

APPENDIX D: Source Water Assessment & Wellhead Protection Plan

City of Minnetonka Water Resources Management Plan

Wellhead Protection Plan Part II

Inventory of Potential Contaminant Sources and Wellhead Management Strategy

City of Minnetonka, MN

SEH No. MINNE 126941

September 2017



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Wellhead Protection Plan Part II
City of Minnetonka, MN

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September 2017

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Wellhead Protection Plan Part II

Inventory of Potential Contaminant Sources and Wellhead Management Strategy

Prepared for City of Minnetonka, Minnesota

1.0 Introduction

The wellhead protection (WHP) plan for the City of Minnetonka was prepared in cooperation with the Minnesota Department of Health (MDH). It contains specific actions that the City will take to fulfill WHP requirements that are specified under Minnesota Rules, part 4720.5100 to 4720.5590.

The WHP is effective for 10 years after the approval date specified by MDH and the City of Minnetonka is responsible for implementing its WHP plan of action as described in Table 10 of this report. Furthermore, the City will evaluate the status of plan implementation at least every two and one half years to identify whether its WHP plan is being implemented on schedule.

1.1 Report Contents

This report is Part II of a Wellhead Protection Plan for the City of Minnetonka, and includes the following:

- A review and assessment of the data elements.
- The results of the potential contaminant source inventory.
- A review of changes, issues, problems, and opportunities related to the public water supply and the identified potential contaminant sources.
- A detailed discussion of the potential contaminant source management strategies and corresponding goals, objectives, and action plans.
- A review of the wellhead/source water protection evaluation program
- An alternative water supply contingency strategy.

1.2 Appendices Content

Much of the technical information that was used to prepare this plan is contained in the appendices but is summarized in the main body of this plan.

Appendix A contains definitions for technical terms used in this WHP as well as a list of common acronyms used herein. Appendix B contains the Scoping Decision Notice No. 2 along with the assessment of data elements (and supporting data) used to prepare this plan.

Part I of the plan was completed in 2016 and is summarized in Section 2 and is included in Appendix C. In Part I of the plan, the Wellhead Protection Area (WHPA) and Drinking Water Supply Management Area (DWSMA) were delineated, and vulnerability assessments of the wells and corresponding DWSMA were amended based on updated data available on the source water aquifer used by the municipal wells.

Appendix D contains the inventory of potential contamination sources that may present a risk to the city's drinking water.

Appendix E contains the contingency strategy to provide for an alternate water supply if there is a disruption caused by contamination or mechanical failure. .

1.3 General Information

The City of Minnetonka water supply is drawn from eighteen wells that draw water from the Jordan or Prairie du Chien Formations. Well data is shown in Table 1.

**Table 1
Water Supply Well Information**

Well No.	Unique Well No.	Use/ Status	Year Constructed	Casing Diam. (in)	Casing Depth (ft)	Total Depth (ft)	Aquifer Formation	Vulnerability
3	204470	Primary	1963	24/20/16	393	465	Jordan	Not Vulnerable
3A	171021	Primary	1981	30/24/16	254	468	Prairie du Chien-Jordan	Not Vulnerable
6	204054	Primary	1967	24/20/16	394	488	Jordan	Not Vulnerable
6A	208012	Primary	1967	24/20/16/12	397	486	Jordan	Not Vulnerable
10	204140	Primary	1969	24/20/16	305	505	Prairie du Chien-Jordan	Vulnerable
10A	150356	Primary	1981	30/24/16	302	486	Prairie du Chien-Jordan	Vulnerable
11	208014	Primary	1905	24/16	282	498	Prairie du Chien-Jordan	Vulnerable
11A	439797	Primary	1988	24/18	291	492	Prairie du Chien-Jordan	Vulnerable
12	203717	Primary	1971	24/16	332	535	Prairie du Chien-Jordan	Not Vulnerable
12A	191939	Primary	1985	30/24/18	340	506	Prairie du Chien-Jordan	Not Vulnerable
13	205165	Primary	1972	24/16	292	475	Prairie du Chien-Jordan	Vulnerable
13A	132263	Primary	1978	24/16	274	464	Prairie du Chien-Jordan	Vulnerable
14	204537	Primary	1972	24/16	367	555	Prairie du Chien-Jordan	Vulnerable
14A	160021	Primary	1978	24/20/16	395	575	Prairie du Chien-Jordan	Vulnerable
15	208016	Primary	1974	24/16	235	450	Prairie du Chien-Jordan	Vulnerable
15A	150351	Primary	1978	24/16	238	444	Prairie du Chien-Jordan	Vulnerable
16A	661401	Primary	2001	24/18	322	530	Prairie du Chien-Jordan	Vulnerable
16B	661402	Primary	2002	24/18	303	519	Prairie du Chien-Jordan	Vulnerable

2.0 Delineation of the Wellhead Protection Area, DWSMA and Vulnerability Assessments

2.1 WHPA and DWSMA Delineation

The boundaries of the WHPA and DWSMA and the DWSMA vulnerability are shown in Figure 1 and well vulnerability is listed in the table below. A detailed description of the process used for 1) delineating the WHPA and the DWSMA, and 2) preparing the vulnerability assessments of the city water supply well(s) and DWSMA is presented in the Part I report found in Appendix C.

The WHPAs are defined by a 10-year time of travel; the WHPA and DWSMA are shown on Figure 1. Figure 1 shows the emergency response areas (ERAs), which are defined by a 1-year time of travel. The Inner Wellhead Protection Management Zone (IWMZ) is the area within a 200-foot radius around each well. Definitions of rule-specific terms that are used are provided in the Glossary of Terms found in Appendix A.

2.2 DWSMA Vulnerability Assessment

The DWSMA vulnerability for the City of Minnetonka water supply is *moderate*. Moderate vulnerability indicates that vertical recharge to the source water aquifer occurs over a time period of years to several decades. Generally, the higher the vulnerability rating, the greater the risk that a released contaminant may result in contaminated drinking water.

Determination of the DMSMA vulnerability is described in more detail in Part I (Appendix C). Generally, for the City of Minnetonka's DWSMA, the moderate vulnerability assessment is based on being in an area of low geologic sensitivity but have tritium present.

3.0 Data Elements and Assessment

3.1 General Information

The data elements that are included in this plan document the need for the WHP measures which will be implemented to help protect the City's water supply from potential sources of contamination. The City met with representatives from MDH on two occasions to discuss the data elements that are specified in Minnesota Rules, part 4720.5400, for preparing a WHP plan.

The first scoping meeting addressed the data elements needed to support the delineation of the WHPA, the DWSMA, and the well and DWSMA vulnerability assessments. The second scoping meeting discussed the data elements required to 1) identify potential risks to the public water supply and 2) develop effective management strategies to protect the public water supply in relation to the well and DWSMA vulnerability. The results of each meeting were communicated to the City by MDH through a formal scoping decision notice.

The Part 2 data elements are based on the determination that the DWSMA is classified as moderate vulnerability. The Part II scoping notice is included as Appendix B of the WHP. Each data element is required to be assessed for its impact on 1) the use of the public water supply well, 2) delineation of the WHPA, 3) the quality and quantity of water supplying the public water supply wells, and 4) land and groundwater uses within the DWSMA.

3.2 Physical Environment

3.2.1 Precipitation

This data element is not required for consideration due to the moderate vulnerability of the DWSMA.

3.2.2 Geology

Management of the DWSMA must reflect what is known about geologic data; records of geologic materials penetrated by wells, borings, test holes; borehole geophysical records and surface geophysical studies.

A surficial geology map and geologic cross sections are found in the Part I report (Appendix C) and were based on geologic maps and well construction reports. The City has no additional geologic information from logs or borehole geophysical records of wells, borings, or exploration test holes, nor additional information from surface geophysical studies.

Quaternary age glacial deposits comprising of approximately 100 to 250 feet of sand and clay are found in the Minnetonka area. Generally, the depth to bedrock in the Minnetonka area ranges from 100 to 150 feet. However, there are areas in which the depth to bedrock is over 200 feet. The top of bedrock elevation ranges from 700 to 850 feet above mean sea level (MSL). According to the well records of the Minnetonka municipal wells, bedrock was encountered at depths ranging from 91 (Municipal Well 10) to 263 feet (Municipal Well 5).

The first bedrock unit in the north and eastern portion of Minnetonka is the Platteville and Glenwood Formations overlying the St. Peter Sandstone. The Platteville and Glenwood Formations are not present in the south and western portion of Minnetonka where the first bedrock unit is the St. Peter Sandstone. The bedrock formations beneath the St. Peter

Sandstone are (in descending order): the Prairie du Chien Group, the Jordan Sandstone, the St. Lawrence Formation, the Tunnel City (formerly Franconia Formation), the Wonewoc Sandstone (formerly Ironton and Galesville Sandstones), the Eau Claire Formation, and the Mount Simon and Hinckley Sandstones.

A synopsis of the major formations is presented below:

- St. Peter Sandstone: The upper half to two-thirds of the St. Peter Sandstone consists of fine- to medium-grained, friable quartz sandstone. The lower part of the formation contains multi-colored beds of mudstone, siltstone, and shale with interbedded very coarse sandstone. The typical thickness of the St. Peter Sandstone in Hennepin County is approximately 160 feet.
- Prairie du Chien Group is a dolostone that is sandy with minor amounts of shale in the upper third to half, and less sandy in the lower part. The formation is thin-bedded and contains thin beds of sandstone in the upper part, but is more massive- and thick-bedded in the lower part. Regionally, it is typically about 120 feet thick.
- The Jordan Sandstone is a quartzose sandstone approximately 95 feet thick. The upper and middle portions of this formation are comprised of medium- and coarse-grained sandstone. The lower portion is massively bedded. The Prairie du Chien and Jordan are hydraulically connected.
- The St. Lawrence Formation, a dolomitic siltstone and shale is below the Jordan Sandstone, and overlies the Tunnel City (formerly Franconia Formation), a glauconitic sandstone. The Wonewoc Sandstone (formerly Ironton and Galesville Sandstones) comprising of sandstone is found beneath the Tunnel City. The Tunnel City and Wonewoc are hydraulically connected.
- The Eau Claire Formation - a siltstone, shale, and silty sandstone, which acts as a confining unit between the Mount Simon below, and the Wonewoc above. The Mount Simon aquifer consists of the Mount Simon Sandstone. In general, the Mount Simon is hydraulically isolated from the shallow groundwater systems and surface waters above it.

3.2.3 Soils

This data element is not required for consideration due to the moderate vulnerability of the DWSMA.

3.2.4 Water Resources

This data element is not required for consideration due to the moderate vulnerability of the DWSMA.

3.3 Land Use

3.3.1 Parcels & Boundaries

DWSMA management must reflect what is known about parcels, municipal boundaries and descriptions (public land survey data).

Figure 1 shows the City of Minnetonka DWSMA, which extends into numerous municipalities: City of Deephaven, City of Eden Prairie, City of Edina, City of Golden Valley, City of Greenwood, City of Hopkins, City of Plymouth, City of Shorewood, City of St. Louis Park, City of Wayzata, and City of Woodland. This will make it difficult or impossible for the City of Minnetonka to administer some actions and will require cooperation with neighboring municipalities. Parcel boundaries, road centerlines, and U.S. Public Land Survey coordinates were used to define the boundaries of the DWSMA.

3.3.2 Potential Contaminant Sources/Land Use

DWSMA management must reflect what is known about these data elements that include potential contaminant sources, Inventory of Inner Wellhead Management Zone (IWMZ), land use and zoning. The potential contaminant sources that were mapped and inventoried, based on the moderate DWSMA vulnerability, are shown in Table 2.

Table 2 Potential Contaminant Sources Based	
Description	
Above-ground Storage Tanks (greater than 1,100 gallons)	
Leaking Underground Storage Tanks	
Class V wells ¹	
Pipeline Facility	
Potential Contamination Site ²	
Solid Waste Management Site	
Spills	
Storage or Preparation Area	
Suspected Contaminant of Concern	
Underground Storage Tank	
Wells	
Notes	
	¹ Potential Class V wells include: Agricultural Drainage Well, Disposal Well, Industrial Drainage Well, Large Capacity Cesspool, Large Capacity Waste Water Disposal Site, Leaking Underground Storage Tank, Misc. Injection Well, Motor Vehicle Waste Disposal Well, Recharge Well, Reinjection Well, Special Drainage Well, Storm water Injection Well
	² Potential Contamination Sites (PCS) include the following: Brownfields, Delisted State Superfund Sites, Federal Superfund Sites, Hazardous Waste Investigative/cleanup, No Further Remedial Action Planned, State Superfund Sites, Suspected Hazardous Waste Site, Voluntary Investigative Cleanup

Potential contaminant sources were identified from a number of sources including databases maintained by the City of Minnetonka (sprinkling permits), Minnesota Pollution Control Agency (MPCA), and the Minnesota Geological Survey County Well Index (CWI) and the “Old Municipal Well” and Inner Well Management Zone reports prepared by MDH and

Potential Class V Well data set provided by MDH from data maintained by the U.S. Environmental Protection Agency. Potential contaminant source data was compiled into Arcview GIS software format and used to generate maps and data tables.

Figure 2 shows private wells within the DWSMA. Figure 3 shows all other required potential contaminant source site types. The table below summarizes the number of sites by type and status.

Table 3 Potential Contaminant Sources within DWSMA		
Potential Contaminant Source Type	Status	Number of Located Sites Within DWSMA
Wells	Private/Active	1558
	Municipal/Active	18
Underground Storage Tanks	Active	4
Leaking Underground Storage Tank	Closed/Inactive	120
	Active	2
Potential Contamination Site	Inactive	27
	Active	7
Aboveground Storage Tanks (>1100 gallons)	Active	12
Solid Waste Management Site	Inactive/Closed	12
No sites of the following type were identified within the DWSMA: Class V wells, Pipeline Facility, Spills, Storage or Preparation Area, Suspected Contaminant of Concern		

A search of the CWI shows that there are many private wells within the DWSMA. Many are located outside of the City of Minnetonka. Locations of private wells were verified by cross referencing CWI data for wells within the DWSMA with the City of Minnetonka’s database of properties with sprinkling permits. Privately owned wells need to be considered in management of the DWSMA because if not properly constructed, maintained or sealed, private wells may act as a conduit for contamination to enter the subsurface.

A number of underground storage tanks and leaking underground storage tank sites were identified within the DWSMA. However, the number of active Leaking Underground Storage Tank (LUST) sites is minimal compared to the degree of development of the DWSMA. Potential contamination sites and aboveground storage tanks are also present within the DWSMA. All of these sites need to be managed to protect the DWSMA and water supply.

A Comprehensive Land Use Map (Figure 4) shows the wide variety of land use within the DWSMA including residential, commercial, parks and office. The varied land use will make managing the DWSMA a challenge because there are many different land uses to be considered. The primary land use within the DWSMA is single family detached residential.

Land Use	Acres in DWSMA	Portion of DWSMA
Industrial and Utility	289.9	2%
Institutional	869.7	6%
Major Highway	154.7	1%
Mixed Use Residential	395.8	3%
Multifamily	146.9	1%
Office	200.4	1%
Park, Recreational, or Preserve	1549.0	11%
Retail and Other Commercial	545.4	4%
Seasonal/Vacation	7.4	0%
Single Family Attached Residential	358.9	3%
Single Family Detached Residential	8770.6	61%
Undeveloped	1036.2	7%
Total	14324.9	

A Zoning Map (Figure 5) shows the planned or zoned land uses within the DWSMA, for the City of Minnetonka and for municipalities where data was available during preparation of this plan.

3.3.3 Public Utility Services

DWSMA management must reflect what is known about these data elements: transportation routes or corridors, storm sewers, sanitary sewers and public water supply systems, public drainage systems, hazardous liquid pipelines, and existing records of construction, maintenance and use of the public water supply wells and other wells within the DWSMA.

A number of transportation corridors are located within the DWSMA, including I-394 and I-494 and railroad corridors. With major transportation corridors, there is potential for spills of hazardous substances to occur within the DWSMA. Additional sources of spills can occur from known hazardous liquid pipelines. No such hazardous liquid pipelines are depicted by the National Pipeline Mapping System and are therefore not a concern to the DWSMA. Management of the DWSMA will require coordination with and education of emergency response agencies in handling incidents within the DWSMA.

Figure 6 shows those areas served by storm sewer and sanitary sewer. Much of the DWSMA, particularly the area within the City of Minnetonka, is served by sanitary sewer and municipal water systems.

3.4 Water Quantity

3.4.1 Surface Water Quantity

Due to the moderate vulnerability of the DWSMA, this data element is not required to be considered.

3.4.2 Groundwater Quantity

DWSMA management must reflect what is known about groundwater quantity based on wells covered by state appropriate permits, known well interference problems and water use conflicts and list of state environmental boreholes.

Since other high capacity wells in the Minnetonka area influence the groundwater flow field of the source water aquifer, high capacity private and public wells were evaluated and assessed in detail in Part I, during the delineations of the WHPAs for the City's public water supply wells.

In Part I, groundwater pumping information from high capacity wells was obtained from the State Water Use Data System (SWUDS) that is maintained by the DNR. SWUDS data, combined with well construction records from the CWI, were used to identify high capacity wells to be included in delineating the WHPA. The locations and daily volumes were cross checked with those in the Metro Model. The pumping volumes were updated as appropriate.

The primary wells used by the Minnetonka public water supply system currently rely upon two source water aquifers – the Prairie du Chien and Jordan aquifers.

Municipal Wells 3A, 10, 10A, 11, 11A, 12, 12A, 13, 13A, 14, 15, 14A, 15A, 16A and 16B are multi-aquifer wells, open to both the Prairie du Chien and Jordan aquifers. Wells 3, 6, and 6A are completed in the Jordan sandstone aquifer. The existing groundwater wells appear adequate to meet the City's current and future water demand. The City has no immediate plans to replace or add municipal wells, or utilize any other source of water supply.

Currently, there are no known, significant groundwater-use conflicts between the City and other parties nor are there known records of state environmental boreholes.

3.5 Water Quality

3.5.1 Surface Water Quality

Due to the moderate vulnerability of the DWSMA, this data element is not required to be considered.

3.5.2 Groundwater Quality

Management of the DWSMA must reflect what is known about groundwater quality. The following data must be considered:

- Groundwater quality data (bacteriological contamination indicators, water chemistry and isotopic data)
- Groundwater tracer studies
- Known areas of groundwater contamination
- Contaminant spills or releases or property audits identifying contamination.

The City publishes an annual consumer confidence report (Minnetonka Drinking Water Report) that contains water quality data collected over the course of the year. The overall quality of groundwater in Minnetonka is good. No contaminants were detected at levels that violated federal drinking water standards. Some were detected in trace amounts that were below legal limits. The most recent Minnetonka Drinking Water Report is available on the City website.

There are no known groundwater tracer studies available to the City of Minnetonka. A number of potential contaminant source sites have groundwater contamination in the near surface aquifer.

4.0 Impact of Land and Water Use Changes on the Public Water Supply Wells

The city estimates that the following changes to the physical environment, land use, surface water, and groundwater may occur over the ten-year period that the WHP plan is in effect.

Consideration of expected changes is useful to determine whether new potential sources of contamination may be introduced in the future and to identify future actions for addressing these anticipated sources. Land and water use changes may introduce new contamination sources or result in changes to groundwater use and quality. The anticipated changes may occur within the jurisdictional authority of the City, although some may not due to part of the DWSMA being outside of the City boundaries.

The following table describes the anticipated changes to the physical environment, land use, and surface water or groundwater in relationship to 1) the influence that existing governmental land and water programs and regulations may have on the anticipated change, and 2) the administrative, technical, and financial considerations of the City of Minnetonka and property owners within the DWSMA.

**Table 5
Expected Land and Water Use Changes**

Expected Change (Physical Environment, Land Use, Surface Water, Ground Water)	Impact of the Expected Change On the Source Water Aquifer	Influence of Existing Government Programs and Regulations on the Expected Change	Administrative, Technical, and Financial, Considerations due to the Expected Change
No changes to the physical makeup of the aquifer are expected.	No changes, therefore, no impact.	No changes, therefore, existing programs or regulations are adequate.	Because there are no expected changes to the physical makeup of the aquifer no additional administrative, technical or financial considerations required.
No changes are expected in the groundwater sources	No changes, therefore, no impact.	No changes, therefore, existing programs or regulations are adequate.	Because there are no expected changes no additional administrative, technical or financial considerations required.
Land use changes within the DWSMA are anticipated to reflect increasing population density.	No impact anticipated due to per capita water usage decline resulting from water conservation measures.	No changes, therefore, existing programs or regulations are adequate.	Because there are no expected changes no additional administrative, technical or financial considerations required.
Construction of private wells within DWSMA	Private wells have the potential to impact existing public wells and can become a source of contamination.	Current City of Minnetonka regulations require that the owner of any property presently developed for residential use which is not connected to the municipal water system must connect the property at sale or other legal transfer of ownership. All property presently developed for non-residential use must be connected to the municipal water system. Outside of municipal boundaries, the City does not have jurisdiction.	Cooperate with other municipalities for areas outside the City of Minnetonka boundaries.

5.0 Issues, Problems and Opportunities

5.1 Identification of Issues, Problems and Opportunities

The City of Minnetonka has identified water and land use issues, problems and opportunities related to 1) the aquifer used by the city water supply wells, 2) the quality of the well water, or 3) land or water use within the DWSMA.

The City assessed 1) input from public meetings and written comments that it received, 2) the data elements identified by MDH during the scoping meetings, and 3) and the status and adequacy of the city's official controls and plans on land use and water uses, as well as those of local, state, and federal government programs. The results of this effort are presented in the following table which defines the nature and magnitude of contaminant source management issues in the city's DWSMA.

Identifying the issues, problems and opportunities as well as resource needs enables the city to: 1) take advantage of opportunities that may be available to make effective use of existing resources, 2) set meaningful priorities for source management and 3) solicit support for implementing specific source management strategies.

Table 6
Issues, Problems and Opportunities

Issue Identified	Impacted Feature	Problem Associated with the Identified Issue	Opportunity Associated with the Identified Issue	Adequacy of Existing Controls to Address the Issue
The clay-rich geologic materials covering the aquifer are thin, discontinuous, or leaky	Aquifer, Well Water Quality, DWSMA	There is greater potential for contaminants to enter the water supply aquifer	DWSMA management	Cooperation with other municipalities is needed.
The amended DWSMA is significantly larger; the DWSMA extends beyond city boundaries	Aquifer, Well Water Quality, DWSMA	Water is recharging the city's aquifer from lands outside the city limits. The city has no land use controls or authority over these areas.	The city will need to work cooperatively to ensure smart land use decisions are made within the City's DWSMA.	Cooperation with other municipalities is needed.
The detection of tritium indicates some of the City's wells capture young (post-1953) recharge indicating that the aquifer is dominated by young recharge.	Well Water Quality	Tritium results are not uniform for all wells.	Consider working with MDH to develop a sampling program to collect additional general chemistry data and tritium samples and assess groundwater age.	Not applicable

Issue Identified	Impacted Feature	Problem Associated with the Identified Issue	Opportunity Associated with the Identified Issue	Adequacy of Existing Controls to Address the Issue
The Minnesota Department of Health has compiled historical information for use in the planning process in the Old Municipal Well Report	Aquifer, Well Water Quality	Wells which have not been sealed according to MDH standards may provide a pathway for pollutants to enter into the aquifer.	With the assistance of MDH the city can locate, assess and seal the wells if they pose a threat to the city's drinking water supply.	MDH Well Management has the ability to require the city to properly address unused improperly sealed wells. The city can utilize the MDH WHP grant program to seal the wells.
The City of Minnetonka has finite resources and funds to implement the wellhead protection plan.	Aquifer, Well Water Quality, DWSMA	With limited resources implementing the WHP plan will be a challenge for the City of Minnetonka.	Form partnerships with other municipalities, County and State agencies who have controls in the DWSMA so they can help with implementation.	Not applicable
Potential movement of contamination toward the community wells.	Aquifer, Well Water Quality,	If contaminants are detected in a municipal well, the City should work with MDH to perform an evaluation of whether to continue pumping the well. Turning off a well may alter the movement of contaminants to other pumping wells and compound the problem.	Include recommendation in contingency plan.	Not applicable
It is always difficult to foresee or plan for every threat or potential contaminant source which may affect Minnetonka in the future.	Aquifer, Well Water Quality, DWSMA	The City may not be prepared technically or financially to address potential threats unknown to them at this time.	If a critical issue or potential contaminant threat becomes an issue in the future for the City, the city can ask for assistance from the various state agencies to promptly take action to prevent this contaminant source from contaminating their drinking water supply. Grants dollars may also be available to help cover various cost and equipment.	Not applicable
Wellhead protection principles may not be incorporated into other plans developed by the City of Minnetonka or other local government units	Aquifer	Discrepancies may arise between planning efforts	Cooperate with other local government units to incorporate wellhead protection principles into other planning efforts.	Local controls do not address this issue.

