWSMA by providing them a map and inform them of the City of Hewitt's WHP efforts. Request that strong consideration be given to the WHP area when responding to a spill. City staff will conduct a meeting with the first responders to provide them information on the location and vulnerability of the DWSMA.	B	Staff Time		•									
Action 11	The wellhead protection team/manager will continually attempt to locate potential contaminant sources in the DWSMA. This will be accomplished through direct contact with landowners and through visual observation as the WHP team travels through the DWSMA.	B	Staff Time	•	•	•	•	•	•	•	•	•	•	•

Table ES-3 Summary of Wellhead Protection Measures Implemented by this Plan (cont.)

Action Priority	Description	Objective Addressed	Cost	Implementation Time Frame													
				2009	2010	2011	2012	2013	2014	2015	2016	2017	2018				
Action 12 Priority	Maintain the good line of communication between the City, Todd County and Stowe Prairie Township in order to remain abreast of any pending land use changes near the City of Hewitt's DWSMA. The City will request to be notified of any pending land use changes within two miles of their DWSMA boundary, so the City has the opportunity to comment on any pending changes.	A, B	Staff Time	•	•												
Action 13 Priority	The City will incorporate the Hewitt DWSMA in their zoning ordinance and consider this area when making land use decisions.	A, B	Staff Time	•	•												

Table ES-3 Summary of Wellhead Protection Measures Implemented by this Plan (cont.)

Action Priority	Description	Objective Addressed	Cost	Implementation Time Frame														
				2009	2010	2011	2012	2013	2014	2015	2016	2017	2018					
Action 14	The City of Hewitt will verify the locations of wells that are constructed within a two mile radius of the DWSMA as part of the process for amending the city's WHP plan. The MDH will compile and provide the drilling records for newly constructed wells to the City and ask them to verify the locations.	C	Staff Time															
Action 15	The City of Hewitt should work cooperatively with the MDH to conduct an aquifer test prior to amending the city's WHP plan.	C	Staff Time															
Action 16 Priority	Water from City Well 2 (702887) should be analyzed for tritium using an enriched detection method approximately 5 years into implementation of the city's wellhead protection plan.	C	Staff Time															
Action 17 Priority	If future samples from the city's source water show the presence of xylene or any other volatile organic compound, or tritium above 1 TU, the City should undertake one of the following options: Option One – Conduct an investigation to determine if Well 1 is serving as a possible conduit for contaminants to reach the city's aquifer. Most likely this would consist of hiring a licensed contractor to conduct down-hole investigations including video logging and possibly chemical profiling of the well column. The city would be responsible for hiring a licensed contractor to remove the well pump and video log the well, whereas the MDH could assist with chemical profiling of the well water. If the down-hole investigative work determines Well #1 is a possible conduit for contaminants to reach the City's aquifer, the City will seal the well. Option Two - The City will choose not to conduct the down-hole investigative work and instead seal Well #1. Cost share funds may be available via the Todd Co. SWCD to help offset the cost for sealing the well.	C	\$500 - \$2,000	The City will conduct the down-hole investigations or seal Well #1 within one year after any detects of xylene, volatile organic compounds or titium levels above 1 TU in the sourcewater.														

Table ES-3 Summary of Wellhead Protection Measures Implemented by this Plan (cont.)

Action Priority	Description	Objective Addressed	Cost	Implementation Time Frame										
				2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Action 18	Complete an annual report and annually brief the Council on management priorities for the upcoming year and the status of implementation.	D	Staff Time	•	•	•	•	•	•	•	•	•	•	•
Action 19	Conduct a self evaluation every 2.5 years on the wellhead protection progress and submit the report to the MDH Planner.	D	Staff Time			•			•				•	

Table ES-3 Summary of Wellhead Protection Measures Implemented by this Plan (cont.)

Action Priority	Description	Objective Addressed	Cost	Implementation Time Frame										
				2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Action 20	Assist MDH staff in completing the Inner Wellhead Management Zone Inventory for the public water supply wells.	B, E	Staff Time				•						•	
Action 21	Follow all setback requirements for new potential contaminant sources within the IWMZ.	B, E	Staff Time	Annually										
Action 22	Implement the WHP Measures and Findings in the future IWMZ Inventory and Sanitary Survey Reports.	B, E	Staff Time	Annually										
Action 23	<i>Current Inner Wellhead Management Zone WHP Measures</i> - Provide educational materials to the owners of the above ground storage tank located within the Inner Wellhead Management Zone. - If a leak is detected in the sanitary sewer lines located within the Inner Wellhead Management Zone the city will fix the leaks immediately.	B, E	Staff Time	•										
Action 24	Contact your MDH Planner if changes to the locations or construction of potential contaminant sources are proposed in the IWMZ.	B, E	Staff Time	•	•	•	•	•	•	•	•	•	•	•

Table ES-3 Summary of Wellhead Protection Measures Implemented by this Plan (cont.)

Action	Priority	Description	Objective Addressed	Cost	Implementation Time Frame											
					2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Action 25	Priority	Hire an electrician to complete work to make it possible to connect a generator to the water treatment plant to provide power in the case of an emergency where the power is out for an extended period of time.	F	\$2,500 - \$3,000	•	•	•	•								
Action 26		Annually review and update the Contingency Strategy (Appendix IV).	F	Staff Time	•	•	•	•	•	•	•	•	•	•	•	•

The City of Hewitt will prepare an internal assessment of plan implementation every two and one half years and will summarize its progress with plan implementation in the eighth year when the plan amendment process begins. Emphasis in the ninth year will be to prepare an amended plan for submittal to the MDH at the beginning of the tenth year. The amended plan must be approved by the end of the tenth year to ensure that the City of Hewitt always has an approved WHP plan in place.

The cost to the City of Hewitt for supporting plan implementation and amendment will be considered by the city council as part of its annual budgeting process. Furthermore, the costs associated with supporting contingency planning measures that are needed to address an interruption of the city’s water supply are a component of the WHP plan.

The MDH, other state agencies, federal agencies, and Todd County will also provide support to the City of Hewitt to implement various actions that are listed above. Refer to the Support Provided by Local, State and Federal Governments section of this report to identify the types of outside support that can be provided to the City of Hewitt. The City of Hewitt will serve as the contact for enlisting support that is provided by other local governments. Generally, the MDH will serve as the contact for enlisting the support of other state agencies and from federal agencies on a case-by-case basis regarding technical or regulatory support that may be applied to the management of potential contamination sources. Also, MDH will provide technical support to the City of Hewitt for assessing the impacts that contamination releases may present to drinking water quality and for further data collection that is summarized in the preceding table. Participation by other state agencies, federal agencies, and local governments is based on legal authority granted to them and resource availability.