5.2 Comments Received

There have been several occasions for local governments, state agencies and the general public to identify issues and comment on the city's WHP plan. At the beginning of the planning process, local units of government were notified that the city was going to develop its WHP plan and were given the opportunity to identify issues, as well as to comment. A public information meeting was held to review the results of the delineation of the WHP area, DWSMA, and the vulnerability assessments. Also, a public hearing was held before the completed WHP plan was sent to MDH for state agency review and approval. No issues were identified during comment periods.

6.0 Existing Authority and Support Provided by Local, State and Federal Governments

In addition to its own controls, the City of Minnetonka will have to rely upon partnerships formed with local units of government, state agencies, and federal agencies with regulatory controls or resource management programs in place to help implement its WHP plan. The level of support that a local, state, and federal agency can provide to help offset the risk that is presented by a potential contamination source will depend up on its legal authority as well as the resources that are available to local governments.

6.1 Existing Controls and Programs of the City of Minnetonka

The City has identified the following legal controls and/or programs that it has in-place that can be used to support the management of potential contamination sources within the DWSMA.

Table 7
Controls and Programs of the City of Minnetonka

Type of Control	Program Description
Zoning Ordinance and Conditional Use Permits	Sets standards and orderly growth of various land uses within the City limits and allows the City to apply permit conditions to land uses they deem necessary.
Connection to City Services (Water and Sewer)	City requires residents to connect to city water and sewer at the time of sale or other property transfer.
Cross Connection Ordinance	Prevents the cross connection between the City's distribution system and private water sources.
Irrigation	Private wells used for irrigation shall be registered and the resident is required to post a furnished yard sign.

6.2 Local Government Controls and Programs

The following departments or programs within Hennepin County may be able to assist the city with issues relating to potential contamination sources that 1) have been inventoried or 2) may result from changes in land and water use within the DWSMA.

Table 8
Local Agency Controls and Programs

Government Unit	Name of Control/Program	Program Description
Local Municipalities	Wellhead Protection Plan	Defines DWSMAs for other communities and their management.
Hennepin County	Well Sealing Cost Share Grant Program.	Offers grants to Hennepin County property owners to recover a portion of the cost they paid to seal wells on their property that are no longer in use
	Natural Resources Interactive Map	Online map application that classifies every acre in the county in terms of land cover and includes detailed information on vegetative cover, natural resource corridors, soils, wetlands, floodplains, geology, topography and the ecological significance of an area that will help landowners learn more about their property and groundwater protection.
	Soil and Water Conservation Services	Provides environmental education and outreach and technical assistance to local governments.

6.3 State Agency and Federal Agency Support

MDH will serve as the contact for enlisting the support of other state agencies on a case-by-case basis regarding technical or regulatory support that may be applied to the management of potential contamination sources. Participation by other state agencies and the federal government is based on legal authority granted to them and resource availability. Furthermore, MDH 1) administers state regulations that affect specific potential sources of contamination and 2) can provide technical assistance for property owners to comply with these regulations.

The following table identifies specific regulatory programs or technical assistance that state and federal agencies may provide to the City of Minnetonka to support implementation of its WHP plan. It is likely that other opportunities for assistance may be available over the ten-year period that the plan is in effect due to changes in legal authority or increases in funding granted to state and federal agencies. Therefore, the table references opportunities available when the city's WHP plan was first approved by MDH.

Table 9

State and Federal Agency Controls and Programs

Government Unit	Type of Program	Program Description
MN Dept. of Health	State Well Code (MR Section 4725)	MDH has authority over the construction of new wells and sealing of wells. MDH staff in the Well Management Program offers technical assistance for enforcing well construction, maintaining setback distances for certain contamination sources, and well sealing.
MN. Dept. of Health	Wellhead Protection	MDH can provide technical and financial assistance to the city for WHP activities and can help identify technical and financial support that other governmental agencies can provide to assist with managing potential contamination sources.
MN Dept. of Natural Resources	Water Appropriation Permitting (MR Section 6115)	DNR can require that anyone requesting an increase in existing permitted appropriations or to pump groundwater must address concerns of the impacts to drinking water if these concerns are include in a WHP plan.
Environment Protection Agency (EPA)	Shallow Disposal Well Program	EPA has the regulatory authority over Class V Injections Well or also known as Shallow Disposal Wells.

7.0 Goals

The City has identified the following goals for implementing its WHP

- Increase public awareness of groundwater problems.
- Promote public health, economic development, and community infrastructure by insuring a potable drinking water supply at reasonable costs for all residents of the community.
- Continue the ongoing collection of data to support future wellhead and source water protection efforts.
- Collaborate, when feasible, to assure that wellhead protection principles are implemented.

8.0 Objectives and Plan of Action

Objectives provide the focus for ensuring that the goals of the WHP plan are met and that priority is given to specific actions that support multiple outcomes of plan implementation.

Both the objectives and the wellhead protection measures (actions) that support them are based on assessing 1) the data elements (Section 3, and Appendix I), 2) the potential contaminant source inventory (Section 3), 3) the impacts that changes in land and water use present (Section 4), and 4) issues, problems, and opportunities related to administrative, financial, and technical considerations (Section 5).

8.1 Objectives

The following objectives have been identified to support the goals of the WHP plan for the City of Minnetonka:

- A. Create awareness and general knowledge about the importance of WHP in the Minnetonka Community and the City of Minnetonka DWSMA.
- B. Properly inventory and manage potential contaminant sources to protect the drinking water supply for the City of Minnetonka.
- C. Effectively track and report the implementation efforts and wellhead protection plan progress to all governing authorities.
- D. Manage the Inner Wellhead Management Zone to prevent contamination of the aquifer near the public supply wells.
- E. Effectively prepare the City of Minnetonka for disruptions to the water distribution system.

8.2 WHP Measures and Action Plan

The WHP team has identified WHP measures that will be implemented by the city over the 10-year period that its WHP plan is in effect. The objective that each measure supports is noted, as well as 1) the lead party and any cooperators, 2) the anticipated cost for implementing the measure, and 3) the year or years in which it will be implemented.

WHP measures reflect the administrative, financial, and technical requirements needed to address the risk to water quality or quantity presented by each type of potential contamination source. Not all of these measures can be implemented at the same time, so the WHP team assigned priority to each. A number of factors must be considered when WHP action items are selected and prioritized (part 4720.5250, subpart 3):

- Contamination of the public water supply wells by substances that exceed federal drinking water standards
- Quantifiable levels of contamination resulting from human activity
- The location of potential contaminant sources relative to the wells.
- The number of each potential contaminant source identified and the nature of the potential contaminant associated with each source
- The capability of the geologic material to absorb a contaminant
- The effectiveness of existing controls

- The time required to get cooperation from other agencies and cooperators
- The resources needed: staff, money, time, legal, and technical

Based upon the factors listed above, the WHP team has prioritized WHP measures that will be implemented by the city over the 10-year period that this plan is in effect and assigned an appropriate priority ranking.

The objective that each measure supports is noted as well as 1) the lead party and any cooperators, 2) the anticipated cost for implementing the measure and 3) the year or years in which it will be implemented. The following table lists each measure that it will implement over the ten-year period that the city's WHP plan is in effect, as well as the priority that it has assigned to each measure.

Measure	Priority	Measure	Objective Addressed	City Measure Unless Cooperator is Noted	Cost	Implementation time frame									
						2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
1	High	During the compilation of this Plan, the MGS CWI database and City records were utilized to identify potential wells in the DWSMAs. As future information is gathered regarding new, existing, unused, or abandoned wells within the DWSMAs, the well database/catalog will be updated.	B	MDH	Staff Time	•	•	•	•	•	•	•	•	•	•
2	Medium	The City of Minnetonka will provide WHP educational materials on the City's website and update the page annually. Materials will address general WHP principles and practice and provide best management practices for tanks, private wells, Class V wells and other potential contaminant sources.	A		Staff Time	•	•	•	•	•	•	•	•	•	•
3	High	Update potential contaminant source database periodically as tanks are removed or discovered and sites are closed or land owners or land use changes. This is also help with the next plan amendment.	B	MPCA MDH	Staff Time					•				•	
4	Medium	The City will annually include an article in the City newsletter regarding proper use and management of storage tanks, wells, and Class V wells.	A		\$5,000	•	•	•	•	•	•	•	•	•	•

Measure	Priority	Measure	Objective Addressed	City Measure Unless Cooperator is Noted	Cost	Implementation time frame									
						2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
5	Medium	The City will continue to make the <i>Drinking Water Consumer Confidence Report</i> available to all users of the Minnetonka public water supply. The report provides information regarding the City's public water supply and its water quality.	A		Staff Time	•	•	•	•	•	•	•	•	•	•
6	High	If unused well(s) are located, work with property owner to properly seal well(s). This may include seeking grant funding.	B	MDH Landowners	Dependent on funding	•	•	•	•	•	•	•	•	•	•
7	High	The detection of tritium indicates some of the City's wells capture young (post-1953) recharge indicating that the aquifer is dominated by young recharge. Collaborate with MDH when feasible to develop a sampling program to collect additional general chemistry data and tritium samples and assess groundwater age.	C	MDH	Staff Time							•			
8	Medium	Maintain a "WHP folder" that contains documentation of WHP activities you have completed.	C	MDH	Staff Time	•	•	•	•	•	•	•	•	•	•
9	Medium	Create awareness among city staff about transportation corridor issues that may affect the public water supply and the procedures in place to address spills and prevent released contaminants from entering the municipal water supply.	B	MDH	Staff Time		•		•						

Measure	Priority	Measure	Objective Addressed	City Measure Unless Cooperator is Noted	Cost	Implementation time frame									
						2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
10	Medium	Complete an Evaluation Report a minimum of every 2.5 years that evaluates the “progress of plan of action and the impact of a (any) contaminant release on the aquifer supplying the public water supply well” MN WHP Rule 4720.5270. This evaluation will be shared with the MDH Planner.	C	MDH	Staff Time			•		•		•		•	
11	High	Integrate wellhead protection principles into next update of Comprehensive Guide Plan.	A		Staff Time		•								
12	High	Assist MDH staff in completing future Inner Wellhead Management Zone Inventories for the public water supply wells.	D	MDH	Staff Time							•			
13	High	During update of <i>Water Emergency and Conservation Plan</i> , add provisions that when contaminants are detected in a municipal well, the City should work with MDH to perform an evaluation of whether to continue pumping the well. Turning off a well may alter the movement of contaminants to other pumping wells and compound the problem	E	MDH	Staff Time		•				•			•	
14	Medium	As feasible the City will begin to routinely monitor and record the static and pumping levels of the groundwater in the municipal wells.	B			•	•	•	•	•	•	•	•	•	•

9.0 Evaluation

Plan evaluation is specified under Objective C and provides the mechanism for determining whether WHP action items are achieving the intended result or whether they need to be modified to address changing administrative, technical, or financial resource conditions within the DWSMA. Evaluation is used to support plan implementation and is required under Minnesota Rules, part 4720.5270, and prior to amending the city's WHP plan. The city has identified the following procedures that it will use to evaluate the success of implementing its WHP plan:

1. The WHP team will meet at a minimum every two and one half years to assess the status of plan implementation and to identify issues that impact implementation of action steps throughout the DWSMA.
2. The city will assess the results of each action item that has been taken to determine whether the action item has accomplished its purpose or whether modification is needed.
3. The city will prepare a written report that documents how it has assessed plan implementation and the action items that were carried out. The report will be presented to MDH at the first scoping meeting that it will hold with the city to begin amending the WHP plan.

10.0 Alternative Water Supply Contingency Strategy

The Minnetonka *Water Emergency and Conservation Plan* was completed and approved in 2008.

As required, the Plan was submitted to the MDNR Division of Waters, Appropriation Permit Program and the Metropolitan Council for review and approval. The Plan has been adopted by the City Council and a copy is available online as part of the City's Comprehensive Guide Plan at

http://eminnetonka.com/documents/comprehensive_guide_plan/2030/ch_10_appendix_a.pdf

Figures

Figure 1 – DWSMA, WHPA and ERAs

Figure 2 – ERA and WHPA Capture Zones

Figure 3 – Surficial Geology

Figure 4 – Bedrock Geology

Figure 5 – Typical Geologic Cross Section North - South

Figure 6 – Typical Geologic Cross Section Southwest - Northeast

Figure 7 – Model Boundary Conditions

Figure 8 – Layer 3 Hydraulic Conductivity Zones

Figure 9 – Layer 4 Hydraulic Conductivity Zones

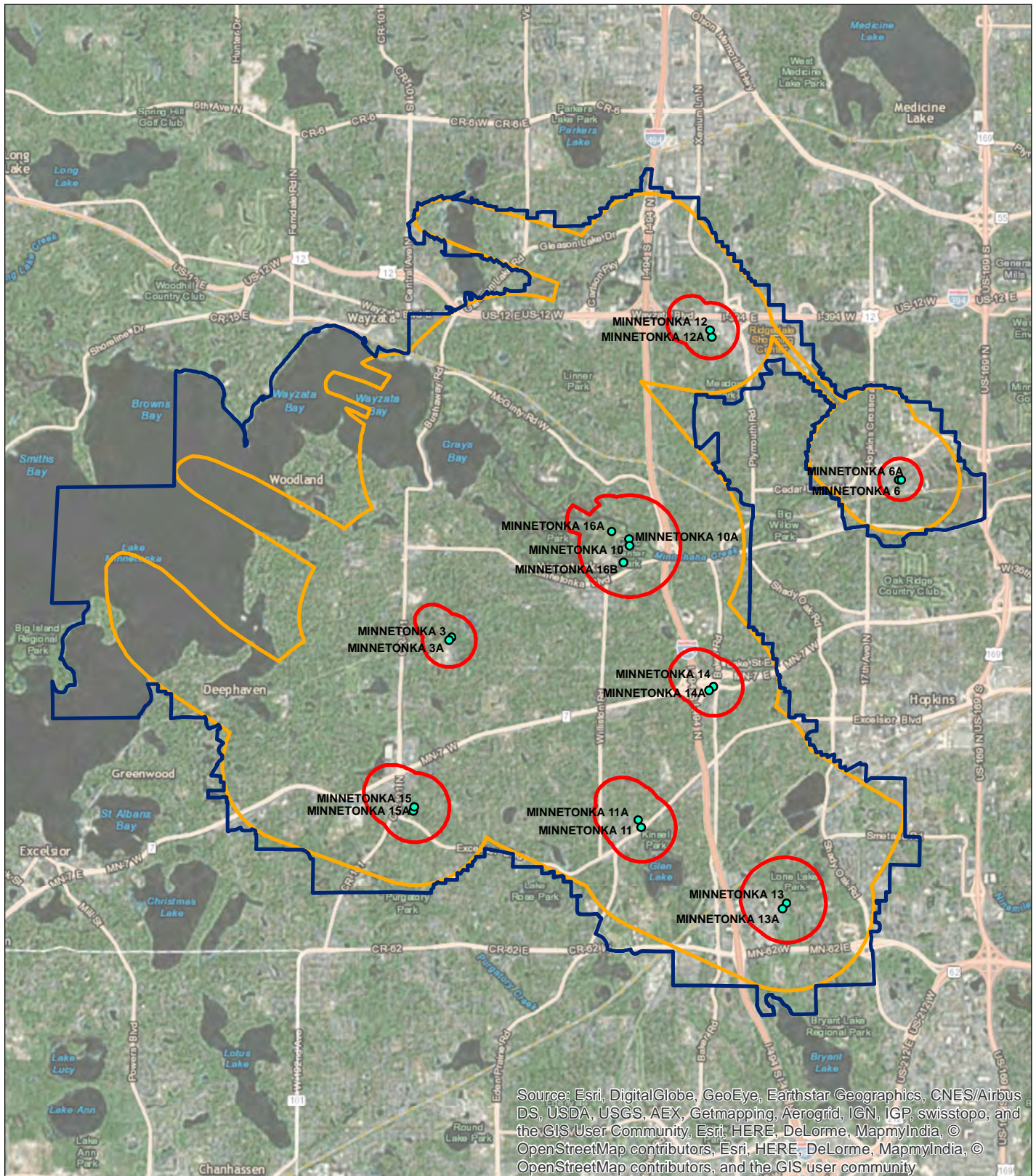
Figure 10 – Layer 3 Groundwater Contours and Calibration Targets


Figure 11 – Layer 4 Groundwater Contours and Calibration Targets

Figure 12 – Geologic Sensitivity

Figure 13 – DWSMA Vulnerability

Figure 14 – Sensitivity Analysis Results





Phone: (612) 701-7343
www.sourcewater-solutions.com

Legend

- Municipal Wells
- Emergency Response Area (ERA)
- Wellhead Protection Area (WHPA)
- Drinking Water Supply Management Area (DWSMA)


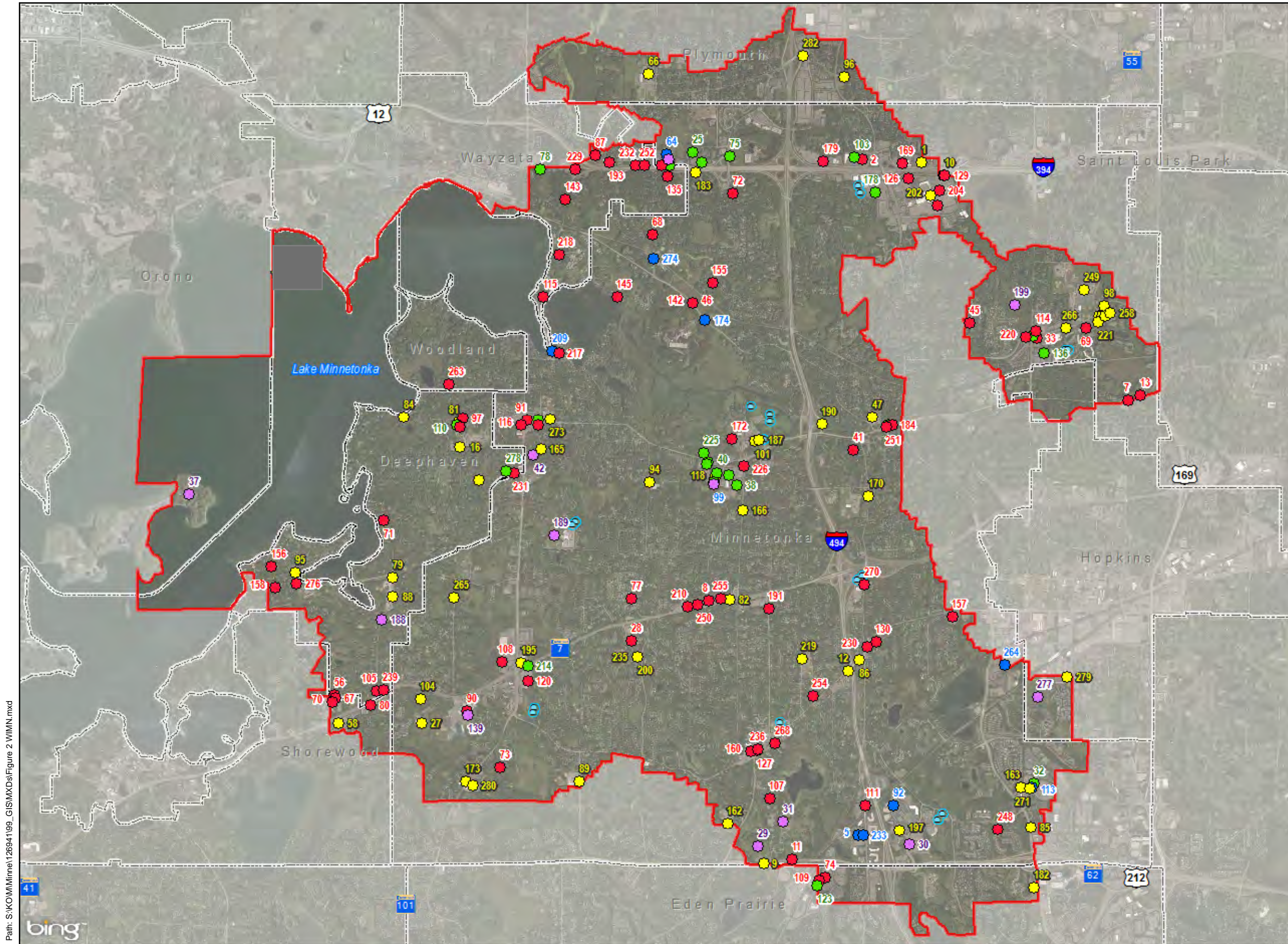


Figure 1
DWSMA, WHPA
and ERAs

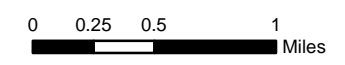
Minnetonka Wellhead
Protection Plan

0 500 1,000 2,000 3,000
Meters



- Legend**
- Drinking Water Supply Management Area
 - City Boundaries
 - 200' IWMZ
 - Minnetonka Wells

- PCSI Type**
- AST - Above Ground Storage Tank
 - UST - Underground Ground Storage Tank
 - LUST - Leaking Underground Ground Storage Tank
 - PCS - Potential Contaminated Source
 - SWMS - Solid Waste Management Site



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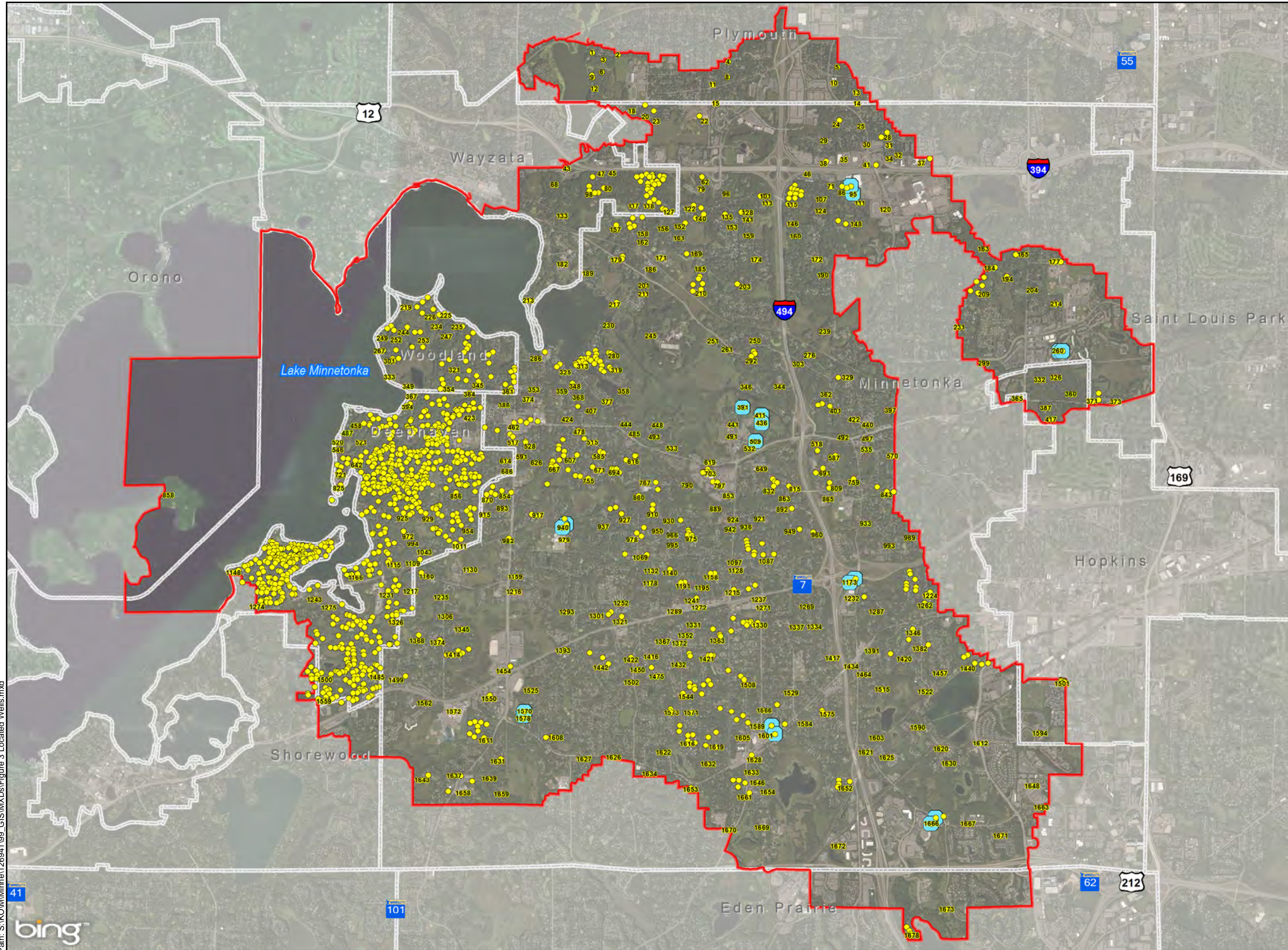
Project: MINNE 126941
Print Date: 8/17/2016

Map by: MSS
Projection: UTM Zone 15, NAD 83
Source: Minnesota Geological Survey,
Minnesota Department of Health, ESRI,
BING, MnDNR

WELLHEAD PROTECTION PLAN Phase II Minnetonka, Minnesota

**W.I.M.N Location
and DWSMA**

**Figure
2**



Legend

- County Wells (Apr 2016)
- Minnetonka Wells
- 200' IWMZ
- Drinking Water Supply Management Area
- City Boundaries

PCSI ID for Wells are ordered North to South
(See Appendix D for full list of Wells)

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0 0.25 0.5 1 Miles

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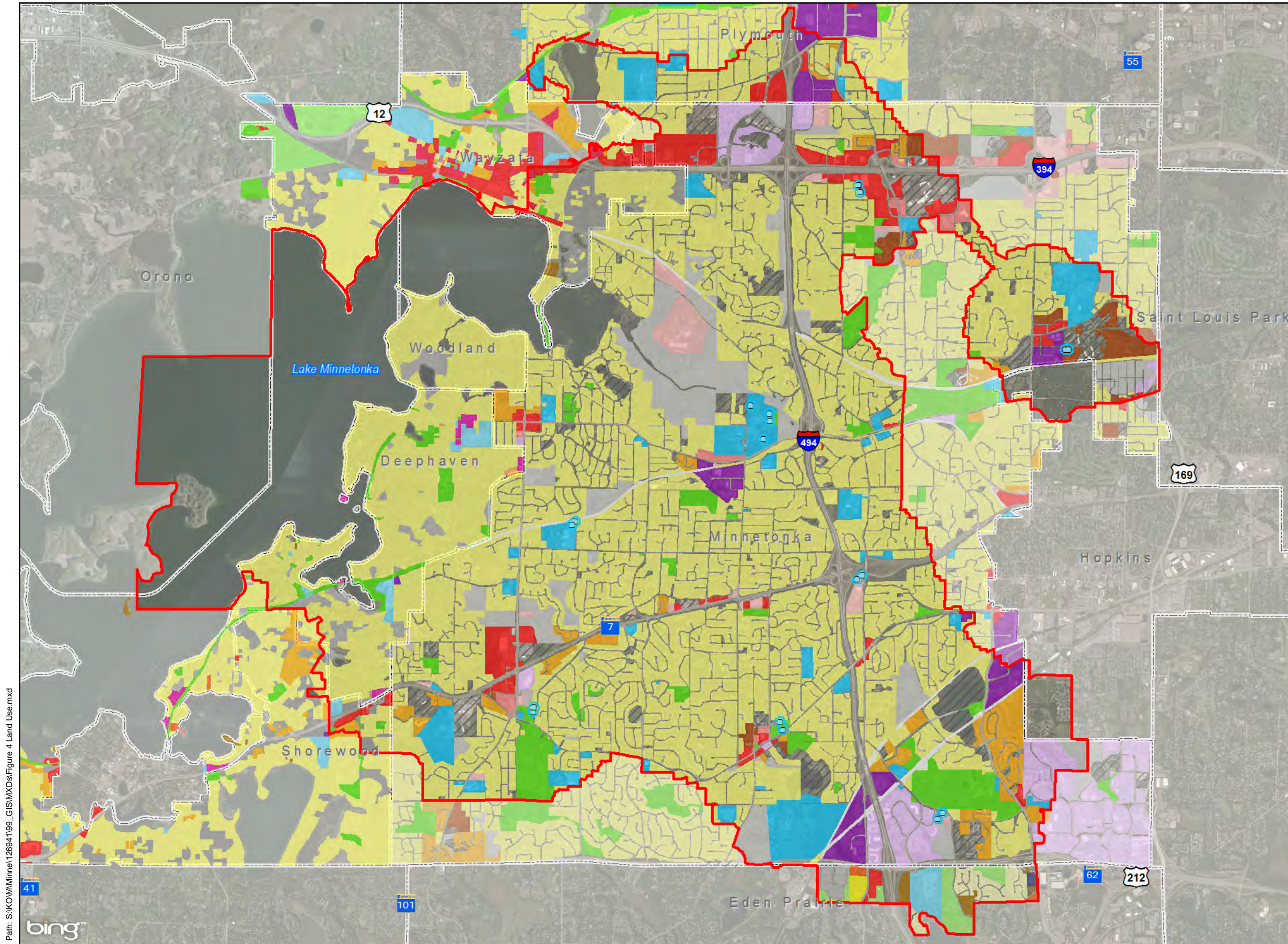
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Projection: UTM Zone 15, NAD 83
Source: Minnesota Geological Survey,
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WELLHEAD PROTECTION PLAN

Phase II

Minnetonka, Minnesota



Legend

- Drinking Water Supply Management Area
- City Boundaries

City of Plymouth Land Use

- Institutional
- Commercial
- Industrial
- Open Space
- Park
- Low Density Housing
- Public
- Medium Density Housing
- Vacant

Land Use Deephaven/Greenwood/Shorewood/Wayzata/Woodland (Met Council)

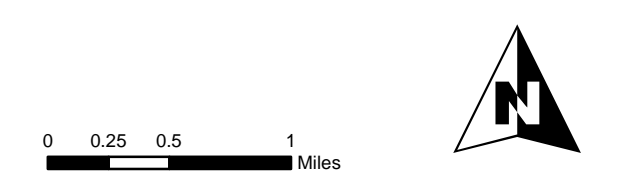
- Golf Course
- Industrial and Utility
- Institutional
- Retail and Other Commercial
- Mixed Use Residential
- Multifamily
- Park, Recreational, or Preserve
- Seasonal/Vacation
- Single Family Attached
- Single Family Detached
- Undeveloped

City of Eden Prairie Land Use

- C-COM
- IND
- LR-2.5
- MR-2.5to10
- N-COM
- OFFICE
- P/OS
- PUB/SEMI-PUB
- REG-COM
- ROW
- Rural/Vacant

City of Minnetonka Land Use (2020)

- No Code
- Commercial
- Industrial
- Institutional
- Mixed Use
- Office
- Open Space
- Parks
- Low Density Residential
- Medium Density Residential
- High Density Residential
- ROW
- Service Commercial
- W



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Project: MINNE 126941
Print Date: 8/16/2016

Map by: MSS
Projection: UTM Zone 15, NAD 83
Source: Minnesota Geological Survey, Minnesota Department of Health, ESRI, BING, MnDNR, Cities of Eden Prairie, Plymouth, Minnetonka and Met Council

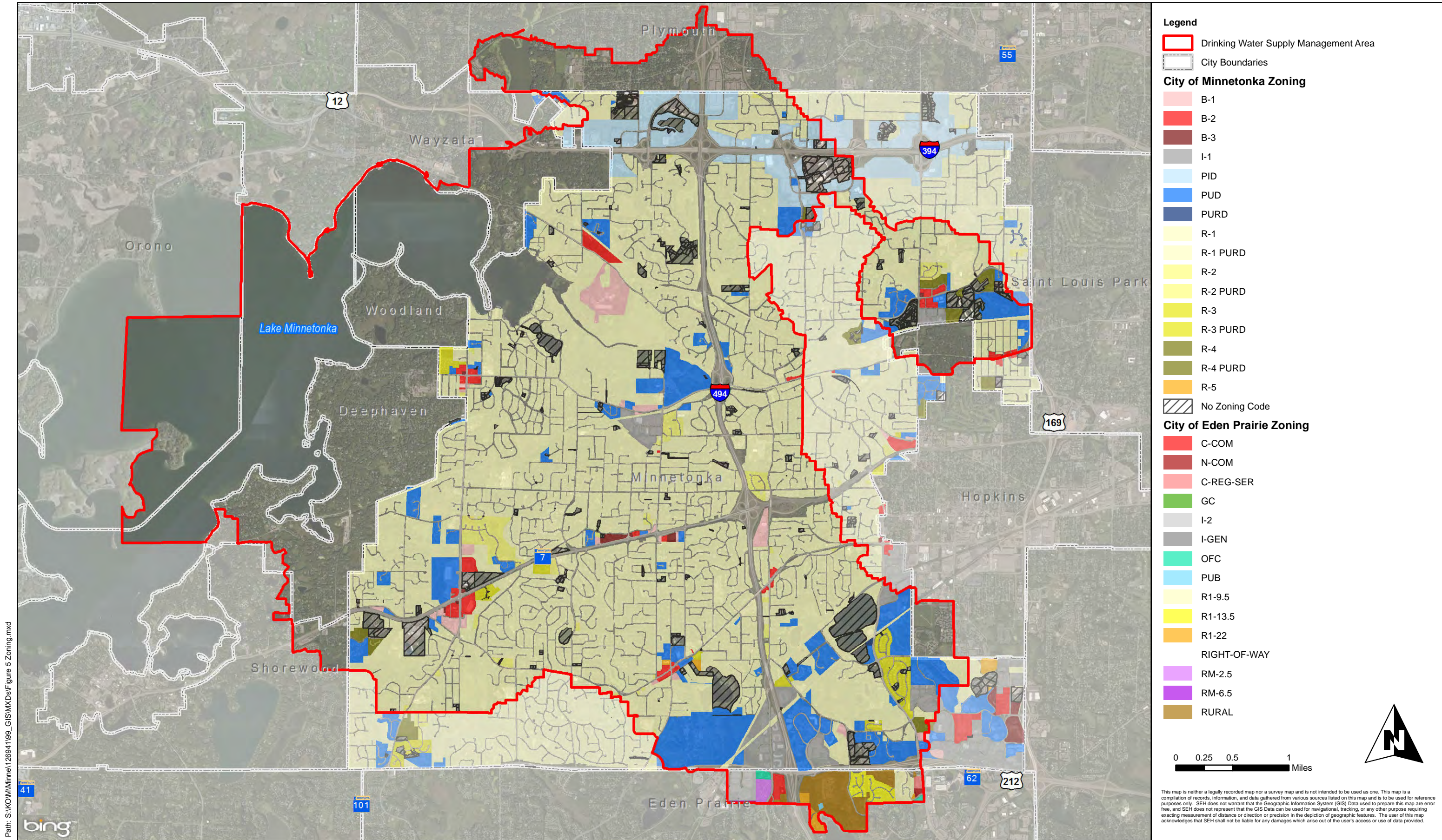
WELLHEAD PROTECTION PLAN

Phase II

Minnetonka, Minnesota

Land Use and DWSMA

Figure 4



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Legend

- Drinking Water Supply Management Area
- City Boundaries

City of Minnetonka Zoning

- B-1
- B-2
- B-3
- I-1
- PID
- PUD
- PURD
- R-1
- R-1 PURD
- R-2
- R-2 PURD
- R-3
- R-3 PURD
- R-4
- R-4 PURD
- R-5
- No Zoning Code

City of Eden Prairie Zoning

- C-COM
- N-COM
- C-REG-SER
- GC
- I-2
- I-GEN
- OFC
- PUB
- R1-9.5
- R1-13.5
- R1-22

RIGHT-OF-WAY

- RM-2.5
- RM-6.5
- RURAL

0 0.25 0.5 1 Miles

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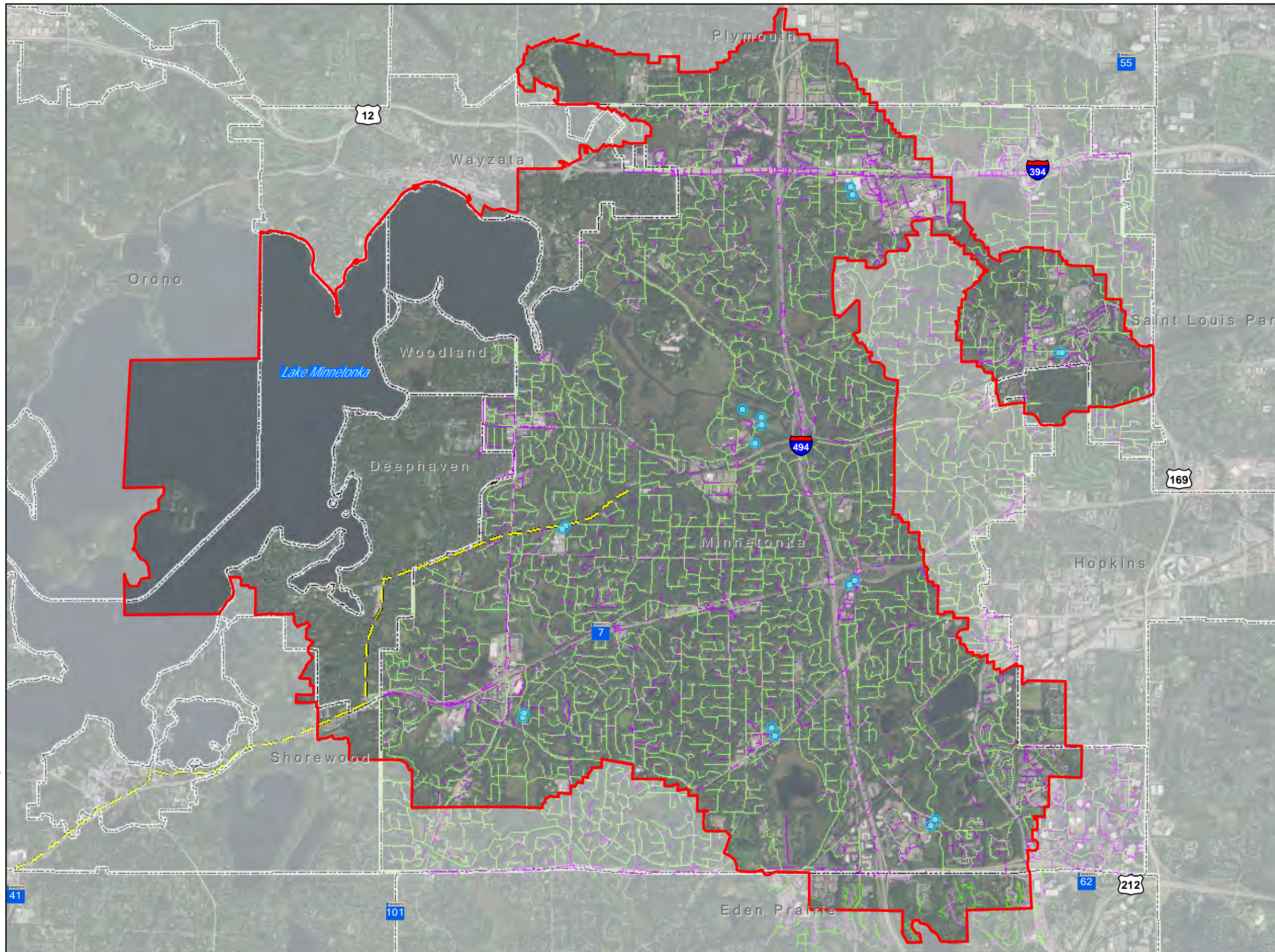
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Print Date: 12/16/2015

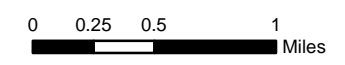
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Source: Minnesota Geological Survey,
Minnesota Department of Health, ESRI,
BING, MnDNR

WELLHEAD PROTECTION PLAN Phase II Minnetonka, Minnesota

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- Legend**
- Drinking Water Supply Management Area
 - City Boundaries
 - Minnetonka Sanitary Sewer
 - Minnetonka Storm Sewer
 - Eden Prairie Storm Sewer
 - Eden Prairie Sanitary Sewer
 - Gas Main
 - Minnetonka Wells
 - 200' IWMZ



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Minnesota Department of Health, ESRI,
BING, MnDNR

WELLHEAD PROTECTION PLAN Phase II Minnetonka, Minnesota

**Utilities
and DWSMA**

**Figure
6**

Appendix A

Glossary of Terms and Acronyms

Glossary of Terms

Data Element. A specific type of information required by the Minnesota Department of Health to prepare a wellhead protection plan.

Drinking Water Supply Management Area (DWSMA). The area delineated using identifiable land marks that reflects the scientifically calculated wellhead protection area boundaries as closely as possible (Minnesota Rules, part 4720.5100, subpart 13).

Drinking Water Supply Management Area Vulnerability. An assessment of the likelihood that the aquifer within the DWSMA is subject to impact from land and water uses within the wellhead protection area. It is based upon criteria that are specified under Minnesota Rules, part 4720.5210, subpart 3.

Emergency Response Area (ERA). The part of the wellhead protection area that is defined by a one-year time of travel within the aquifer that is used by the public water supply well (Minnesota Rules, part 4720.5250, subpart 3). It is used to set priorities for managing potential contamination sources within the DWSMA.

Inner Wellhead Management Zone (IWMZ). The land that is within 200 feet of a public water supply well (Minnesota Rules, part 4720.5100, subpart 19). The public water supplier must manage the IWMZ to help protect it from sources of pathogen or chemical contamination that may cause an acute health effect.

Surface Water Contribution Area (SWCA). In a conjunctive delineation, the geographic area that may provide recharge to the aquifer within the well capture zone, attributed to: 1) the presence of a surface hydraulic feature; and 2) the runoff of precipitation or meltwater.

Wellhead Protection (WHP). A method of preventing well contamination by effectively managing potential contamination sources in all or a portion of the well's recharge area.

Wellhead Protection Area (WHPA). The surface and subsurface area surrounding a well or well field that supplies a public water system, through which contaminants are likely to move toward and reach the well or well field (Minnesota Statutes, section 103I.005, subdivision 24).

Well Vulnerability. An assessment of the likelihood that a well is at risk to human-caused contamination, either due to its construction or indicated by criteria that are specified under Minnesota Rules, part 4720.5550, subpart 2.

Acronyms

CWI	County Well Index
DNR	Minnesota Department of Natural Resources
EPA	United States Environmental Protection Agency
IWMZ	Inner Wellhead Protection Management Zone
MDA	Minnesota Department of Agriculture
MDH	Minnesota Department of Health
MGS	Minnesota Geological Survey
MNDNR	Minnesota Department of Natural Resources
MnDOT	Minnesota Department of Transportation
MPARS	MNDNR Permitting and Reporting System (formerly known as SWUDS)
MPCA	Minnesota Pollution Control Agency
PLS	Public Land Survey
SWCA	Surface Water Contributing Area
SWCD	Soil and Water Conservation District
UMN	University of Minnesota
USGS	United States Geological Survey

Appendix B

Scoping Decision Notice No. 2

COPY



June 27, 2016

Protecting, maintaining and improving the health of all Minnesotans

Mr. Brian Wagstrom, Public Works Director
City of Minnetonka
146000 Minnetonka Boulevard
Minnetonka, Minnesota 55345

Dear Mr. Wagstrom:

Subject: Scoping 2 Decision Notice and Meeting Summary – City of Minnetonka – PWSID 1270031

This letter provides notice of the results of the second scoping meeting held with you and Jim Malone (city of Minnetonka), Suzanne Wojtkiewicz and John Rodeberg (SEH), and me (Minnesota Department of Health) on June 2, 2016, at Minnetonka Public Works regarding Part II of your wellhead protection (WHP) plan. During the meeting, we discussed data elements that must be compiled and assessed to prepare the part of the WHP plan related to the management of potential contaminants in the approved drinking water supply management area. The enclosed Scoping 2 Decision Notice lists the data elements that were discussed at the meeting. The data elements must be compiled and assessed in terms of their present and future implications on the 1) use of the well(s), 2) quality and quantity of water supplying the public water supply well(s), and 3) land and groundwater uses in the drinking water supply management area. We also discussed a summary of planning issues that were identified during the Part I WHP Plan development process which should be considered for inclusion in your Part II WHP Plan.

The city of Minnetonka has not met the requirements to distribute copies of the first part of the WHP plan to local units of government and hold an informational meeting for the public. The city of Minnetonka will have until August 31, 2017, to complete its WHP plan.

If a data element is marked on the enclosed notice as a data element that must be used and it does not exist, it is helpful if your plan notes this. MDH understand SEH will be working with you to develop a draft of the remainder of the WHP plan. I will be contacting you to review the progress of the development of Part II of your plan. If you have any questions regarding the enclosed notice, contact me by email at john.freitag@state.mn.us or by phone at (651) 201-4669.

Sincerely,

A handwritten signature in black ink that reads "John Freitag".

John Freitag, Planner
Source Water Protection Unit
Environment Health Division
P.O. Box 64975
St. Paul, Minnesota 55164-0975

JF:ds-b

Enclosures

cc: ✓ Susanne Wojtkiewicz, Project Manager, SEH
Geraldyn Barne, City Manager, City of Minnetonka
Isaac Bradlich, MDH Engineer, Metro District Office
Ron Struss, Minnesota Department of Agriculture

SCOPING 2 DECISION NOTICE

Moderately Vulnerable DWSMA

Remainder of the Wellhead Protection Plan

Name of Public Water Supply:		Date:
City of Minnetonka (PWSID = 1270031)		June 27, 2016
Name of the Wellhead Protection Manager:		
Mr. Brian Wagstrom, Public Works Director		
Address:	City:	Zip:
11522 Minnetonka Boulevard	Minnetonka	55305
Unique Well Numbers:		Phone:
204470 (Well 3), 171021 (Well 3A), 204054 (Well 6), 208012 (Well 6A), 204140 (Well 10), 150356 (Well 10A), 208014 (Well 11), 439797 (Well 11A), 203717 (Well 12), 191939 (Well 12A), 205165 (Well 13), 132263 (Well 13A), 204537 (Well 14), 160021 (Well 14A), 208016 (Well 15), 150351 (Well 15A), 661401 (Well 16A), 661402 (Well 16B)		(612) 988-8400

Instructions for Completing the Scoping 2 Form

N	R	S	N = Not required. If this box is checked, this data element is NOT necessary for your wellhead protection plan because it is not needed or it has been included in the first scoping decision notice. Please go to the next data element.
X			

N	R	S	R = Required for the remainder of the plan. If this box is checked, this data MUST be used for the "remainder of the plan."
	X		

N	R	S	S = Submit to MDH. If this box is checked, this data element MUST be included in your wellhead protection plan and submitted to MDH.
		X	
If there is NO check mark in the "S" box but there is an "X" in the "R" box, this data element MUST be included in your plan, but should NOT be submitted to MDH. This box will only be checked if MDH does not have access to this data element. This will help to reduce the cost by reducing the amount of paper and time to reproduce the data element.			

DATA ELEMENTS ABOUT THE PHYSICAL ENVIRONMENT

PRECIPITATION			
N	R	S	An existing map or list of local precipitation gauging stations.
X			
Technical Assistance Comments:			
N	R	S	An existing table showing the average monthly and annual precipitation in inches for the preceding five years.
X			
Technical Assistance Comments:			
GEOLOGY			
N	R	S	An existing geologic map and a description of the geology, including aquifers, confining layers, recharge areas, discharge areas, sensitive areas as defined in Minnesota Statutes, section 103H.005, subdivision 13, and groundwater flow characteristics.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about these data elements.			
N	R	S	Existing records of the geologic materials penetrated by wells, borings, exploration test holes, or excavations, including those submitted to the department.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about these data elements.			
N	R	S	Existing borehole geophysical records from wells, borings, and exploration test holes.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect the geology of the area(s).			
N	R	S	Existing surface geophysical studies.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect the geology of the area(s).			
SOILS			
N	R	S	Existing maps of the soils and a description of soil infiltration characteristics.
X			
Technical Assistance Comments:			
N	R	S	A description or an existing map of known eroding lands that are causing sedimentation problems.
X			
Technical Assistance Comments:			

WATER RESOURCES			
N	R	S	An existing map of the boundaries and flow directions of major watershed units and minor watershed units.
X			
Technical Assistance Comments:			
N	R	S	An existing map and a list of public waters as defined in Minnesota Statutes, section 103G.005, subdivision 15, and public drainage ditches.
X			
Technical Assistance Comments:			
N	R	S	The shoreland classifications of the public waters listed under subitem (2), pursuant to part 6120.3000 and Minnesota Statutes, sections 103F.201 to 103F.221.
X			
Technical Assistance Comments:			
N	R	S	An existing map of wetlands regulated under Chapter 8420 and Minnesota Statutes, section 103G.221 to 103G.2373.
X			
Technical Assistance Comments:			
N	R	S	An existing map showing those areas delineated as floodplain by existing local ordinances.
X			
Technical Assistance Comments:			

DATA ELEMENTS ABOUT THE LAND USE

LAND USE			
N	R	S	An existing map of parcel boundaries.
	X	X	
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	An existing map of political boundaries.
	X	X	
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	An existing map of public land surveys including township, range, and section.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			

N	R	S	A map and an inventory of the current and historical agricultural, residential, commercial, industrial, recreational, and institutional land uses and potential contaminant sources.
	X	X	

Technical Assistance Comments: The inventory, mapping and management of land uses and potential sources of contamination for all the Drinking Water Supply Management Areas(s) must reflect what is known about these data elements, as follows:

Moderate Vulnerability - 1) All potential contaminant sources as listed on the attachment, 2) a land use/land cover map and table, and 3) an inventory of the Inner Wellhead Management Zone (IWMZ).

As a starting point, MDH will provide a land cover map and table from federal data bases. This data set must be used unless an alternative electronic data set that is more current and detailed is available. Management strategies must be developed for all land uses and potential sources of contamination.

N	R	S	An existing comprehensive land-use map.
	X	X	

Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.

N	R	S	Existing zoning map.
	X	X	

Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.

PUBLIC UTILITY SERVICES

N	R	S	An existing map of transportation routes or corridors.
	X		

Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.

N	R	S	An existing map of storm sewers, sanitary sewers, and public water supply systems.
	X	X	

Technical Assistance Comments: It is not necessary to include a map of your public water supply system in your plan if you feel it would pose a threat to the security of your system. An existing map of the storm sewers and sanitary sewers in the Drinking Water Supply Management Area(s) must be included in the wellhead protection plan and must also be submitted to MDH as part of the approval.

N	R	S	An existing map of the gas and oil pipelines used by gas and oil suppliers.
	X	X	

Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.

N	R	S	An existing map or list of public drainage systems.
	X		

Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.

N	R	S	An existing record of construction, maintenance, and use of the public water supply well and other wells within the drinking water supply management area.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about these data elements.			

DATA ELEMENTS ABOUT WATER QUANTITY

SURFACE WATER QUANTITY			
N	R	S	An existing description of high, mean, and low flows on streams.
X			
Technical Assistance Comments:			
N	R	S	An existing list of lakes where the state has established ordinary high water marks.
X			
Technical Assistance Comments:			
N	R	S	An existing list of permitted withdrawals from lakes and streams, including source, use, and amounts withdrawn.
X			
Technical Assistance Comments:			
N	R	S	An existing list of lakes and streams for which state protected levels or flows have been established.
X			
Technical Assistance Comments:			
N	R	S	An existing description of known water-use conflicts, including those caused by groundwater pumping.
X			
Technical Assistance Comments:			
GROUNDWATER QUANTITY			
N	R	S	An existing list of wells covered by state appropriation permits, including amounts of water appropriated, type of use, and aquifer source.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	An existing description of known well interference problems and water use conflicts.
	X	X	
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	An existing list of state environmental bore holes, including unique well number, aquifer measured, years of record, and average monthly levels.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			

DATA ELEMENTS ABOUT WATER QUALITY

SURFACE WATER QUALITY			
N	R	S	An existing map or list of the state water quality management classification for each stream and lake.
X			
Technical Assistance Comments:			
N	R	S	An existing summary of lake and stream water quality monitoring data, including: 1. bacteriological contamination indicators; 4. sedimentation; 2. inorganic chemicals; 5. dissolved oxygen; and 3. organic chemicals; 6. excessive growth or deficiency of aquatic plants.
X			
Technical Assistance Comments:			
GROUNDWATER QUALITY			
N	R	S	An existing summary of water quality data, including: 1. bacteriological contamination indicators; 2. inorganic chemicals; and 3. organic chemicals.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	An existing list of water chemistry and isotopic data from wells, springs, or other groundwater sampling points.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	An existing report of groundwater tracer studies.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	An existing site study and well water analysis of known areas of groundwater contamination.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about these data elements.			
N	R	S	An existing property audit identifying contamination.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	An existing report to the Minnesota Department of Agriculture and the Minnesota Pollution Control Agency of contaminant spills and releases.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			

Scoping 2 Meeting
Wellhead Protection (WHP) Planning Issues Summary
PWSID: Minnetonka (1270031)

DWSMA Vulnerability:

Very Low *Low* *Moderate* *High* *Very High*

Drinking Water Protection Issues Identified to Date:

The clay-rich geologic materials covering the aquifer are thin, discontinuous, or leaky.

Water Quality Detections and Implications:

The detection of tritium indicates some of the city's wells captures young (post-1953) recharge indicating that the aquifer is dominated by young recharge.

Old Municipal Well Information:

The Minnesota Department of Health has compiled historical information for use in the planning process.

Sanborn Maps:

- Sanborn Maps are available for this area
- Sanborn Maps are not available for this area

Recommended WHP Measures:

Consult with area hydro.

Addressing the potential movement of contamination toward the community well(s). MDH recommends that if contaminants are ever detected in a municipal water supply well, the Public Water Supplier work with MDH to perform an evaluation of whether to continue pumping the impacted well(s). Turning off a well may alter the movement of contamination to other pumping wells and compound the problem. Therefore, it is very important to include this recommendation in the contingency plan.

MDH also recommends to prioritize the identification and sealing of unused wells that have the greatest threat to the source aquifer.

This document is intended to be a summary of issues identified to date and is not intended to replace the required data elements identified in the Scoping 2 Decision Notice nor is it intended to be an exhaustive list of all potential drinking water issues.

Appendix C

Part I Wellhead Protection Plan

Part I Wellhead Protection Plan Amendment

WHPA Delineation, DWSMA Delineation, Well and
DWSMA Vulnerability Assessments

Minnetonka, Minnesota

Public Water Supplier No. 1270031
SEH No. MINNE 126941

March 10, 2016

FINAL MDH SUBMITTAL



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for All of Us®

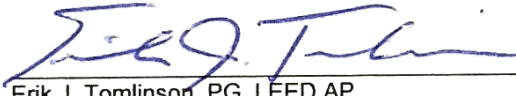
Engineers | Architects | Planners | Scientists

WHPA Delineation, DWSMA Delineation, Well and DWSMA Vulnerability Assessments
Part I Wellhead Protection Plan Update
Minnetonka, Minnesota

SEH No. MINNE 126941

December 2015

I hereby certify that this report was prepared by me or under my direct supervision,
and that I am a duly Licensed Professional Geologist under the laws of the State of
Minnesota.



Erik J. Tomlinson, PG, LEED AP

Date: 12/30/15 Lic. No.: 46739

Reviewed By: Susan Wojtkiewicz Date: 1-14-2016
Susan Wojtkiewicz

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Glossary of Terms

Data Element. A specific type of information required by the Minnesota Department of Health to prepare a wellhead protection plan.

Drinking Water Supply Management Area (DWSMA). The area delineated using identifiable land marks that reflects the scientifically calculated wellhead protection area boundaries as closely as possible (Minnesota Rules, part 4720.5100, subpart 13).

Drinking Water Supply Management Area Vulnerability. An assessment of the likelihood that the aquifer within the DWSMA is subject to impact from land and water uses within the wellhead protection area. It is based upon criteria that are specified under Minnesota Rules, part 4720.5210, subpart 3.

Emergency Response Area (ERA). The part of the wellhead protection area that is defined by a one-year time of travel within the aquifer that is used by the public water supply well (Minnesota Rules, part 4720.5250, subpart 3). It is used to set priorities for managing potential contamination sources within the DWSMA.

Inner Wellhead Management Zone (IWMZ). The land that is within 200 feet of a public water supply well (Minnesota Rules, part 4720.5100, subpart 19). The public water supplier must manage the IWMZ to help protect it from sources of pathogen or chemical contamination that may cause an acute health effect.

Wellhead Protection (WHP). A method of preventing well contamination by effectively managing potential contamination sources in all or a portion of the well's recharge area.

Wellhead Protection Area (WHPA). The surface and subsurface area surrounding a well or well field that supplies a public water system, through which contaminants are likely to move toward and reach the well or well field (Minnesota Statutes, section 103I.005, subdivision 24).

Well Vulnerability. An assessment of the likelihood that a well is at risk to human-caused contamination, either due to its construction or indicated by criteria that are specified under Minnesota Rules, part 4720.5550, subpart 2.

Acronyms

CWI	County Well Index
CJDN	Jordan Sandstone Aquifer
DNR	Minnesota Department of Natural Resources
EPA	United States Environmental Protection Agency
IWMZ	Inner Wellhead Protection Management Zone
OPDC	Prairie du Chien Group
MDA	Minnesota Department of Agriculture
MDH	Minnesota Department of Health
MGS	Minnesota Geological Survey
MnDOT	Minnesota Department of Transportation
MPCA	Minnesota Pollution Control Agency
PLS	Public Land Survey
SWCD	Soil and Water Conservation District
UMN	University of Minnesota
USGS	United States Geological Survey

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Part I Wellhead Protection Plan Amendment

WHPA Delineation, DWSMA Delineation, Well and DWSMA Vulnerability Assessments

Prepared for City of Minnetonka

1.0 Public Water Supply Profile

The following are the contacts for the Minnetonka Wellhead Protection Plan.

1.1 Wellhead Protection Manager

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Public Works Director
Minnetonka Public Works
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Telephone: 952.988.8403
Email: bwagstrom@eminnetonka.com

2.0 Introduction

SEH was retained by the City of Minnetonka (City) (PWSID 1270031) to complete an update to the City's wellhead protection (WHP) plan. The work was performed in accordance with the Minnesota Wellhead Protection Rule, Parts 4720.5100 to 4720.5590.

This report presents the delineation of the wellhead protection area (WHPA), the drinking water supply management area (DWSMA), and the vulnerability assessments for the public water supply wells and DWSMAs. Figure 1 shows the boundaries for the wellhead protection areas (WHPAs), emergency response areas (ERAs) and DWSMA. Figure 2 shows the boundaries for the porous media and fracture flow capture zones for both the ERAs and WHPAs. The WHPAs are defined by a 10-year time of travel and the ERAs are defined by a 1-year time of travel. The Inner Wellhead Management Zone (IWMZ), a 200 foot radius around each well is shown on Figure 2. Definitions of rule-specific terms that are used are provided in the "Glossary of Terms."

This report also documents the technical information that was required to prepare this portion of the WHP Plan in accordance with the Minnesota Wellhead Protection Rule. Additional technical information is available from Minnesota Department of Health (MDH).

The municipal water supply wells included in the WHP Plan are listed in Table 1.

**Table 1
Water Supply Well Information**

Well No.	Unique Well No.	Use/ Status	Year Constructed	Casing Diam. (in)	Casing Depth (ft)	Total Depth (ft)	Aquifer Formation	Vulnerability
3	204470	Primary	1963	24/20/16	393	465	Jordan	Not Vulnerable
3A	171021	Primary	1981	30/24/16	254	468	Prairie du Chien-Jordan	Not Vulnerable
6	204054	Primary	1967	24/20/16	394	488	Jordan	Not Vulnerable
6A	208012	Primary	1967	24/20/16/ 12	397	486	Jordan	Not Vulnerable
10	204140	Primary	1969	24/20/16	305	505	Prairie du Chien-Jordan	Vulnerable
10A	150356	Primary	1981	30/24/16	302	486	Prairie du Chien-Jordan	Vulnerable
11	208014	Primary	1905	24/16	282	498	Prairie du Chien-Jordan	Vulnerable
11A	439797	Primary	1988	24/18	291	492	Prairie du Chien-Jordan	Vulnerable
12	203717	Primary	1971	24/16	332	535	Prairie du Chien-Jordan	Not Vulnerable
12A	191939	Primary	1985	30/24/18	340	506	Prairie du Chien-Jordan	Not Vulnerable
13	205165	Primary	1972	24/16	292	475	Prairie du Chien-Jordan	Vulnerable
13A	132263	Primary	1978	24/16	274	464	Prairie du Chien-Jordan	Vulnerable
14	204537	Primary	1972	24/16	367	555	Prairie du Chien-Jordan	Vulnerable
14A	160021	Primary	1978	24/20/16	395	575	Prairie du Chien-Jordan	Vulnerable
15	208016	Primary	1974	24/16	235	450	Prairie du Chien-Jordan	Vulnerable
15A	150351	Primary	1978	24/16	238	444	Prairie du Chien-Jordan	Vulnerable
16A	661401	Primary	2001	24/18	322	530	Prairie du Chien-Jordan	Vulnerable
16B	661402	Primary	2002	24/18	303	519	Prairie du Chien-Jordan	Vulnerable

3.0 Assessment of the Data Elements

MDH staff met with representatives of the public water supplier and SEH in December 2013 for a scoping meeting that identified the data elements required to prepare Part I of the WHP Plan Update. Table 2 presents the assessment of these data elements, relative to the present and future implications of planning items, as specified in Minnesota Rules, part 4720.5210. The Scoping Decision Notice is provided as Appendix A.

Table 2
Assessment of Data Elements

	Present and Future Implications				Data Source
	Use of the Well (s)	Delineation Criteria	Quality and Quantity of Well Water	Land and Groundwater Use in DWSMA	
Precipitation					
Average monthly and annual precipitation	L	M	L	M	Midwestern Regional Climate Center
Geology					
Maps and geologic descriptions	M	H	H	H	MGS, DNR, USGS, Consultant Reports
Subsurface data	M	H	H	H	MGS, MDH, DNR
Borehole geophysics	M	H	H	H	MGS, Consultant Reports
Surface geophysics	L	L	L	L	DNR, MPCA, Consultant Reports
Maps and soil descriptions	L	M	L	M	USDA SURGGO
Water Resources					
Watershed units	L	M	L	M	DNR
List of public waters	L	M	L	M	DNR
Land Use					
Parcel boundaries map	L	H	L	M	Hennepin County
Political boundaries map	L	H	L	M	DNR
PLS map	L	H	L	L	DNR
Public Utility Services					
Transportation routes and corridors	L	H	M	M	MnDOT, City of Minnetonka
Storm/sanitary sewers and PWS system map	L	L	M	M	City of Minnetonka
Public drainage systems map or list	L	M	M	M	DNR, City of Minnetonka
Records of well construction, maintenance, and use	H	H	H	H	City of Minnetonka, CWI, MDH files
Surface Water Quantity					
Stream flow data	L	L	M	L	USGS, MPCA, DNR
Ordinary high water mark data	L	L	L	M	DNR
Permitted withdrawals	M	L	M	M	DNR, City of Minnetonka
Protected levels/flows	M	L	M	M	DNR, MPCA
Water use conflicts	M	M	M	M	DNR, MPCA

Table 2
Assessment of Data Elements

	Present and Future Implications				Data Source
	Use of the Well (s)	Delineation Criteria	Quality and Quantity of Well Water	Land and Groundwater Use in DWSMA	
Groundwater Quantity					
Permitted withdrawals	H	H	H	H	DNR
Groundwater use conflicts	H	H	H	H	DNR
Water levels	H	H	H	H	DNR, MPCA, MDA, MDH, City
Surface Water Quality					
Monitoring data summary	L	L	M	M	MPCA
Groundwater Quality					
Monitoring data	H	H	H	H	MPCA, MDH, MDA, USGS
Isotopic data	H	H	H	H	MPCA, MDH, MDA, USGS, County, UMN
Tracer studies	H	H	H	H	DNR, MPCA
Contamination site data	H	M	H	H	MPCA, MDA
MPCA and MDA spills/release reports	H	L	H	H	MPCA, MDA
Definitions Used for Assessing Data Elements: High (H) - the data element has a direct impact Moderate (M) - the data element has an indirect or marginal impact Low (L) - the data element has little if any impact Acronyms used in this report are listed on page ii, after the "Glossary of Terms."					

3.1 Precipitation

Precipitation Data was obtained from the Midwestern Regional Climate Center website. Monthly data was available for the past five years at the MINNEAPOLIS/ST PAUL Airport station (USW00014922) and is provided below in Table 3. Precipitation data can be used for determining local recharge for the groundwater model.

Table 3
Precipitation Data

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
2009	0.57	0.93	1.5	1.57	0.53	2.86	2.17	6.43	0.46	5.57	0.38	1.83	24.8
2010	0.45	0.75	0.69	2.32	2.5	6.25	3.03	4.91	5.52	1.61	2.07	2.79	32.89
2011	1	1.12	2.06	2.8	4.04	5.28	5.23	3.03	0.36	0.7	0.3	0.99	26.91
2012	0.36	1.71	1.4	3.04	9.34	3.59	4.9	1.38	0.3	1.3	0.63	1.64	29.59
2013	0.86	1.33	2.04	5.22	6.24	5.17	3.51	2.07	1.35	3	0.52	1.46	32.77

Note: All values are in inches.

3.2 Geological Information

The local and regional geologic and hydrogeologic conditions influence the delineation of the WHPAs for the public water supply wells. By characterizing these conditions, the geometry, location and magnitude of groundwater recharge and discharge areas, and the groundwater flow direction of the source water aquifer could be determined or estimated.

Existing geological maps, reports, and studies that were used are listed in the References section of the plan. Through the use of public-domain well records and local and regional geologic studies and publications, the geology and hydrogeology of the area have been evaluated and reviewed to aid in the WHPA delineations and vulnerability assessments. These resources were provided by the City, the MDH, the Minnesota Geological Survey (MGS), and the USGS. These resources provided the basis for defining local geologic and hydrologic conditions but this interpretation was refined using the records of wells, borings, exploration test holes, and excavations. The City has no additional geologic information from logs or borehole geophysical records of wells, borings, or exploration test holes, nor additional information from surface geophysical studies. A surficial geology map is presented as Figure 3 and a bedrock geologic map is presented as Figure 4. Geologic cross-sections were created through the study area and are provided as Figures 5 and 6. The cross-section locations are depicted on Figure 4.

Quaternary age glacial deposits comprising of approximately 100 to 250 feet of sand and clay are found in the Minnetonka area.

Generally, the depth to bedrock in the Minnetonka area ranges from 100 to 150 feet. However, there are areas in which the depth to bedrock is over 200 feet. The top of bedrock elevation ranges from 700 to 850 feet above mean sea level (MSL). According to the well records of the Minnetonka municipal wells, bedrock was encountered at depths ranging from 91 (Municipal Well 10) to 263 feet (Municipal Well 5).

The first bedrock unit in the north and eastern portion of Minnetonka is the Platteville and Glenwood Formations overlying the St. Peter Sandstone. The Platteville and Glenwood Formations are not present in the south and western portion of Minnetonka where the first bedrock unit is the St. Peter Sandstone. (Figure 4) The bedrock formations beneath the St. Peter Sandstone are (in descending order): the Prairie du Chien Group, the Jordan Sandstone, the St. Lawrence Formation, the Tunnel City (formerly Franconia Formation), the Wonewoc Sandstone (formerly Ironton and Galesville Sandstones), the Eau Claire Formation, and the Mount Simon and Hinckley Sandstones.

The Platteville Formation is a fine-grained limestone containing thin shale partings near its top and base. It is underlain by the 0 – 10 feet thick, green sandy shale of the Glenwood Formation.

The upper half to two-thirds of the St. Peter Sandstone consists of fine- to medium-grained, friable quartz sandstone. The lower part of the formation contains multi-colored beds of mudstone, siltstone, and shale with interbedded very coarse sandstone. The typical thickness of the St. Peter Sandstone in Hennepin County is approximately 160 feet.

The Prairie du Chien Group is a dolostone that is sandy with minor amounts of shale in the upper third to half, and less sandy in the lower part. The formation is thin-bedded and contains thin beds of sandstone in the upper part, but is more massive- and thick-bedded in the lower part. Regionally, it is typically about 120 feet thick.

Below the Prairie du Chien Group is the Jordan Sandstone, a quartzose sandstone approximately 95 feet thick. The upper and middle portions of this formation are comprised of medium- and coarse-grained sandstone. The lower portion is massively bedded. The Prairie du Chien and Jordan are hydraulically connected.

The St. Lawrence Formation, a dolomitic siltstone and shale is below the Jordan Sandstone, and overlies the Tunnel City (formerly Franconia Formation), a glauconitic sandstone. The Wonewoc Sandstone (formerly Ironton and Galesville Sandstones) comprising of sandstone is found beneath the Tunnel City. The Tunnel City and Wonewoc are hydraulically connected.

The Eau Claire Formation - a siltstone, shale, and silty sandstone, which acts as a confining unit between the Mount Simon below, and the Wonewoc above. The Mount Simon aquifer consists of the Mount Simon Sandstone. In general, the Mount Simon is hydraulically isolated from the shallow groundwater systems and surface waters above it.

All of this geological information was used to define hydrogeologic boundaries that were incorporated into the delineation of the WHPA and used to assess DWSMA vulnerability. Also, the construction information about the public water supply wells was used in conjunction with groundwater quality data to assess well vulnerability.

3.3 Land Use Information

Parcel boundaries, road centerlines, and U.S. Public Land Survey coordinates were used to define the boundaries of the DWSMA.

Political boundaries are depicted in Figure 2. Boundary and parcel information was primarily used to delineate the DWSMA and determine whether the limits of the DWSMA cross municipal divisions.. Specific land uses and zoning within and adjacent to the DWSMA will be reviewed, evaluated, assessed, and presented in Part II of the Plan.

Figures included in this Plan depict the major transportation routes and corridors within and surrounding Minnetonka. However, sanitary and storm sewer coverage and presence of large-scale pipelines within the DWSMA will be examined in Part II of the Plan.

3.4 Water Quantity Information

Since other high capacity wells in the Minnetonka area influence the groundwater flow field of the source water aquifer, high capacity private and public wells were evaluated and assessed in detail during the delineations of the WHPAs for the City's public water supply wells. In addition, specific information related to the construction, maintenance, and use of the municipal wells has been compiled, utilized, and presented in the Plan (Table 1). This information was also used in delineating the WHPAs and completing the vulnerability assessments.

Groundwater pumping information from high capacity wells was obtained from the State Water Use Data System (SWUDS) that is maintained by the DNR. The annual pumping reported by the Public Water Supplier was used in determining the daily volume of water that is discussed in Section 2 of this document (Table 6). Furthermore, SWUDS data, combined with well construction records from the CWI, were used to identify additional high capacity wells to be included in delineating the WHPA. The locations and daily volumes were cross checked with those in the Metro Model. The pumping volumes were updated as appropriate. These wells constitute flow boundaries (Table 6).

The primary wells used by the Minnetonka public water supply system currently rely upon two source water aquifers – the Prairie du Chien and Jordan aquifers.

Municipal Wells 3A, 10, 10A, 11, 11A, 12, 12A, 13, 13A, 14, 15, 14A, 15A, 16A and 16B are multi-aquifer wells, open to both the Prairie du Chien and Jordan aquifers. Wells 3, 6, and 6A are completed in the Jordan sandstone aquifer. Well logs are included as Appendix B. The existing groundwater wells appear adequate to meet the City's current and future water demand. The City has no immediate plans to replace or add municipal wells, or utilize any other source of water supply.

The City has provided the 2009-2013 water use and pumping volume records presented in this Plan to determine an appropriate discharge rate for the wells in delineating the WHPAs. In addition, the City has estimated a projected increase in groundwater use for 2018. These records are provided in Table 6.

Currently, there are no known, significant groundwater-use conflicts between the City and other parties.

3.5 Water Quality Information

Groundwater quality information was used to update well vulnerability. The quality of the groundwater in the source water aquifers, and in the Minnetonka area specifically, must be evaluated and assessed for this Plan. Groundwater contamination and undesirable groundwater quality will directly impact the public water supply system. Certain naturally-occurring constituents in the groundwater also provide information that can be used to determine the vulnerability of the source water aquifer. The City publishes an annual consumer confidence report (Minnetonka Drinking Water Report) that contains water quality data collected over the course of the year.

The overall quality of groundwater in Minnetonka is good. No contaminants were detected at levels that violated federal drinking water standards. Some were detected in trace amounts that were below legal limits. The most recent Minnetonka Drinking Water Report is available on the City website.

4.0 General Descriptions

4.1 Description of the Water Supply System

The public water supplier currently obtains its drinking water supply from 18 primary groundwater wells. Table 1 summarizes information regarding the City wells.

4.2 Description of the Hydrogeologic Setting

The description of the hydrologic setting for the aquifer used to supply drinking water is presented in Table 4 and discussed in further detail below.

**Table 4
Description of Hydrogeologic Setting**

Aquifer	Attribute	Descriptor	Data Source
Prairie du Chien (OPDC)	Aquifer Material	Dolostone	CWI Well Logs, MGS
	Porosity (type and value)	0.056	Metro Model 3.0
	Aquifer Thickness	82-212 ft.	City Well Logs
	Stratigraphic Top Elevation	600-663 feet AMSL	City Well Logs
	Stratigraphic Bottom Elevation	392-536 feet AMSL	City Well Logs
	Hydraulic Confinement	Confined	City Well Logs
	Transmissivity (T)	Reference Value: 11,270 ft ² /day	The reference value for the transmissivity of the OPDC Aquifer was determined from pumping tests on Minnetonka Well 6 and specific capacity test on Minnetonka Well 16A. The analysis was provided as part of the Aquifer Test Plan for the PDC and approved on December 10, 2015.
	Hydraulic Conductivity (K)	Reference Value: 104.4 ft/day	See above.
	Groundwater Flow Field	Flow to the southeast	Measured from model results. Flow generally to southeast toward the Minnesota River.
Hydraulic Gradient:			
0.00247			
Jordan Sandstone (CJDN)	Aquifer Material	Sandstone	City Well Logs
	Primary Porosity	0.2	MDH
	Aquifer Thickness	67-94 ft	City Well Logs
	Stratigraphic Top Elevation	510 - 536 feet AMSL	City Well Logs
	Stratigraphic Bottom Elevation	423-448 feet AMSL	City Well Logs
	Hydraulic Confinement	Confined	City Well Logs
	Transmissivity (T)	Reference Value/Range	The reference value for the transmissivity of the Jordan Sandstone Aquifer was determined from pumping tests on Minnetonka Well 6. The pump test analysis was provided as part of the Aquifer Test Plan for the Jordan and approved on December 10, 2015.
		2,400 ft ² /day	
		(2,360 – 2,510 ft ² /day)	
Hydraulic Conductivity (K)	Reference Value :	See above.	
	25.5 ft/day		
Groundwater Flow Field	Flow to the southeast	Measured from model results. Flow generally to southeast toward the Minnesota River.	
	Hydraulic Gradient: 0.00258		

The primary wells used by the Minnetonka public water supply system currently rely upon two source water aquifers – the Prairie du Chien and Jordan aquifers.

Municipal Wells 3A, 10, 10A, 11, 11A, 12, 12A, 13, 13A, 14, 15, 14A, 15A, 16A and 16B are multi-aquifer wells, open to both the Prairie du Chien and Jordan aquifers. Wells 3, 6, and 6A are completed in the Jordan sandstone aquifer. Municipal well information including location, construction information, and aquifer is presented in Table 1.

5.0 Delineation of the Wellhead Protection Area

5.1 Delineation Criteria

The boundaries for each of the City's WHPAs are shown in Figure 1 and Figure 2. Table 5 describes how the delineation criteria that are specified under Minnesota Rules, part 4720.5510, were addressed.

Table 5
Description of WHPA Delineation Criteria

Criterion	Descriptor	How the Criterion was Addressed
Flow Boundary	Local Lakes and Rivers: Minnesota River, Lake Minnetonka and Minnehaha Creek	The rivers and lakes provided boundary conditions to the model that extended to and included these natural boundaries. They were included in the model and helped set the regional groundwater flow and water balance.
Flow Boundary	Other High-Capacity Wells Table 7	The pumping amounts were determined based on the averaged 2003-2011 pumped volumes. The pumping amounts of these high-capacity wells were included in the methods used for the delineation.
Daily Volume of Water Pumped	See Table 6	Pumping information was obtained from the Minnesota Department of Natural Resources Appropriations Permit 1979-6207. The annual pumped volumes were converted to a daily volume pumped by a well.
Groundwater Flow Field	Southeast Flow See Figures 10 and 11	The model calibration process addressed the relationship between the calculated versus observed groundwater flow field.
Aquifer Hydraulic Transmissivity (T)	Reference Value: OPDC: 11,269 ft ² /day CJDN: 2,400 ft ² /day	The reference value for the transmissivity of the Jordan and Prairie du Chien Aquifers were determined from pumping tests and other data collected for the City of Minnetonka's WHP Plan. Uncertainty regarding T was addressed as described in Section 5.4.
Time of Travel	10 years	The public water supplier selected a 10 year time of travel.

Information provided by the public water supplier was used to identify the maximum volume of water pumped annually by each well over the previous five-year period, as shown in Table 6. Also, the projected 2018 pumping rate is shown. Previous pumping values have been reported to the DNR, as required by the public water supply's Groundwater Appropriation Permit No. (1979-6207). Maximum daily volume of discharge, used as an input parameter in the model, was calculated by dividing the greatest annual pumping volume by 365 days.

Table 6
Annual Volume of Water Discharged from Water Supply Wells

Well Name/ Number	Unique Number	Model Well Name	2009	2010	2011	2012	2013	Projected 2018 Year Withdrawal* (gal/yr)	Daily Volume max withdrawal (cubic meters)
3	204470	204470-1979-6207_3_211	135,393,000	143,080,000	91,673,000	198,544,000	89,826,000	107,721,884	2,067
3A	171021	MNW_01312	167,959,000	89,838,000	641,000	2,256,000	15,698,000	18,825,486	1,749
6	204054	204054-1979-6207_6_211	98,024,000	110,731,000	134,150,000	119,206,500	161,193,000	193,307,212	2,013
6A	208012	208012-1979-6207_6A_211	98,030,000	110,725,000	134,106,000	105,968,500	124,020,000	148,728,297	1,548
10	204140	MNW_01297	259,077,000	196,115,000	220,251,000	175,052,000	68,396,000	82,022,421	2,697
10A	150356	MNW_01298	259,147,000	194,385,000	220,780,000	175,203,000	69,565,000	83,424,319	2,698
11	208014	MNW_01299	107,118,000	82,713,000	141,883,000	173,279,000	200,613,000	240,580,793	2,505
11A	439797	MNW_01300	99,055,000	112,279,000	192,567,000	165,341,000	195,476,000	234,420,357	2,441
12	203717	MNW_01301	147,278,000	123,416,000	121,856,000	124,402,000	87,947,000	105,468,534	1,533
12A	191939	MNW_01302	179,241,000	171,420,000	123,412,000	105,851,000	92,158,000	110,518,484	1,866
13	205165	MNW_01303	119,932,000	76,606,000	95,093,000	209,587,000	202,548,000	242,901,299	2,529
13A	132263	MNW_01304	121,126,000	134,091,000	110,600,000	217,111,000	284,470,000	341,144,482	3,552
14	204537	MNW_01305	114,811,000	90,060,000	62,183,000	95,201,000	88,546,000	106,186,872	1,995
14A	160021	MNW_01306	140,417,000	90,057,000	106,618,000	82,983,000	81,655,000	97,922,989	1,462
15	208016	MNW_01307	103,276,000	159,183,000	159,183,000	203,482,000	122,493,000	146,897,076	2,118
15A	150351	MNW_01308	95,185,000	163,261,000	200,030,000	251,122,000	261,197,000	313,234,842	3,261
16A	661401	MNW_01309	230,038,000	167,049,000	223,857,000	184,863,000	157,559,000	188,949,216	2,395
16B	661402	MNW_01310	202,843,000	178,875,000	53,249,000	149,748,000	154,679,000	185,495,439	2,067

Annual volumes expressed as gallons. **Bold** indicates greatest annual pumping volume.

* Total annual volume calculated from Minnetonka Comprehensive Plan projections. Well volume ratio was calculated based upon 2013 pumping.

In addition to the wells used by the public water supplier, Table 7 below shows other high-capacity wells, within two miles of the City wells. Pumping data was obtained from the DNR State Water Use Database System.

Table 7
Other Permitted High-Capacity Wells

Unique Number	Permittee	Permit	Use	Aquifer	Reported Withdrawal (Gallons/Year)				
					2007	2008	2009	2010	2011
112228	Hopkins	1975-6245	Municipal Water Works	Prairie du Chien-Jordan	127,024,000	407,215,000	368,373,000	317,123,000	180,700,000
122298	Shorewood	1974-5226	Municipal Water Works	Prairie du Chien	7,643,000	5,834,000	28,000	374,000	1,400,000
203183	Minneapolis Golf Club	1986-6083	Golf Course Irrigation	Prairie du Chien-Jordan	13,494,000	12,850,000	13,552,000	12,734,000	12,200,000
203187	St. Louis Park	1973-1007	Municipal Water Works	Jordan	192,135,000	371,318,000	375,759,000	273,452,000	262,000,000
203678	St. Louis Park	1973-1007	Municipal Water Works	Prairie du Chien-Jordan	468,120,000	292,233,000	296,189,000	545,933,000	530,300,000

**Table 7
Other Permitted High-Capacity Wells**

Unique Number	Permittee	Permit	Use	Aquifer	Reported Withdrawal (Gallons/Year)				
					2007	2008	2009	2010	2011
204068	Hopkins	1975-6245	Municipal Water Works	Prairie du Chien-Jordan	771,405,000	429,940,000	444,802,000	476,926,000	551,200,000
204072	Oak Ridge Country Club	1966-1167	Golf Course Irrigation	Prairie du Chien-Jordan	18,860,000	23,000,000	16,500,000	29,105,000	33100000
204570	Hopkins	1975-6245	Municipal Water Works	Prairie du Chien-Jordan	22,546,000	4,656,000	0	0	78,100,000
224098	General Mills Inc.	2007-0209	Fire Protection	Prairie du Chien-Jordan	3,029,000	222,000	494,000	764,000	1,600,000
224099	General Mills Inc.	2007-0210	Non-Crop Irrigation	Prairie du Chien-Jordan	30,498,000	31,252,000	32,197,000	23,235,000	23,400,000
227132	Thermotech	1992-6099	Industrial Process Cooling Once-through	Prairie du Chien	0	0	85,685,000	94,789,000	79,700,000
232331	Shorewood	1974-5226	Municipal Water Works	St. Peter-Ironton Galesville	4,024,000	1,745,000	3,619,000	20,738,000	28,200,000
236143	Hennepin County Parks	1996-6172	Golf Course Irrigation	St. Peter-Ironton Galesville	10,194,000	8,671,000	10,412,000	6,476,000	5,900,000
255722	Cargill Inc.	2003-3059	Non-Crop Irrigation/Water Level Maintenance	Prairie du Chien	3,144,000	3,701,000	12,250,000	1,117,000	0
255880	Cargill Inc.	2003-3060	Non-Crop Irrigation/Water Level Maintenance	Prairie du Chien	908,000	1,063,000	1,936,000	891,000	0
416160	Shorewood	1974-5226	Municipal Water Works	Prairie du Chien-Jordan	0	82,159,000	94,497,000	59,615,000	57,200,000
424927	Eden Prairie	1978-6175	Municipal Water Works	Jordan	403,511,000	272,155,000	381,635,000	488,264,000	252,100,000
578922	Honeywell Inc.	1998-6076	Non-Metallic Processing	Prairie du Chien-Jordan	60,278,000	56,470,000	61,136,000	66,615,000	69,200,000
NA	Minneapolis Golf Club	1986-6083	Golf Course Irrigation	NA	25,962,000	26,004,000	26,581,000	21,088,000	21,500,000

5.2 Method Used to Delineate the Wellhead Protection Area

5.2.1 Conceptual Model

The City of Minnetonka utilizes the Prairie du Chien and Jordan aquifers for its water supply. The Metro Model Version 3, a recognized nine layer MODFLOW base model developed by the Metropolitan Council was used as a base model and then refined in the vicinity of the Minnetonka area (Metropolitan Council, 2014). The model grid, pumping rates, and hydraulic conductivity/transmissivity zones were refined to better represent the local geologic

conditions. Model refinement focused primarily on the OPDC (Layer 3) and CJDN (Layer 4) aquifers. The model refinement is described in more detail below.

5.2.2 Numerical Model

MODFLOW is the name that has been given the USGS Modular Three-Dimensional Ground-Water Flow Model. Because of its ability to simulate a wide variety of systems, its extensive publicly available documentation, and its rigorous USGS peer review, MODFLOW has become the worldwide standard ground-water flow model. MODFLOW is used to simulate systems for water supply, containment remediation, and mine dewatering. MODFLOW is most appropriate in those situations where a relatively precise understanding of the flow system is needed to make a decision. MODFLOW was developed using the finite-difference method. The finite-difference method permits a physical explanation of the concepts used in construction of the model.

Ground-water flow within the aquifer is simulated in MODFLOW using a block-centered finite-difference approach. Layers can be simulated as confined, unconfined, or a combination of both. Flows from external stresses such as flow to wells, areal recharge, evapotranspiration, flow to drains, and flow through riverbeds can also be simulated. The existing Metro Model 3, a nine layer model, was used as a base model. The model layers represented include the Quaternary, St. Peter Sandstone, Prairie du Chien Group, Jordan Sandstone, St. Lawrence Formation, Tunnel City Group (formerly known as the Ironston and Galesville Sandstones), Wonewoc Sandstone (formerly known as the Franconia Formation), Eau Claire Formation, and Mt. Simon-Hinkley Sandstones (Metropolitan Council, 2014). The model was refined around the Minnetonka area using local data and focused primarily on the layers/aquifers that the City of Minnetonka relies on for its water supply, the Prairie du Chien and Jordan Aquifers. The Groundwater Vistas Version 6.74 Build 39 software package was used to model the system.

5.2.3 Grid Development/Refinement

Because MODFLOW is a block centered finite-difference model, a grid must be defined over the model domain. The grid spacing and size of cells varies across the model domain. The Metro Model 3 consists of a uniform 500 x 500 meter grid. In areas where impact from pumping and accuracy will not impact the capture zones, cells remained 500 x 500 meters. In areas where the accuracy of groundwater contours and the delineation of particle tracks require greater accuracy (around pumping wells) the grid spacing is 30 x 30 meters.

5.2.4 Boundary Conditions

Constant head boundaries were used to represent water bodies in the model along northern sections of the St Croix River. Figure 7 shows the boundary conditions used to represent natural features in the model in the Minnetonka area. River boundaries were used to represent the water bodies in the model. Boundary conditions for local lakes and rivers were not updated due to the confined nature of the OPDC and CJDN aquifers. The remaining boundary conditions from the original Metro Model were far enough from the area of study as to not impact the study area results. Model files are provided as Appendix E.

5.2.5 Transmissivity

Transmissivity values for the OPDC and CJDN were calculated based the analysis of well pump tests conducted on wells completed in each aquifer. An aquifer test plan for each aquifer was submitted to and approved by the MDH. The transmissivity values in the ATPs were used as a starting point for refining the model. Those values are referenced above in Table 4.

A polygon shapefile was created to differentiate areas of similar and dissimilar hydraulic conductivity values. Hydraulic conductivity zone values were calculated based upon the model layer/aquifer thickness and the transmissivity value calculated for each aquifer. The zones for Layer 3 are depicted in Figure 8 and Layer 4 in Figure 9.

5.2.6 Porosity

A porosity of 0.056 was used for the OPDC and 0.2 for the CJDN aquifers.

5.2.7 Aquifer Recharge

Annual recharge rates to surficial materials in the Twin Cities area is estimated to range between 3 and 9 inches per year (Delin, 2007). The Metro Model 3 (Metropolitan Council, 2014) estimates infiltration using the Soil Water Balance (SWB) model developed by the Metropolitan Council. The aerial average infiltration for a period 1988-2011 was 8.2 inches per year and ranged between 2.7 and 13.0 inches per year. Due to the way that the Metro Model 3 handles this variable and that the aquifers utilized by the City of Minnetonka are confined and not likely directly affected by recharge/infiltration, the values were not altered from those of the base Metro Model 3.

5.3 Fracture Flow Delineation Method

The Prairie du Chien formation is capable of rapidly transmitting water through its secondary porosity features (fractures and solution cavities) and can transmit water to the underlying Jordan aquifer. Therefore, an additional delineation effort was required for the Prairie du Chien and Jordan aquifer wells. The Minnesota Department of Health has developed a guidance document and ArcGIS tool to assist in the delineation of the wellhead capture zone in fractured bedrock aquifers. The methodology is outlined in greater detail in *Guidance for Delineating Wellhead Protection Areas in Fractured and Solution-Weathered Bedrock in Minnesota* (MDH 2005).

Fifteen (15) of Minnetonka's eighteen (18) active wells are completed, at least partially, in the fractured Prairie du Chien aquifer. Minnetonka municipal wells 3A, 10, 10A, 11, 11A, 12, 12A, 13, 13A, 14, 15, 14A, 15A, 16A and 16B are multi-aquifer wells, open to both the Prairie du Chien and Jordan aquifers. The MODFLOW model allocates flow from each layer based on aquifer properties and well elevations of the well's open interval in the model. The amount of flow from Layer 3 (OPDC) at each of these wells was used to calculate the fracture flow delineation for the PDC-JDN wells.

MDH guidance also requires the assessment of wells completed solely in porous media aquifers that are hydraulically connected to a fractured bedrock aquifer. The City has three (3) wells that are completed only in the Jordan, which is hydraulically connected to the OPDC, so these wells were assessed for fracture flow delineation. Wells 3, 6, and 6A are completed in the Jordan sandstone aquifer. Wells 6 and 6A met the threshold for fracture flow delineation. Well 3 did not require fracture flow delineation. Appendix G summarizes the calculations used to determine and the values used in the fracture flow delineations.

Pumping volumes were extracted from the MODFLOW model for wells completed in the Prairie du Chien aquifer for the layer that represents the Prairie du Chien (Layer 3). This value along with the open interval thickness was input into the MDH ArcGIS delineation tool to determine if there was any overlap of capture zones. If there is overlap, additional analysis is completed to account for the volume of water "shared" by each well from the aquifer. There was no overlap of the calculated fixed radius (CFR) delineation of the OPDC wells.

The modified Metro Model 3 model was analyzed to determine the estimated recharge from the PDC into the JDN aquifer across the 10 year delineation areas for the wells completed only in the Jordan aquifer (Wells 3, 6 and 6A). The analysis comparing the pumping volume generated by the MODFLOW model to the volume of water pumped by the wells completed in the Jordan aquifer met the 10% contribution threshold for Wells 6 and 6A, indicating that there is a highly leaking setting. The fractured aquifer is a major source of recharge to the Jordan aquifer near Wells 6 and 6A and fracture flow delineation was completed for those wells. This was done by computing a water balance for the cells within the 10-year capture zone. The value contributed by the PDC was used as the flow value for the Jordan wells.

To delineate nested wells (ie. Wells 15 and 15A) the location and thickness of the aquifer for the well noted in Appendix G was used from the model and used in the calculation. The combined Q for both wells (ie. Wells 15 and 15A) from the OPDC aquifer was exported from the MODFLOW model and used to calculate the volume.

Wells 10, 10A, 16A and 16B from OPDC were combined and the location for Well 10 was used. The average aquifer thickness was used in the fracture flow analysis volume calculations for these wells. The calculated fixed radius for Wells 10, 10A, 16A and 16B intersected that of Wells 14 and 14A. An additional calculation was conducted to account for the volume of overlap. These calculations are provided in Appendix G.

The final fracture flow delineation is represented on Figure 2. Summary tables of fracture flow input data and output results are provided in Appendix G.

The fracture flow capture zones were added to the area defined by the MODFLOW model and a composite delineation was created. The City's well capture zones can be found on Figure 2 and the shapefiles can be found in Appendix F.

5.4 Results of Model Calibration and Sensitivity Analysis

Model calibration is a procedure that compares the results of a model based on estimated input values to measured or known values. This procedure can be used to define model validity over a range of input values, or it helps determine the level of confidence with which model results may be used. As a matter of practice, groundwater flow models are usually calibrated using water elevation or flux.

Hydraulic conductivity zones were refined while updating the county-wide model during calibration and the sensitivity analysis. Figures 8 and 9 show the hydraulic conductivity zones for model layers 3 and 4, representing the OPDC and CJDN aquifers respectively. The calibration results for this model are presented in Figure 10 and the resulting potentiometric surface depicts groundwater flow direction and gradient. Hydraulic conductivity was the primary variable used to calibrate the model in the local area surrounding Minnetonka.

Model sensitivity is the amount of change in model results caused by the variation of a particular input parameter. Because of the relative simplicity of the WHPA model, the direction and extent of the modeled capture zone may be very sensitive to any of the input parameters:

- The pumping rate directly affects the volume of the aquifer that contributes water to the well. An increase in pumping rate leads to an equivalent increase in the volume of aquifer within the capture zone, proportional to the porosity of the aquifer materials. However, the

pumping rate is based on the results presented in Table 6 and, therefore, is not a variable factor that will influence the delineation of the WHPA.

- The direction of groundwater flow determines the orientation of the capture area. Variations in the direction of groundwater flow will not affect the size of the capture zone but are important for defining the areas that are the source of water to the well. The calibrated potentiometric map that is produced by the Minnetonka WHPP model closely matches that generated by contouring static water level data. Therefore, the direction of groundwater flow should not have a significant effect on WHPA delineation given the current knowledge of hydraulic head distribution in the aquifer.
- A hydraulic gradient of zero produces a circular capture zone, centered on the well. As the hydraulic gradient increases, the capture zone changes into an elliptical shape, with the well centered on the down-gradient focal point. The hydraulic gradient was determined by using water level elevations that were taken from wells that have verified locations. Generally, the accuracy of the hydraulic gradient determination is directly proportional to the amount of available data that describes the distribution of hydraulic head in the aquifer.
- The aquifer thickness and porosity influence the size and shape of the capture zone. A decrease in either thickness or porosity causes a linear, proportional increase in the areal extent of the capture zone. Aquifer thickness was verified in the area of study based upon boring and geophysical log data. The aquifer thickness in the area of study is relatively well defined, therefore is not a variable that will change to influence the WHPA delineation. A change in porosity will affect the delineation of the WHPA, however, the value used in the model for the aquifers are relatively accepted, and therefore is not a variable that will change to influence the WHPA delineation.
- Aquifer permeability will influence the size and shape of the capture zone. Permeability defines the relative proportions of the capture zone width to length. A decrease in permeability decreases the length of the capture zone and increases the distance to the stagnation point, making the capture zone more circular in shape, centered at the well. The updated hydraulic conductivity zones (Figures 8 and 9) appeared to represent the local OPCD and CJDN conditions relatively well. During sensitivity analysis, as the K value increased, the capture zone increased slightly. Results of the sensitivity analysis are presented in Figure 14. The K values used during the sensitivity analysis are included below in Table 8.

Table 8
Sensitivity Analysis Variables

Model Run Name	Description	Layer	Kh Value (m/day)	Kv Value (m/day)	Results
Kx2	The K value used in the calibrated delineation was doubled.	L3	Zone 1 69.0	Zone 1 0.01	Shift in capture zone to the north west and south. Path lines extend outside of the delineated DWSMA. See Figure 14 Note: K zones are depicted in Figures 8 and 9.
			Zone 2 59.4	Zone 2 0.01	
			Zone 3 49.2	Zone 3 0.01	
			Zone 4 59.8	Zone 4 0.01	
		L4	Zone 1 18.4	Zone 1 1.84	
			Zone 2 13.8	Zone 2 1.38	
			Zone 3 12.8	Zone 3 1.28	
Kdiv2	The K value used in the calibrated delineation was divided by 2..	L3	Zone 1 17.25	Zone 1 0.0025	Shift in capture zone to the south east and north. Path lines extend slightly outside of the delineated DWSMA. See Figure 13. Note: K zones are depicted in Figures 8 and 9.
			Zone 2 14.85	Zone 2 0.0025	
			Zone 3 12.3	Zone 3 0.0025	
			Zone 4 14.95	Zone 4 0.0025	
		L4	Zone 1 4.6	Zone 1 0.46	
			Zone 2 3.45	Zone 2 0.35	
			Zone 3 3.2	Zone 3 0.32	

6.0 Delineation of the Drinking Water Supply Management Area

Boundaries used to delineate the Drinking Water Supply Management Area (DWSMA) are described above in Section 3.2. The DWSMA boundaries were defined using the following features (Figure 2):

- public land surveys (including township, range, and section boundaries),
- roadway centerlines, and
- property lines (Hennepin County parcel data).

A GIS shapefile of the DWSMA is provided in Appendix D.

7.0 Vulnerability Assessments

The Part I wellhead protection plan includes the vulnerability assessments for the public water supply wells and the DWSMA. These vulnerability assessments are used to help define potential contamination sources within the DWSMA and to select appropriate measures for reducing the risk that they present to the public water supply.

7.1 Assessment of Well Vulnerability

The vulnerability assessment for each well used by the public water supplier is listed in Table 1 and is based upon the following conditions:

1. Well construction meets current state Well Code specifications (Minnesota Rules, part 4725) and the well itself does not provide a pathway for contaminants to enter the aquifer used by the public water supplier.
2. The geologic conditions at the well site include a cover of geologic materials over the aquifer that is sufficient to retard or prevent the vertical movement of contaminants.
3. None of the human-caused contaminants regulated under the federal Safe Drinking Water Act have been detected at levels indicating that the well itself serves to draw contaminants into the aquifer as a result of pumping.
4. Tritium analysis, when it exists, of water from each well.

Results of the well vulnerability analysis – The MDH Source Water Protection (SWP) Vulnerability rating for Minnetonka’s municipal wells determined Wells 10, 10A, 11, 11A, 13, 13A, 14, 14A, 15, 15A, 16A and 16B to be vulnerable and Wells 3, 3A, 6, 6A, 12 and 12A to be not vulnerable. Well vulnerability for each well is identified in Table 1 above.

The L-scores and geologic sensitivity ratings used in determining well vulnerability are based upon the overlying surficial geology and the presence of any protective confining units. Many of the wells determined to be vulnerable had a low to very low geologic sensitivity to pollution, however the presence of Tritium in wells open to the same aquifer overrode the “not vulnerable” rating. The MDH scoring sheets are presented as Appendix F.

7.2 Assessment of Drinking Water Supply Management Area Vulnerability

The vulnerability of the DWSMA is shown in Figure 13 and is based upon the following information:

Boring logs available for wells within the DWSMA were reviewed for the presence of clay thicknesses. Geologic cross-sections were developed and are included as Figures 5 and 6.

MDH guidance (MDH, 1997) was followed in determining the DWSMA vulnerability. L-scores were calculated based upon DNR geologic sensitivity guidelines for wells within the DWSMA that extended to the OPDC-OJDN. Geologic Sensitivities were also determined for each of those wells. In addition, the following criteria, incorporating available tritium data, were used to determine the vulnerability of the City’s DWSMA:

1. Areas of very low geologic sensitivity but tritium present should be of low vulnerability; and
2. Areas of low geologic sensitivity but tritium present should be of moderate vulnerability.

Boring logs available for wells within the DWSMA were reviewed for the presence of clay thicknesses and L-scores calculated. Figure 13 shows the DWSMA Vulnerability.

8.0 Recommendations

The following plan implementation action item recommendations have been made for the Public Water Supplier to consider. Each recommendation is referenced to the plan implementation category under which it can be incorporated. Each recommendation will be further evaluated during the preparation of the Part II WHP Plan Update.

Plan Implementation Category – Contingency Planning

Item 2- Addressing the potential movement of contamination toward the community well(s).

The MDH recommends that if contaminants are ever detected in a municipal water supply well, the Public Water Supplier work with the MDH to perform an evaluation of whether to continue pumping the impacted well(s). Turning off a well may alter the movement of contamination to other pumping wells and compound the problem. Therefore, it is very important to include this recommendation in the contingency plan.

9.0 Standard of Care

The interpretations presented in this report are based on local data collected during this study and previous studies, such as current and historical pumping tests and regional data collected from governmental agencies. Data collected and analyzed by others and used in this report may not be precise or accurate. This Plan does not account for any variations that may occur between points of exploration; geologic and hydrogeologic conditions likely differ across the study area. Also, it must be noted that seasonal and cyclical fluctuations in the hydrogeologic characteristics and properties of the aquifers will occur.

The scope of this report and the corresponding groundwater flow model and calculations is limited to the delineation of capture zones for the Minnetonka municipal wells. Use of the groundwater flow model by other parties or for other purposes is not advised. Use or modification of the model for purposes other than the delineation of capture zones must be done with caution and a full understanding of the inherent assumptions and limitations of the data.

This Plan represents our understanding of the significant aspects of the local geologic and hydrogeologic conditions; the conclusions are based on our hydrogeologic and engineering judgment, understanding and perspective, and represent our professional opinions. These opinions were arrived at in accordance with the currently accepted standard of care for geologic and engineering practices at this time and location. No warranty is implied or intended.

10.0 Selected References

Balaban, N. H. 1989. C-04 Geologic atlas of Hennepin County, Minnesota. Minnesota Geological Survey. Retrieved from the University of Minnesota Digital Conservancy, <http://purl.umn.edu/58491>.

Delin, G. N. and J. D. Falteisek. 2007. Groundwater Recharge in Minnesota, Fact Sheet 2007-3002, US Dept. of Interior, US Geological Survey.

Fetter, C. W. 1988. Applied Hydrogeology, Merrill Publishing Company, Columbus, OH.

Geologic Sensitivity Project Workgroup. 1991. Criteria and Guidelines for Assessing Geologic Sensitivity of Ground Water Resources in Minnesota. Minnesota Department of Natural Resources, Division of Waters, St. Paul, MN.

Metropolitan Council. 2014. Twin Cities Metropolitan Area Regional Groundwater Flow Model, Version 3.0. Prepared by Barr Engineering. Metropolitan Council: Saint Paul, MN.

MN Climatology Working Group (State Climatology Office - DNR Waters, phone: 651-296-4214, web: <http://climate.umn.edu>)

Minnesota Department of Health (MDH). 1997. Assessing Well and Aquifer Vulnerability for Wellhead Protection. MDH Drinking Water Protection Section, Source Water Protection Unit, St. Paul, MN.

Minnesota Department of Health (MDH). 2005. Guidance for Delineating Wellhead Protection Areas in Fractured and Solution-Weathered Bedrock in Minnesota.

Appendix D

Potential Contaminant Source Data

Appendix D
 Minnetonka Wellhead Protection Plan
 Potential Contaminant Source Inventory



MapID	PCSI_ID	PROGRAM_ID	PCS_C	STATUS_C	MAT_C	PIN	FAC_NAME	ADDRESS	CITY	ZIP5_CODE	TOTAL	Comment
Other Potential Contaminant Sources - Figure 2												
1	1560	2434	UST	A	F000	0211722230059	Morrie's Subaru KIA	12550 Wayzata Blvd	Minnetonka	55305	1	
2	1561	6611	LUST	C	F000	0311722130053	Morries Minnetonka Ford	13400 Wayzata Blvd	Minnetonka	55305	1	
2	1562	4657	LUST	C	F000	0311722130053	Morries Minnetonka Ford	13400 Wayzata Blvd	Minnetonka	55305	1	
2	1563	11142	AST	A	W000	0311722130053	Morries Minnetonka Ford	13400 Wayzata Blvd	Minnetonka	55305	1	
5	1564	1770999	AST	A	W000	3411722430005	Culligan Soft Water Service Co	6030 Culligan Way	Minnetonka	55345	1	
5	1565	1770	UST	A	F000	3411722430005	Culligan Soft Water Service Co	6030 Culligan Way	Minnetonka	55345	2	
7	1566	566	LUST	C	F000	1311722130037	Youngstedts Standard	10000 Minnetonka Blvd	Minnetonka	55305	1	
8	1567	7764	LUST	C	F000	2111722430035	Youngstedt Inc Highway 7 Foodmart 10	15114 Highway 7	Minnetonka	55345	1	
8	1568	1997	UST	A	F000	2111722430035	Youngstedt Inc Highway 7 Foodmart 10	15114 Highway 7	Minnetonka	55345	4	
9	1569	3126	UST	R	F000		Oak Terrace Nursing Home	14500 County Road 62	Minnetonka	55345	8	
10	1570	15322	UST	A	F000	0211722330010	JC Penney 1405-0	12421 Wayzata Blvd	Minnetonka	55305	1	
11	1571	2014	LUST	C	F000	3411722310001	Hennepin County Home School	14300 County Road 62	Minnetonka	55345	1	
11	1572	16916	LUST	C	F000	3411722310001	Hennepin County Home School	14300 County Road 62	Minnetonka	55345	1	
11	1573	2087	UST	A	F000	3411722310001	Hennepin County Home School	14300 County Road 62	Minnetonka	55345	2	
12	1574	13130	UST	R	F000	2711722420032	Immaculate Heart Of Mary	13505 Excelsior Blvd	Minnetonka	55345	1	
13	1575	4273	LUST	C	F000	1311722140011	Boulevard Sinclair	9800 Minnetonka Blvd	Minnetonka	55305	1	
13	1576	8943	LUST	C	F000	1311722140011	Boulevard Sinclair	9800 Minnetonka Blvd	Minnetonka	55305	1	
13	1577	15657	LUST	C	F000	1311722140011	Boulevard Sinclair	9800 Minnetonka Blvd	Minnetonka	55305	1	
13	1578	1472	UST	A	F000	1311722140011	Boulevard Sinclair	9800 Minnetonka Blvd	Minnetonka	55305	4	
15	1579	VP32790	PCS	A	W000	1511722410006	Minnetonka Mills Property	12924, 12934, & 12940 Minnetonka Bl	Minnetonka	55305	1	
16	1580	18844	UST	R	F000	1811722310089	Grace Lutheran Church	18360 Minnetonka Blvd	Deephaven	55391	1	
25	1581	VP29680	PCS	A	W000	0411722240021	Tweleve Oaks center	6001-1001 Twelve Oaks Center Dr	Wayzata	55397	1	
27	1582	123837	UST	R	F000	3011722330004	Stratford Wood Apartments	18701 Stratford Rd	Minnetonka	55345	2	
28	1583	18729	LUST	C	F000		Redeemer Bible Church	16031 Woodland Curve	Minnetonka	55345	1	
29	1584	REM04107	SWMS	I	W100		Glen Lake State Sanitarium Sewage Lagoon	County Road 62	Minnetonka	55344	1	SA7628 , Glen Lake Sanitarium Sewage Lagoon
30	1585	REM03552	SWMS	I	W100		Baker Road Promiscuous Dump		Minnetonka	55344	1	SA7627
31	1586	REM04204	SWMS	I	W100		Hennepin County Home Schl Swge Lagoon		Minnetonka	55344	1	SA7626
32	1587	VP3600	PCS	I	W000		Johnson and Johnson	11140 Brene Rd W	Minnetonka	55343	1	
33	1588	8871	LUST	C	F000	1211722330003	Holiday Stationstore #39	2801 Hopkins Crossroad	Minnetonka	55305	1	
33	1589	2144	UST	A	F000	1211722330003	Holiday Stationstore #39	2801 Hopkins Crossroad	Minnetonka	55305	5	
35	1590	VP13880	PCS	I	W000	2511722310699	Fina #1176	1120 7th St S	Hopkins	55343	1	
35	1591	13645	UST	A	F000	2511722310699	Fina #1176	1120 7th St S	Hopkins	55343	3	
35	1592	8298	LUST	C	F000	2511722310699	Fina #1176	1120 7th St S	Hopkins	55343	1	
38	1593	VP22150	PCS	I	W000		Minnetonka Office/Production Bldings		Minnetonka	55345	1	
39	1594	MND985671866	PCS	A	W000	1611722430012	Mibco Site	15000 Minnetonka Industrial Blvd	Minnetonka	55345	1	
40	1595	VP12930	PCS	I	W000		Commercial Property- Minco	15305 Minnetonka Blvd	Minnetonka	55345	1	
41	1596	14375	LUST	C	F000	1511722420050	Haugen Residence	13314 Invernes Rd	Minnetonka	55343	1	
42	1597	REM03899	SWMS	I	W100		Demolition Fill - 1		Minnetonka	55345	1	SA7710
45	1598	7397	LUST	C	F000	1111722420028	Residential Property	2551 Mayflower Ave	Minnetonka	55345	1	
46	1599	5253	LUST	C	F000	0911722320001	Alexander/cargill Property	15607 Mcginty Road	Minnetonka	55345	1	
47	1600	3095	UST	R	F000	1511722140010	Burwell Community Center	3395 Plymouth Rd	Minnetonka	55305	2	
48	1601	10150	LUST	C	F000	0211722340006	Sears	12431 Wayzata Blvd	Minnetonka	55343	1	
56	1602	14922	LUST	C	F000	2511723420022	Leland Residence	5160 Hooper Rd	Deephaven	55331	1	
57	1603	3723	PCS	I	W000	0611722420102	Wayzata Bay Center Redevelopment	801 through 805 Lake St E	Wayzata	55391	1	
58	1604	18896	UST	A	F000	2511723430069	Holiday Stationstore #12	19955 Highway 7	Shorewood	55331	5	
60	1605	911	LUST	C	F000		Mn Dept Of Trans/former Gas Station	11002 Wayzata Blvd	Minnetonka	55345	1	

Appendix D
 Minnetonka Wellhead Protection Plan
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MapID	PCSI_ID	PROGRAM_ID	PCS_C	STATUS_C	MAT_C	PIN	FAC_NAME	ADDRESS	CITY	ZIP5_CODE	TOTAL	Comment
62	1606	13758	UST	A	F000	1811722420023	Saint Therese Church/school	18323 18325 Minnetonka Blvd	Deephaven	55391	1	
63	1607	1940	UST	A	F000	2011722240015	Minnetonka Middle School East Parking	17000 Lake St Extension	Minnetonka	55345	1	
64	1608	125178999	UST	U	F000	0411722230014	Twin cities BMW	15802 Wayzata Blvd	Minnetonka	55304	1	
64	1609	125178	AST	A	W000	0411722230014	Twin cities BMW	15802 Wayzata Blvd	Minnetonka	55304	2	
66	1610	1793	UST	A	F000	3211822440001	Wayzata Central Middle School	305 Vicksburg Ln N	Plymouth	55447	1	
66	1611	4172	LUST	C	F000	3211822440001	Wayzata Central Middle School	305 Vicksburg Ln N	Plymouth	55447	1	
66	1612	19671	LUST	A	F000	3211822440001	Wayzata Central Middle School	305 Vicksburg Ln N	Plymouth	55447	1	
67	1613	11783	LUST	C	F000	2511723420023	Alt Residence	5180 Hooper Lake Rd	Deephaven	55331	1	
68	1614	8620	LUST	C	F000	0811722110026	Larson Residence	2030 Crosby Road	Minnetonka	55391	1	
69	1615	11686	LUST	C	F000		Greenbier Village	10401 Cedar Lake Rd	Minnetonka	55305	1	
70	1616	14141	LUST	C	F000		Excelsior Covenant Church	19955 Excelsior Blvd	Shorewood	55331	1	
71	1617	6793	LUST	C	F000	2411723140002	Kenneth Dahlberg Residence	19360 Walden Tr	Deephaven	55391	1	
72	1618	7525	LUST	C	F000		Davis Residence	1617 Liner Rd	Minnetonka	55391	1	
73	1619	5109	LUST	C	F000		Jon Peterson Residence	5600 Mahoney Ave	Minnetonka	55345	1	
74	1620	11047	LUST	C	F000	0311622210010	FRMI	6250 Bury Dr	Eden Prairie	55346	1	Richard Mfg. Co.
75	1621	3707	PCS	C	W000		Carlson Parkway	801 Carlson Pkwy	Minnetonka	55305	1	Petroleum brownfield site
77	1622	7371	LUST	C	F000		Tullamore Glen	4500 Tonkawood Rd	Minnetonka	55345	1	
78	1623	3685	PCS	C	W000	0511722320077	Former Burger King Restaurant	1200 Wayzata Blvd	Wayzata	55391	1	
79	1624	1936	UST	A	F000	2411723440002	Deephaven Elementary School	4452 Vine Hill Rd	Deephaven	55331	1	
80	1625	9258	LUST	C	F000	2511723410010	Rapid Oil Change	19465 Highway 7	Shorewood	55331	1	
81	1626	1590	UST	R	F000	1811722310093	The Corner Office	18300 Minnetonka Blvd	Deephaven	55391	3	
82	1627	19428	UST	R	F000	2111722430055	The Bunker	14900 Highway 7	Minnetonka	55345	1	Material in tank unknown
84	1628	15216	UST	R	F000	1811722230004	Clarkson Lindley Residence	18950 Northome Blvd	Deephaven	55391	1	
85	1629	2850	UST	R	F000	3611722320004	Us West Communications	5959 Shady Oaks	Hopkins	55343	1	
86	1630	2261	UST	A	F000	2711722130053	SuperAmerica #5002	13305 Excelsior Blvd	Minnetonka	55343	4	
87	1631	473	LUST	C	F000	0511722130010	Gleason Lake	155 Gleason Lake Rd	Wayzata	55391	1	
87	1632	15337	LUST	C	F000	0511722130010	Gleason Lake	155 Gleason Lake Rd	Wayzata	55391	1	
88	1633	1935	UST	A	F000	2411723440004	Deephaven Education Center	4584 Vine Hill Rd	Excelsior	55331	1	
89	1634	1939	UST	A	F000	3211722240002	Scenic Heights Elementary School	5650 Scenic Heights Dr	Minnetonka	55345	1	
89	1635	610	LUST	C	F000	3211722240002	Scenic Heights Elementary School	5650 Scenic Heights Dr	Minnetonka	55345	1	
90	1636	10239	LUST	C	F000	3011722430020	Minnetonka Senior High School	18301 Highway 7	Minnetonka	55345	1	
91	1637	9935	LUST	C	F000		Ty Abel Service	3333 Highway 101 S	Wayzata	55391	1	
92	1638	55662	AST	A	W000	3411722410018	Cargill Inc	12700 Whitewater Dr	Minnetonka	55343	1	
94	1639	19957	UST	R	F000	1611722330021	Tonkadale Greenhouses	3739 Tonkawood Rd	Minnetonka	55345	1	
95	1640	19233	UST	R	F000	2411723310013	Cottagewood General Store	20280 Cottagewood Rd	Deephaven	55331	1	
96	1641	14357	UST	R	F000	3411822340050	Christ Memorial Lutheran Church	13501 Sunset Trl	Plymouth	55441	1	
97	1642	5988	LUST	C	F000	1811722130046	Woodys Mobil Service Inc	18258 Minnetonka Blvd	Deephaven	55391	1	
98	1643	17268	UST	A	F000		Cedar Ridge Condominium	10211 Cedar Lake Rd	Minnetonka	55305	1	3000 gal. fuel oil UST removed, 3000 gal. fuel oi*
99	1644	55134	AST	A	W000		I Flex Inc	15115 Minnetonka Industrial Rd	Minnetonka	55345	9	
101	1645	2488	UST	R	F000	1611722410003	Minnetonka Police Department	14600 Minnetonka Blvd	Minnetonka	55345	1	Civic Center Complex
103	1646	VP21470	PCS	I	W000	0311722130052	Sears Imported Autos Inc	13500 Wayzata Blvd	Minnetonka	55305	1	
103	1647	16357	LUST	C	F000	0311722130052	Sears Imported Autos Inc	13500 Wayzata Blvd	Minnetonka	55305	1	
103	1648	18138	LUST	C	F000	0311722130052	Sears Imported Autos Inc	13500 Wayzata Blvd	Minnetonka	55305	1	
103	1649	5154	LUST	C	F000	0311722130052	Sears Imported Autos Inc	13500 Wayzata Blvd	Minnetonka	55305	1	
104	1650	125771	UST	R	F000	3011722320044	Stratford Wood	5101 Boarshead Rd	Minnetonka	55345	2	
105	1651	7648	LUST	C	F000		Mndot Right Of Way	Th 7 & Vinehill Rd	Minnetonka	55345	1	

Appendix D
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 Potential Contaminant Source Inventory



MapID	PCSI_ID	PROGRAM_ID	PCS_C	STATUS_C	MAT_C	PIN	FAC_NAME	ADDRESS	CITY	ZIP5_CODE	TOTAL	Comment
107	1652	8958	LUST	C	F000	3411722230021	Sue Gardner Residence	14325 Grenier Rd	Minnetonka	55345	1	
108	1653	5460	LUST	C	F000		Tonka Ford	4924 County Road 101	Minnetonka	55345	1	
109	1654	38	LUST	C	F000	0311622210007	Clark Bill Oil Co Inc	6300 Carlson Dr	Eden Prairie	55346	1	
110	1655	VP30180	PCS	A	W000	1811722310097	Former Deephaven Service Station	18325 Northome Blvd	Deephaven	55391	1	
110	1656	19086	LUST	C	F000	1811722310097	Former Deephaven Service Station	18325 Northome Blvd	Deephaven	55391	1	
111	1657	7632	LUST	C	F000	3411722140007	Creative Auto Service	5801 Baker Rd	Minnetonka	55345	1	
112	1658	VP4300	PCS	I	W000		Hedberg Estate Property	Ceder Lake & Hopkins Crosswood	Minnetonka	55305	1	
113	1659	50549	AST	A	W000	3611722230020	Holiday Circuits Inc	11126 W Bren Rd	Minnetonka	55343	4	4 - 3000 gal. chemical tanks
113	1660	MND066539743	PCS	C	W000	3611722230020	Holiday Circuits Inc	11126 W Bren Rd	Minnetonka	55343	1	Unknown/unidentified contaminant
114	1661	1890	LUST	C	F000	1211722330001	Spielmann's BP #5765	2711 Hopkins Crossroad	Minnetonka	55305	1	
114	1662	13051	LUST	C	F000	1211722330001	Spielmann's BP #5765	2711 Hopkins Crossroad	Minnetonka	55305	1	
114	1663	2924	UST	A	F000	1211722330001	Spielmann's BP #5765	2711 Hopkins Crossroad	Minnetonka	55305	4	
115	1664	9831	LUST	C	F000	0811722230001	Miller Residence	639 Bushaway Rd	Wayzata	55391	1	
116	1665	439	LUST	C	F000	1811722410001	Oasis Market #563	17601 Minnetonka Blvd	Minnetonka	55391	1	
116	1666	13408	LUST	C	F000	1811722410001	Oasis Market #563	17601 Minnetonka Blvd	Minnetonka	55391	1	
116	1667	2562	UST	A	F000	1811722410001	Oasis Market #563	17601 Minnetonka Blvd	Minnetonka	55391	3	
118	1668	2365	UST	R	F000		Honeywell International Inc	15102 Minnetonka Industrial Rd	Minnetonka	55345	3	
120	1669	17433	LUST	C	F000	2911722320006	Kmart Store 3052	17501 Highway 7	Minnetonka	55345	1	
121	1670	VP24540	PCS	A	W000	0411722230014	BMW of Minnesota	15802 Wayzata Blvd	Minnetonka	55391	1	
123	1671	3272	PCS	C	W000		Ultramatic Inc	6338 Carlson Dr	Eden Prairie	55346	1	Petroleum brownfield site
126	1672	1470	UST	R	F000	0211722320005	Sinclair Ridgedale Station	12415 Wayzata Blvd	Minnetonka	55305	4	
126	1673	4289	PCS	C	W000	0211722320005	Sinclair Ridgedale Station	12415 Wayzata Blvd	Minnetonka	55305	1	
126	1674	8884	LUST	C	F000	0211722320005	Sinclair Ridgedale Station	12415 Wayzata Blvd	Minnetonka	55305	1	
126	1675	18933	LUST	C	F000	0211722320005	Sinclair Ridgedale Station	12415 Wayzata Blvd	Minnetonka	55305	1	
127	1676	5436	LUST	C	F000	3311722110024	Glen Lake Mobile	14525 Excelsior Blvd	Minnetonka	55345	1	
127	1677	1768	UST	A	F000	3311722110024	Glen Lake Mobile	14525 Excelsior Blvd	Minnetonka	55345	3	
128	1678	6382	LUST	C	F000	0211722330011	Firestone	12425 Wayzata Blvd	Minnetonka	55305	1	
129	1679	5894	LUST	C	F000	0211722320002	Macy's North - Ridgedale	12411 Wayzata Blvd	Minnetonka	55305	1	
129	1680	2429	UST	R	F000	0211722320002	Macy's North - Ridgedale	12411 Wayzata Blvd	Minnetonka	55305	1	
130	1681	4155	LUST	C	F000	2711722140088	Carworks Auto Care Inc dba Baker Road Service	13125 Excelsior Blvd	Minnetonka	55343	1	
130	1682	11403	LUST	C	F000	2711722140088	Carworks Auto Care Inc dba Baker Road Service	13125 Excelsior Blvd	Minnetonka	55343	1	
134	1683	3471	PCS	I	W000	1711722230083	Minnetonka Animal Hospital	17408 Minnetonka Blvd	Minnetonka	55345	1	
135	1684	18941	LUST	C	F000	0411722320010	Dahlen Residence	1410 Holdridge Ter	Wayzata	55391	1	
136	1685	3071	PCS	I	W000		Apt Site P031/Hedberg Industrial	2863 Hedberg Dr	Minnetonka	55305	1	
138	1686	VP27890	PCS	A	W000	0411722240015	CLS Properties LLC Auto Service Redevelopment	15320 Wayzata Blvd	Minnetonka	55391	1	
138	1687	4051	PCS	I	W000	0411722240015	CLS Properties LLC Auto Service Redevelopment	15320 Wayzata Blvd	Minnetonka	55391	1	
139	1688	REM03795	SWMS	I	W100		Clear Spring School Dist. Stab Pond		Minnetonka	55345	1	SA7612
140	1689	VP15280	PCS	I	W000		Commercial Property #2		Minnetonka	55345	1	
140	1690	VP15281	PCS	I	W000		Commercial Property #2		Minnetonka	55345	1	
142	1691	5263	LUST	C	F000		Jackson Residence		Minnetonka	55345	1	
143	1692	17943	LUST	C	F000	0511722430031	Enchanted Woods	262 Bushaway Rd	Wayzata	55391	1	
145	1693	17853	LUST	C	F000	0811722420011	Wilkie Residence	2602 Crosby Rd	Minnetonka	55391	1	
146	1694	3010	UST	R	F000		Minnetonka Apco	17300 W Highway 101	Wayzata	55391	6	
148	1695	1077	LUST	C	F000		Us West	23520 County Road 10	Minnetonka	55345	1	
152	1696	VP0073	PCS	I	W000		Commercial Property		Minnetonka	55345	1	
153	1697	VP0071	PCS	I	W000		Lutheran Brotherhood		Minnetonka	55345	1	
154	1698	VP0076	PCS	I	W000		Advanced Flex III		Minnetonka	55345	1	
155	1699	9724	LUST	C	F000		Kulich Residence	2460 Sheridan Hills Curve	Minnetonka	55391	1	
156	1700	7669	LUST	C	F000	2411723320082	Todd Murphy Residence	4285 Cottonwood Ln	Deephaven	55331	1	
157	1701	4673	LUST	C	F000		Faith Presbyterian Church	12007 Excelsior Blvd	Minnetonka	55343	1	
158	1702	9416	LUST	C	F000	2411723330022	Ferguson Residence	20590 Linden Rd	Deephaven	55331	1	
159	1703	5406	LUST	C	F000		Groveland Elementary School	3325 Groveland School Rd	Minnetonka	55391	1	
160	1704	4324	LUST	C	F000	3311722110032	Glen Lake BP	14616 Excelsior Blvd	Minnetonka	55345	1	

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160	1705	2951	UST	A	F000	3311722110032	Glen Lake BP	14616 Excelsior Blvd	Minnetonka	55345	4		
162	1706	3091	UST	A	F000	3311722420046	Gatewood Elementary School	14900 Gatewood Dr	Minnetonka	55345	1		
163	1707	3000	UST	R	F000	3511722140253	Oasis Market #524	5757 Sanibel Dr #1	Minnetonka	55343	3		
165	1708	20956	UST	C	F000		Tyrus Abel	3531 Lilac Ln	Minnetonka	55345	1		
166	1709	14291	UST	R	F000	2111722110027	Proposed Antique Shop	3909 Williston Rd	Minnetonka	55345	1		
167	1710	SA4526	PCS	A	W000	1711722230083	17408 Minnetonka Boulevard	17408 Minnetonka Boulevard	Minnetonka	55345	1		
168	1711	VP0075	PCS	I	W000	1611722340002	Lutheran Brotherhood #2	15225 Minnetonka Boulevard	Minnetonka	55345	1		
169	1712	696	LUST	A	F000	0311722140059	Midas Muffler/mndot Strip	12812 Wayzata Blvd	Minnetonka	55305	1		
170	1713	3088	UST	A	F000		ISD 270 West Junior High School	3830 Baker Rd	Minnetonka	55305	1		
170	1714	7434	LUST	C	F000		ISD 270 West Junior High School	3830 Baker Rd	Minnetonka	55305	1		
172	1715	19212	LUST	C	F000	1611722420003	Minnetonka Christian Academy	3500 Williston Rd	Minnetonka	55345	1		
173	1716	1926	UST	R	F000	3111722130005	Minnetonka Schools Warehouse	5700 Highway 101	Minnetonka	55345	2		
174	1717	2485	AST	A	W000	0911722340002	Cargill Inc/office Center	15407 Mcginty Rd W	Wayzata	55391	2		
174	1718	6599	LUST	C	F000	0911722340002	Cargill Inc/office Center	15407 Mcginty Rd W	Wayzata	55391	1		
176	1719	7049	LUST	C	F000	0211722340006	Sears Roebuck & Co	1112/6382	12431 Wayzata Blvd	Minnetonka	55305	1	
177	1720	VP6480	PCS	I	W000		Conoco Store #23315	17515 Highway 7	Minnetonka	55345	1		
178	1721	VP9440	PCS	I	W000		Ridgehaven Mall	13513 Ridgehaven Dr	Minnetonka	55305	1		
179	1722	12633	LUST	C	F000		Goodwill - Minnetonka	13820 Wayzata Blvd	Minnetonka	55305	1		
180	1723	15161	UST	I	F000		Cedar Ridge Apts	10101 Cedar Lake Rd	Minnetonka	55343	1	3000 gal. fuel oil UST, closed in place	
182	1724	15218	UST	A	F000	0211622110021	Superamerica #4441	6355 Point Chase Rd	Eden Prairie	55344	4		
183	1725	1609	UST	A	F000		GLC Hillcrest of Wayzata	15409 Wayzata Blvd	Wayzata	55391	1		
183	1726	2517	LUST	C	F000		GLC Hillcrest of Wayzata	15409 Wayzata Blvd	Wayzata	55391	1		
184	1727	3034	LUST	I	F000	1511722410062	Glenns 1 Stop	12908 Minnetonka Blvd	Minnetonka	55305	1		
184	1728	1827	UST	A	F000	1511722410062	Glenns 1 Stop	12908 Minnetonka Blvd	Minnetonka	55305	4		
187	1729	17258	UST	I	F000		Minnetonka city of Fire Dept	14550 Minnetonka Blvd	Minnetonka	55345	1	Tank listed as temporarily closed	
188	1730	REM03884	SWMS	C	W100		Deephaven Dump		Deephaven	55345	1	SA7610, CLOSED 1972	
189	1731	REM04618	SWMS	I	W100		Minnetonka Jr. High Swge Lagoon Surf Imp		Minnetonka	55345	1	SA7621	
190	1732	11119999	UST	R	F000		Bollig & Sons Inc	11401 County Road 3	Hopkins	55343	7	Site preparation contractor	
190	1733	11119	UST	A	F000		Bollig & Sons Inc	11401 County Road 3	Hopkins	55343	2	Site preparation contractor	
191	1734	12342	LUST	C	F000	2111722440036	Tower Hill Booster Station	4550 Woodhill Rd	Minnetonka	55345	1		
193	1735	6871	LUST	C	F000	0511722130031	Zitco Inc/lowells Auto	1805 Wayzata Blvd E	Wayzata	55391	1		
194	1736	15159	UST	R	F000	1211722420223	Cedar Ridge Apts	10201 Cedar Lake Rd	Minnetonka	55343	2	2 - 3000 gal. fuel oil UST, removed	
195	1737	1753	UST	A	F000	2911722230006	Freedom Valu Center	17516 Highway 7	Minnetonka	55345	4		
197	1738	3117	UST	A	F000	3511722330018	GE Osmonics Inc	5951 Clearwater Dr	Minnetonka	55343	2		
197	1739	3117	UST	A	F000	3511722330018	GE Osmonics Inc	5951 Clearwater Dr	Minnetonka	55343	2		
197	1740	18895	LUST	C	F000	3511722330018	GE Osmonics Inc	5951 Clearwater Dr	Minnetonka	55343	1		
197	1741	VP10440	PCS	I	W000	3511722330018	GE Osmonics Inc	5951 Clearwater Dr	Minnetonka	55343	1		
199	1742	MND985678937	SWMS	I	W100		Old Minnetonka Dump		Minnetonka	55345	1		
200	1743	15384	UST	R	F000	2711722240037	Cochran (residence)	4731 Conventry Rd	Minnetonka	55345	1		
201	1744	3178	LUST	C	F000	1711722320047	Koehnens Amoco	17415 Minnetonka Blvd	Minnetonka	55345	1		
201	1745	2914	UST	A	F000	1711722320047	Koehnens Amoco	17415 Minnetonka Blvd	Minnetonka	55345	4		
202	1746	7839	LUST	C	F000	0211722310007	Ridgedale Shopping Center	12401 Wayzata Blvd	Minnetonka	55305	1		
202	1747	7897	LUST	C	F000	0211722310007	Ridgedale Shopping Center	12401 Wayzata Blvd	Minnetonka	55305	1		
202	1748	7783	LUST	C	F000	0211722310007	Ridgedale Shopping Center	12401 Wayzata Blvd	Minnetonka	55305	1		
202	1749	7937	LUST	C	F000	0211722310007	Ridgedale Shopping Center	12401 Wayzata Blvd	Minnetonka	55305	1		
202	1750	2784	UST	R	F000	0211722310007	Ridgedale Shopping Center	12401 Wayzata Blvd	Minnetonka	55305	6		
204	1751	8183	LUST	C	F000	0211722310008	Carson Pirie Scott - Ridgedale	12441 Wayzata Blvd	Minnetonka	55305	1		

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204	1752	1663	UST	U	F000	0211722310008	Carson Pirie Scott - Ridgedale	12441 Wayzata Blvd	Minnetonka	55305	1	
206	1753	REM03460	SWMS	I	W100		Advanced Flex	15115 Minnetonka Boulevard	Minnetonka	55345	1	
209	1754	20787	AST	A	W000		Former Gray's Bay Resort & Mar	2831 Highway 101	Wayzata	55391	1	
210	1755	15033	LUST	C	F000		Digital 7	15400 Highway 7	Minnetonka	55345	1	
210	1756	4369	LUST	C	F000		Digital 7	15400 Highway 7	Minnetonka	55345	1	
214	1757	4393	PCS	I	W000		the Shoppes on Seven	17501 Highway 7	Minnetonka	55345	1	
217	1758	14041	LUST	C	F000		Gray's Bay Resort And Marina	2831 County Road 101 S	Minnetonka	55345	1	
218	1759	9365	LUST	C	F000	0811722220003	Sweatt Residence	500 Bushaway Rd	Wayzata	55391	1	
219	1760	3086	UST	A	F000	2711722240001	Glen Lake Elementary School	4801 Woodridge Rd	Minnetonka	55345	1	
220	1761	7273	LUST	C	F000		Minnetonka Plant	11303 W Cedar Lake Rd	Minnetonka	55305	1	Hedberg & Sons
220	1762	1744	UST	R	F000		Minnetonka Plant	11303 W Cedar Lake Rd	Minnetonka	55305	1	
221	1763	17266	UST	A	F000	1211722420080	Cedar Ridge Condominium	10301 Cedar Lake Rd	Minnetonka	55305	1	3000 gal. fuel oil UST removed, 3000 gal. fuel oi*
223	1764	14510	LUST	C	F000	1811722310096	Former Gas Station	18312 Minnetonka Blvd	Deephaven	55391	1	
225	1765	VP1490	PCS	I	W000	1411722140004	Minnetonka Operations & Maintenance Dept	11522 Minnetonka Blvd	Minnetonka	55305	1	Minnetonka City Garage
225	1766	10814	LUST	C	F000	1411722140004	Minnetonka Operations & Maintenance Dept	11522 Minnetonka Blvd	Minnetonka	55305	1	Minnetonka City Garage
225	1767	3736	LUST	I	F000	1411722140004	Minnetonka Operations & Maintenance Dept	11522 Minnetonka Blvd	Minnetonka	55305	1	No closure report or letter from PCA indicated
225	1768	2491	UST	A	F000	1411722140004	Minnetonka Operations & Maintenance Dept	11522 Minnetonka Blvd	Minnetonka	55305	2	
225	1769	2491	UST	A	F000	1411722140004	Minnetonka Operations & Maintenance Dept	11522 Minnetonka Blvd	Minnetonka	55305	2	
226	1770	7297	LUST	C	F000		Williston Road Lift Station	3600 Williston Rd	Minnetonka	55345	1	
228	1771	11148	LUST	C	F000		Autoworks Collision	15906 Wayzata Blvd	Wayzata	55391	1	
229	1772	7527	LUST	C	F000	0511722310020	Wayzata Bp Amoco	1490 Wayzata Blvd E	Wayzata	55391	1	
229	1773	2932	UST	A	F000	0511722310020	Wayzata Bp Amoco	1490 Wayzata Blvd E	Wayzata	55391	4	
230	1774	8205	LUST	C	F000	2711722110076	Express Lube	13118 Excelsior Blvd	Minnetonka	55343	1	
230	1775	2453	UST	A	F000	2711722110076	Express Lube	13118 Excelsior Blvd	Minnetonka	55343	3	
231	1776	15652	LUST	C	F000		Sullivans Services Inc	3660 Highway 101 S	Deephaven	55391	1	
232	1777	13457	LUST	C	F000		Wayzata Marine Inc	16602 Wayzata Blvd	Wayzata	55391	1	
233	1778	2855	AST	A	W000	3411722420008	TruGreen - Minnetonka	6010 Culligan Way	Minnetonka	55345	1	
233	1779	6659	LUST	C	F000	3411722420008	TruGreen - Minnetonka	6010 Culligan Way	Minnetonka	55345	1	
234	1780	REM05371	SWMS	I	W100		Wayzata Boulevard Demolition		Minnetonka	55391	1	SA7615
235	1781	14738	UST	R	F000	2611722420006	Best Product	5135 Shady Oak Rd	Minnetonka	55345	1	
236	1782	12187	LUST	C	F000	3311722110022	Matts Auto Service Inc	14521 Excelsior Blvd	Minnetonka	55345	1	
239	1783	13941	LUST	C	F000		Vine Hill Rd And Hwy 7 Mndot Site	Vine Hill Rd & Highway 7	Deephaven	55331	1	
244	1784	11394	UST	A	F000	1811722430020	Weaver David K	18000 Fairhomes Ln	Deephaven	55391	1	1 TANK REMOVED ALSO
247	1785	17267	UST	A	F000	1211722420125	Cedar Ridge Condominium	10311 Cedar Lake Rd	Minnetonka	55343	1	3000 gal. fuel oil UST removed, 3000 gal. fuel oi*
247	1786	8812	LUST	C	F000	1211722420125	Cedar Ridge Condominium	10311 Cedar Lake Rd	Minnetonka	55343	1	
248	1787	16647	LUST	C	F000	3511722410011	Susan Friedline Residence	11507 Old Bren Rd	Minnetonka	55343	1	
249	1788	3090999	UST	R	F000	1211722240004	ISD 270 - Hopkins Sr High School	2400 Lindbergh Dr	Minnetonka	55305	3	
249	1789	3090	UST	A	F000	1211722240004	ISD 270 - Hopkins Sr High School	2400 Lindbergh Dr	Minnetonka	55305	1	
250	1790	6401	LUST	C	F000		Stodola Well Drilling	15306 Highway 7	Minnetonka	55345	1	
251	1791	1648	LUST	C	F000	1511722410051	Bennis Feed N Fuel Inc	13008 Minnetonka Blvd	Minnetonka	55305	1	
251	1792	2816	UST	A	F000	1511722410051	Bennis Feed N Fuel Inc	13008 Minnetonka Blvd	Minnetonka	55305	4	
252	1793	1248	LUST	C	F000		Village Chevrolet Co	16200 Wayzata Blvd	Wayzata	55391	1	
252	1794	3253	UST	A	F000		Village Chevrolet Co	16200 Wayzata Blvd	Wayzata	55391	3	
253	1795	5337	LUST	C	F000		Wayzata Lift Station/I-26	320 Grove Ln E	Wayzata	55391	1	
254	1796	19815	LUST	C	F000	2711722310044	Wollenberg Residence	5100 Prescott Dr	Minnetonka	55345	1	
255	1797	8894	LUST	C	F000		Youngstedts Goodyear Service	14950 Highway 7	Minnetonka	55345	1	

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258	1798	15160	UST	R	F000	1211722420224	Cedar Ridge Apts	10111 Cedar Lake Rd	Minnetonka	55343	1	3000 gal. fuel oil UST, removed
262	1799	19617	UST	R	F000	1211723110003	Pillsbury Residence	306 W Ferndale Rd	Wayzata	55391	2	
263	1800	8400	LUST	C	F000		William Dolan Residence	3100 Maplewood Rd	Wayzata	55391	1	
264	1801	19626	AST	R	W000		Pentax Vision Inc	11545 Encore Circle	Minnetonka	55343	1	Unknown/unidentified contaminant
265	1802	14628	UST	R	F000	1911722340009	Stark Clarence - Residence	4516 Sparrow Rd	Minnetonka	55345	1	
266	1803	3089	UST	A	F000	1211722240006	ISD 270 North Junior High School	10700 Cedar Lake Rd	Minnetonka	55305	1	10,000 gal. fuel oil
268	1804	8443	LUST	C	F000		Former Kelley Properties	14324 Stewart Lake	Minnetonka	55345	1	
270	1805	16933	LUST	C	F000	2211722430023	Petters Group Aviation	4400 Baker Rd	Minnetonka	55343	1	
271	1806	18148	UST	R	F000	3611722230019	Bren Tech Building/miw-gw Partners	11140 Bren Rd	Minnetonka	55343	1	2000 gal. tank removed
273	1807	1933	UST	A	F000		Groveland Elementary	3325 Groveland School Rd	Minnetonka	55391	1	
274	1808	54834	AST	A	W000	0911722230005	Cargill Inc/research Building	2301 Crosby Rd	Minnetonka	55391	1	
274	1809	5910	LUST	C	F000	0911722230005	Cargill Inc/research Building	2301 Crosby Rd	Minnetonka	55391	1	
274	1810	3998	LUST	C	F000	0911722230005	Cargill Inc/research Building	2301 Crosby Rd	Minnetonka	55391	1	
276	1811	4875	LUST	C	F000	2411723330044	Deephaven city of	20225 Cottagewood Rd	Deephaven	55331	1	
276	1812	2553	LUST	C	F000	2411723330044	Deephaven city of	20225 Cottagewood Rd	Deephaven	55331	1	
277	1813	SW-58	SWMS	C	W100		Hopkins Sanitary Landfill	1010 1st St S	Hopkins	55343	1	Landfill, Closed - SW-58 - Owned by MPCA
278	1814	VP19950	PCS	I	W000		Deephaven Cove	3660 County Highway 101	Deephaven	55319	1	
280	1815	1937	UST	A	F000	3111722130003	Clear Springs Elementary School	5701 Highway 101	Minnetonka	55345	1	
280	1816	6318	LUST	C	F000	3111722130003	Clear Springs Elementary School	5701 Highway 101	Minnetonka	55345	1	
282	1817	19981	UST	A	F000	3411822320033	Holiday Stationstore 140	189 Cheshire Ln	Plymouth	55441	4	
282	1818	18194	LUST	C	F000	3411822320033	Holiday Stationstore 140	189 Cheshire Ln	Plymouth	55441	4	
Minnesota Well Index - Figure 3												
1	1	00207469	WEL	I	W000	3211822420022	BIRCHWOOD ESTATES N	165254TH AVE N	PLYMOUTH	55447	1	
2	2	00643170	WEL	A	W000	3211822410041	MIGUET, GAYLEN	162154TH AVE N	PLYMOUTH	55447	1	
3	3	00413369	WEL	A	W000	3211822420036		300BLACK OAKS LA N	PLYMOUTH	55391	1	
4	4	00204704	WEL	A	W000	3311822420022	JOHN, R. D.	316LANEWOOD LA N	PLYMOUTH	55447	1	
5	5	00563086	WEL	A	W000	3411822310003	ZIEGLER, LOIS	13508SUNSET TR N	PLYMOUTH	55441	1	
6	6	00136728	WEL	A	W000	3211822430001	KNAPP, BILL	240BLACK OAKS LA N	PLYMOUTH	55391	1	
7	7	00696479	WEL	A	W000	3211822430004		235BLACK OAKS LA N	PLYMOUTH	55391	1	
8	8	00204705	WEL	A	W000	3311822430036	FLICK, ED	210LANEWOOD LA N	PLYMOUTH	55447	1	
9	9	00588935	WEL	A	W000	3211822430005	KOPPLEMAN, STEINER	205BLACK OAKS LA N	PLYMOUTH	55391	1	
10	10	00204710	WEL	A	W000	3411822340050	CHRIST MEMORIAL CHUR	13501SUNSET TR N	PLYMOUTH	55441	1	
11	11	00204706	WEL	A	W000	3311822430048	ODIN INC.	15014GLEASON LAKE DR	PLYMOUTH	55447	1	
12	12	00127386	WEL	A	W000	3211822430007	SUPERIOR 77	125BLACK OAKS LA N	PLYMOUTH	55391	1	
13	13	00204713	WEL	A	W000	3411822430055	FLADWOOD, EUNICE	132551ST AVE N	PLYMOUTH	55441	1	
14	14	00203683	WEL	A	W000	0311722120006	KOSKA, JAMES	14PLYMOUTH RD	MINNETONKA	55305	1	
15	15	00203722	WEL	A	W000	0411722120006	BURNETT, GENE	300CARLSON PKWY	MINNETONKA	55305	1	
16	16	00207174	WEL	A	W000	0511722110001	ZAFFKE	100TOWNES RD	MINNETONKA	55391	1	
17	17	00203724	WEL	A	W000	0411722220008	PIERCE, C. C.	207TOWNES LA	MINNETONKA	55391	1	
18	18	00203756	WEL	A	W000	0511722110024	HOLST, ROY	16116GLEASON LAKE RD	MINNETONKA	55391	1	
19	19	00180940	WEL	A	W000	0411722210002	JONDAHL, DON	302PARKERS LAKE RD	MINNETONKA	55391	1	
20	20	00207175	WEL	A	W000	0511722110010	ZAFFKE	301TOWNES RD	MINNETONKA	55391	1	
21	21	00203684	WEL	A	W000	0311722120046	LICHT, RAYMOND	13537WINDYHILL RD	MINNETONKA	55305	1	
22	22	00203723	WEL	A	W000	0411722219000	BAUMAN, PAUL	0		55305	1	
23	23	00203725	WEL	A	W000	0411722220013	WALLANDER, OSCAR	315TOWNES LA	MINNETONKA	55391	1	
24	24	00203685	WEL	A	W000	0311722210022	GRADY	442KENMAR CIR	MINNETONKA	55305	1	
25	25	00203686	WEL	A	W000	0311722120023	HADFIELD, HARRIET	414PLYMOUTH RD	MINNETONKA	55305	1	
26	26	00203682	WEL	A	W000	0311722110031	DEDRICK, GRANVILLE A.	12916FAIRFIELD RD	MINNETONKA	55305	1	
27	27	00223792	WEL	A	W000	0311722140008		13011FAIRFIELD RD	MINNETONKA	55305	1	
28	28	00203689	WEL	A	W000	0311722140042	JOHNSON, CHARLES	12909FAIRFIELD RD	MINNETONKA	55305	1	
29	29	00203693	WEL	A	W000	0311722240018		13707KNOLLWAY DR N	MINNETONKA	55305	1	
30	30	00203687	WEL	A	W000					55305	1	
31	31	00203690	WEL	A	W000	0311722140038	TOWNROE, E. B.	903SUNNYVIEW LA	MINNETONKA	55305	1	
32	32	00203691	WEL	A	W000	0311722140027	TRIPLETT, JEROME	1014SUNSET DR S	MINNETONKA	55305	1	
33	33	00203673	WEL	A	W000	0211722230051		12400WAYZATA BLVD	MINNETONKA	55305	1	

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34	34	00203692	WEL	A	W000	0311722140005	HEDTKE, OTTO	12901MARION LA W	MINNETONKA	55305	1	
35	35	00203688	WEL	A	W000	0311722130052	NESLUND, RICHARD	13500WAYZATA BLVD	MINNETONKA	55305	1	
36	36	00203694	WEL	A	W000	0311722240003	STANDARD OIL CO.	13712WAYZATA BLVD	MINNETONKA	55305	1	
37	37	00203672	WEL	A	W000	0211722230030	GREVICH, MEL	12500WAYZATA BLVD	MINNETONKA	55305	1	
38	38	00223968	WEL	A	W000	0311722240003	BELL HOTEL	13712WAYZATA BLVD	MINNETONKA	55305	1	
39	39	00242099	WEL	U	W000		OBWELL 27037 STANDARD OIL			55305	1	
40	40	00242205	WEL	A	W000		SKELGAS L.P. PLANT + PRO			55305	1	
41	41	00563989	WEL	A	W000	0511722310020	MW-4	1490WAYZATA BLVD E	WAYZATA	55391	1	
42	42	00272552	WEL	A	W000	0511722420003	FAIRVIEW CONSTRUCTIO	1920WAYZATA BLVD E	WAYZATA	55391	1	
43	43	00223969	WEL	A	W000	0311722310023	GREEN GABLE MOTEL	13911RIDGEDALE DR	MINNETONKA	55305	1	
44	44	00137380	WEL	A	W000	0511722420005		16530HOLDRIDGE RD W	WAYZATA	55391	1	
45	45	00203727	WEL	A	W000	0411722320002	AULD, JOE	1300HOLDRIDGE TER	WAYZATA	55391	1	
46	46	00561362	WEL	A	W000	0411722320004	ESTHER CHRISTENSON T	1322HOLDRIDGE TER	WAYZATA	55391	1	
47	47	00203729	WEL	A	W000	0411722320004	ASTRUM, CARL	1322HOLDRIDGE TER	WAYZATA	55391	1	
48	48	00561314	WEL	A	W000	0511722410002	GRIMM, IVAN	1413HOLDRIDGE LA	WAYZATA	55391	1	
49	49	00127500	WEL	A	W000	0411722320010	BRITIAN, BOB	1410HOLDRIDGE TER	WAYZATA	55391	1	
50	50	00203726	WEL	A	W000	0411722310008	BAKER, L. J.	1406CLARENDON DR	MINNETONKA	55391	1	
51	51	00184761	WEL	A	W000	0411722320024	BRIGGS, GARY	1409HOLDRIDGE TER	WAYZATA	55391	1	
52	52	00750674	WEL	A	W000	0411722320008	FITZGERALD, SUZANNE	15906HILL RD	WAYZATA	55391	1	
53	53	00424071	WEL	A	W000	0411722320007	KLEVEN, DAVID	15910HILL RD	WAYZATA	55391	1	
54	54	00505022	WEL	A	W000	0511722410010	BENNETT, HOWARD	1412HOLDRIDGE LA	WAYZATA	55391	1	
55	55	00435384	WEL	A	W000	0511722420016	NORTHEY, CURT	1414HOLDRIDGE CIR	WAYZATA	55391	1	
56	56	00112218	WEL	A	W000	0411722320025	COLLINS, THOMAS	1501HOLDRIDGE TER	WAYZATA	55391	1	
57	57	00462143	WEL	A	W000	0411722320014	FRANK, SUSAN	1506HOLDRIDGE TER	WAYZATA	55391	1	
58	58	00223784	WEL	A	W000	0511722410003	BAINBRIDGE, HARLAND J	1505HOLDRIDGE LA	WAYZATA	55391	1	
59	59	00276376	WEL	A	W000	0411722310003	OLSON, H.S.	1431CLARENDON DR	MINNETONKA	55391	1	
60	60	00620055	WEL	A	W000	0411722320012	KROECK, GEORGE	15907HILL RD	WAYZATA	55391	1	
61	61	00615234	WEL	A	W000	0411722320015	BREMER, BILL	1513CROSBY RD	WAYZATA	55391	1	
62	62	00770029	WEL	A	W000		HINDERKS, CRAIG			55305	1	
63	63	00223791	WEL	A	W000	0311722320005		14104LAUREL RD	MINNETONKA	55305	1	
64	64	00650716	WEL	A	W000	0411722320016	ALLEN-WOLSTEAD, LISA	1512HOLDRIDGE TER	WAYZATA	55391	1	
65	65	00136626	WEL	A	W000	0511722310011	WEILAND, TWYLAH	167BUSHAWAY RD	WAYZATA	55391	1	
66	66	00203717	WEL	A	W000	0311722420009	MINNETONKA 12	13414JEFFRY WAY	MINNETONKA	55305	1	
67	67	00203715	WEL	A	W000	0311722420005	CHURCH	1505ESSEX RD	MINNETONKA	55305	1	
68	68	00203696	WEL	A	W000	0311722310007		1500ESSEX RD	MINNETONKA	55305	1	
69	69	00203760	WEL	A	W000	0511722420018	STATEWIDE	1500HOLDRIDGE CIR	WAYZATA	55391	1	
70	70	00203714	WEL	A	W000	0311722420007	WHITLEY	13504JEFFRY WAY	MINNETONKA	55305	1	
71	71	00426532	WEL	A	W000	0411722320017	ROSEN, CASEY	1607CROSBY RD	WAYZATA	55391	1	
72	72	00223790	WEL	U	W000	0311722320018		14111LAUREL RD	MINNETONKA	55305	1	
73	73	00223783	WEL	A	W000	0511722420026	HANSON, R. C.	1716HOLDRIDGE CIR	WAYZATA	55391	1	
74	74	00203701	WEL	A	W000	0311722320019		14103LAUREL RD	MINNETONKA	55305	1	
75	75	00203728	WEL	A	W000	0411722310012	LAUER, DICK	1533CLARE LA	MINNETONKA	55391	1	
76	76	00203762	WEL	A	W000	0511722420026	HARTWELL, W.E.	1716HOLDRIDGE CIR	WAYZATA	55391	1	
77	77	00735741	WEL	A	W000	0411722320020	SMITH, RUSSELL	1610HOLDRIDGE TER	WAYZATA	55391	1	
78	78	00538036	WEL	A	W000	0411722320019	COOK, TIM	1609CROSBY RD	WAYZATA	55391	1	
79	79	00203699	WEL	A	W000	0311722320020		14015LAUREL RD	MINNETONKA	55305	1	
80	80	00426590	WEL	A	W000	0511722420019	KANE, DAN	1600HOLDRIDGE CIR	WAYZATA	55391	1	
81	81	00203700	WEL	A	W000	0311722320009		14003WHITE BIRCH RD	MINNETONKA	55305	1	
82	82	00203716	WEL	A	W000	0311722420017	SKOGEN, LYLE	1601ESSEX RD	MINNETONKA	55305	1	
83	83	00203703	WEL	A	W000	0311722320023		14110WHITE BIRCH RD	MINNETONKA	55305	1	
84	84	00203704	WEL	A	W000	0311722320024		14118WHITE BIRCH RD	MINNETONKA	55305	1	
85	85	00419428	WEL	A	W000	0411722320022	LIPACO, JOHN	1618HOLDRIDGE TER	WAYZATA	55391	1	
86	86	00770034	WEL	A	W000	0511722420009	VENTURA, GRETCHEN	1705HOLDRIDGE CIR	WAYZATA	55391	1	
87	87	00203707	WEL	A	W000	0311722320022		14102WHITE BIRCH RD	MINNETONKA	55305	1	
88	88	00178973	WEL	A	W000	0511722420010	RONNING, HOWARD	1601HOLDRIDGE CIR	WAYZATA	55391	1	
89	89	00203702	WEL	A	W000	0311722320022		14102WHITE BIRCH RD	MINNETONKA	55305	1	
90	90	00191939	WEL	A	W000	0311722420023	MINNETONKA 12A	13201RIDGEDALE DR	MINNETONKA	55305	1	
91	91	00203749	WEL	A	W000	0411722420012	WESTMAN, CARL	1553LINNEN RD	MINNETONKA	55391	1	
92	92	00203706	WEL	A	W000	0311722320010		14007WHITE BIRCH RD	MINNETONKA	55305	1	
93	93	00203761	WEL	A	W000	0511722420020	STATEWIDE PLG.	1620HOLDRIDGE CIR	WAYZATA	55391	1	
94	94	00203746	WEL	A	W000	0411722410011	VON BUSCH, ART	1608BRIGHTWOOD DR	MINNETONKA	55391	1	
95	95	00705933	WEL	A	W000	0411722320032	HOLDRIDGE LLC	15913HOLDRIDGE RD E	WAYZATA	55391	1	
96	96	00203747	WEL	A	W000	0411722410012	BANAZAK	1618BRIGHTWOOD DR	MINNETONKA	55391	1	
97	97	00203705	WEL	A	W000	0311722320013		14109WHITE BIRCH RD	MINNETONKA	55305	1	
98	98	00203697	WEL	A	W000	0311722320015		14117WHITE BIRCH RD	MINNETONKA	55305	1	
99	99	00203695	WEL	A	W000	0311722310026		1617FAIRFIELD RD S	MINNETONKA	55305	1	
100	100	00203731	WEL	A	W000	0411722320030	LINDAHL, JACK	15820HOLDRIDGE RD E	WAYZATA	55391	1	
101	101	00655014	WEL	A	W000	0411722330007	MALMBERG, JOEL & JEAN	1715CROSBY RD	WAYZATA	55391	1	
102	102	00203718	WEL	A	W000		NELSON, WILLIAM			55305	1	

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MapID	PCSI_ID	PROGRAM_ID	PCS_C	STATUS_C	MAT_C	PIN	FAC_NAME	ADDRESS	CITY	ZIP5_CODE	TOTAL	Comment
103	103	00112226	WEL	A	W000	0411722330001	LUDWIG, L. J.	15804HOLDRIDGE RD E	WAYZATA	55391	1	
104	104	00203750	WEL	A	W000	0411722440019	MEYERS, CLIFFORD	1631OAKWAYS	MINNETONKA	55391	1	
105	105	00203710	WEL	A	W000	0311722330004	HUGHES BROS.	1701OAKLAND RD	MINNETONKA	55305	1	
106	106	00203708	WEL	A	W000	0311722330003	LUNDGREN BROS.	1705OAKLAND RD	MINNETONKA	55305	1	
107	107	00203738	WEL	A	W000	0411722340009	MEEHAN, MIKE	15320HOLDRIDGE DR	MINNETONKA	55391	1	
108	108	00688960	WEL	A	W000	0511722440039		1720CROSBY RD	WAYZATA	55391	1	
109	109	00621593	WEL	A	W000	0411722330008	KELLESTAD, LEIGH	1723CROSBY RD	WAYZATA	55391	1	
110	110	00203736	WEL	A	W000		SCHERER, D. L.			55305	1	
111	111	W0000118	WEL	A	W000	0311722440036	IMPERIAL DEVELOPERS	1800PLYMOUTH RD	MINNETONKA	55305	1	
112	112	00203733	WEL	A	W000	0411722330014		15709HOLDRIDGE RD E	WAYZATA	55391	1	
113	113	00203739	WEL	A	W000	0411722340015	GRADOUS, FRED	15413HOLDRIDGE DR	MINNETONKA	55391	1	
114	114	00203732	WEL	A	W000	0411722330015	JOHNSON, RAY	15611HOLDRIDGE RD E	WAYZATA	55391	1	
115	115	00203713	WEL	A	W000	0311722340013	ANDERSON, LOWELL A.	1805FAIRFIELD RD S	MINNETONKA	55305	1	
116	116	00203751	WEL	A	W000	0411722440007	JOHNSON, IVAN	1801DEER HILL DR	MINNETONKA	55391	1	
117	117	00203752	WEL	A	W000	0411722440008	LONG, G. R.	1813DEER HILL DR	MINNETONKA	55391	1	
118	118	00203734	WEL	A	W000	0411722330045	HAIL, DOUGLAS	15607HOLDRIDGE RD E	WAYZATA	55391	1	
119	119	00203753	WEL	A	W000	0411722440009	SMESTAD + ENGQUIST	1825DEER HILL DR	MINNETONKA	55391	1	
120	120	W0000115	WEL	A	W000	0411722430052	CROSBY, JUDIE	1813LINNEN RD	MINNETONKA	55391	1	
121	121	00203737	WEL	A	W000	0411722340013	HARVEY, RALPH	15200HOLDRIDGE DR	MINNETONKA	55391	1	
122	122	00203759	WEL	A	W000	0511722340027	FIELDS, JOHN	310BUSHAWAY RD	WAYZATA	55391	1	
123	123	00136737	WEL	A	W000	0411722430001	CARLSON, KEN	1901LINNEN RD	MINNETONKA	55391	1	
124	124	00203766	WEL	A	W000	0511722440006	EXTURM, ED	16006RINGER RD	MINNETONKA	55391	1	
125	125	00203744	WEL	A	W000	0411722340030		15309HOLDRIDGE RD	MINNETONKA	55391	1	
126	126	00203768	WEL	A	W000		OSTROM, ED			55305	1	
127	127	00203743	WEL	A	W000	0411722340028		15213HOLDRIDGE RD	MINNETONKA	55391	1	
128	128	00203754	WEL	A	W000	0411722440011	RYERSE, D. D.	1913DEER HILL DR	MINNETONKA	55391	1	
129	129	00203719	WEL	A	W000	0311722430030	LUNDSTROM CONST. CO	1909ESSEX RD	MINNETONKA	55305	1	
130	130	00203741	WEL	A	W000	0411722340036		15535HOLDRIDGE DR	MINNETONKA	55391	1	
131	131	00203720	WEL	A	W000	0311722430034	EDWALL, ROBERT	13529LARKIN DR	MINNETONKA	55305	1	
132	132	00203712	WEL	A	W000	0311722330010	LENHART, A. A.	1922OAKLAND RD	MINNETONKA	55305	1	
133	133	00203721	WEL	A	W000	0311722430011	LAURIE, JIM	13517LARKIN DR	MINNETONKA	55305	1	
134	134	00203765	WEL	A	W000	0511722440016	PIERCE	16201RINGER RD	MINNETONKA	55391	1	
135	135	00203763	WEL	A	W000	0511722440013	BUDINGER	16392RINGER RD	MINNETONKA	55391	1	
136	136	00203769	WEL	A	W000	0511722440025	HEIL, RICHARD	1981LYMAN LA	MINNETONKA	55391	1	
137	137	00203742	WEL	A	W000	0411722340026		15544HOLDRIDGE DR	MINNETONKA	55391	1	
138	138	00223743	WEL	A	W000	0411722430008	CARLSON, KENNETH	1918DEER HILL CT	MINNETONKA	55391	1	
139	139	00203767	WEL	A	W000	0511722440015	PIERCE, C.C.	1982LYMAN LA	MINNETONKA	55391	1	
140	140	00203735	WEL	A	W000	0411722330032	CARROTHERS CONSTRU	15813WHITE PINE DR	MINNETONKA	55391	1	
141	141	00203764	WEL	A	W000	0511722440038	BOYER, JOE	16391RINGER RD	MINNETONKA	55391	1	
142	142	00100191	WEL	A	W000	0811722110023	LABELLE	16001ADELINE LA	MINNETONKA	55391	1	
143	143	00223744	WEL	A	W000	0911722110002	MICHAEL, WAYNE	2051MEETING ST	MINNETONKA	55391	1	
144	144	00204008	WEL	A	W000	1011722220022	MINNETONKA 9	34ADDRESS UNASSIGNE	MINNETONKA	55305	1	
145	145	00203794	WEL	A	W000	0911722210008	ECKSTROM, ED	15517POST RD	MINNETONKA	55391	1	
146	146	00100208	WEL	A	W000	0811722110026	JOHNSON, HERBERT T. J	2030CROSBY RD	MINNETONKA	55391	1	
147	147	00204020	WEL	A	W000	1111722120026	SODERLUND	11704LIVE OAK DR	MINNETONKA	55305	1	
148	148	00204018	WEL	A	W000	1111722110044	HIETANAN, W.	11312PARK RIDGE DR W	MINNETONKA	55305	1	
149	149	00439711	WEL	A	W000	1111722110017	MARTINSON, RALPH	11305PARK RIDGE DR W	MINNETONKA	55305	1	
150	150	00203795	WEL	A	W000	0911722210024	ADAMS CONST. CO.	2124SHERIDAN HILLS RD	MINNETONKA	55391	1	
151	151	00223785	WEL	A	W000	0911722210020		2148SHERIDAN HILLS RD	MINNETONKA	55391	1	
152	152	00223786	WEL	A	W000	0911722210022		2136SHERIDAN HILLS RD	MINNETONKA	55391	1	
153	153	00223787	WEL	A	W000	0911722210021		2142SHERIDAN HILLS RD	MINNETONKA	55391	1	
154	154	00203770	WEL	A	W000	0811722110018	CAMPION-PETERSON CO	16211ICE CIRCLE DR	MINNETONKA	55391	1	
155	155	00256806	WEL	I	W000	0911722220068		34ADDRESS UNASSIGNE	MINNETONKA	55391	1	
156	156	00223788	WEL	A	W000	1011722210052		2212OAKLAND RD	MINNETONKA	55305	1	
157	157	00203772	WEL	A	W000	0811722110017		16324MCGINTY RD W	MINNETONKA	55391	1	
158	158	00223745	WEL	A	W000	0911722110006	STEDMAN	2202MEETING ST	MINNETONKA	55391	1	
159	159	00204049	WEL	A	W000	1211722210002	REINHOLD	10712HILLSIDE LA W	MINNETONKA	55305	1	
160	160	00750624	WEL	A	W000	1211722220007	EARTH SPIRIT ENVIRONM	2264CAPE COD PL	MINNETONKA	55305	1	
161	161	00203771	WEL	A	W000	0811722110004	HAGEN	16307MCGINTY RD W	MINNETONKA	55391	1	
162	162	00249098	WEL	I	W000		LOCUST HILL FARM			55391	1	
163	163	00204022	WEL	A	W000	1111722130009	KUALEY, PAUL	11568FETTERLY LA	MINNETONKA	55305	1	
164	164	00204021	WEL	A	W000	1111722130007	DOOLEY, ED	11656FETTERLY LA	MINNETONKA	55305	1	
165	165	00203796	WEL	A	W000	0911722240009	SMESTAD + ENGQUIST	2312SHERIDAN HILLS RD	MINNETONKA	55391	1	
166	166	00255880	WEL	A	W000	0911722230005	CARGILL, INC.	2301CROSBY RD	MINNETONKA	55391	1	
167	167	00203773	WEL	A	W000		FOREMAN, C. R.			55391	1	
168	168	00791777	WEL	A	W000	1011722240013	WEBER, LOUIS	2326OAKLAND RD	MINNETONKA	55305	1	
169	169	00204028	WEL	A	W000	1111722140020	DORN REALTY	2336NOTTINGHAM CT	MINNETONKA	55305	1	
170	170	00223804	WEL	A	W000	1111722130024	BEATTY, HERBERT O.	2325SHERWOOD HILLS C	MINNETONKA	55305	1	
171	171	00203797	WEL	A	W000	0911722240011	EXSTROM, ED	2332SHERIDAN HILLS CU	MINNETONKA	55391	1	

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MapID	PCSI_ID	PROGRAM_ID	PCS_C	STATUS_C	MAT_C	PIN	FAC_NAME	ADDRESS	CITY	ZIP5_CODE	TOTAL	Comment
172	172	00204029	WEL	A	W000	1111722140021	DORN REALTY	2344NOTTINGHAM CT	MINNETONKA	55305	1	
173	173	00203798	WEL	A	W000	0911722240012	DAHL	2338SHERIDAN HILLS CU	MINNETONKA	55391	1	
174	174	00149847	WEL	A	W000	1111722130043	NITZ, DAVID	2401SHERWOOD HILLS R	MINNETONKA	55305	1	
175	175	00203800	WEL	A	W000	0911722240014	FRA-TIM	2465SHERIDAN HILLS CU	MINNETONKA	55391	1	
176	176	00203792	WEL	A	W000	0911722130057	GOETZE, B. A.	14850STONE RD	MINNETONKA	55391	1	
177	177	00223803	WEL	A	W000	1111722130028	JOHNSON, ORELAND	2423SHERWOOD HILLS R	MINNETONKA	55305	1	
178	178	00203789	WEL	A	W000	0911722240029	LINDGREN, JOHN	2412SHERIDAN HILLS CU	MINNETONKA	55391	1	
179	179	00203774	WEL	A	W000	0811722140017	GARCO CONST.	2424CROSBY RD	MINNETONKA	55391	1	
180	180	00203793	WEL	A	W000	0911722140033	GOETZE, BRITTON	2430MEETING ST	MINNETONKA	55391	1	
181	181	00204052	WEL	A	W000	1211722230033	HOLT, S. S.	11155MILL RUN	MINNETONKA	55305	1	
182	182	00204002	WEL	A	W000	0911722240015	REIRERSON, DON	2445SHERIDAN HILLS CU	MINNETONKA	55391	1	
183	183	00204024	WEL	A	W000	1111722130037	BOWEN, ROBERT	2410SHERWOOD HILLS R	MINNETONKA	55305	1	
184	184	00203799	WEL	A	W000	0911722240027	FRA-TIM	2424SHERIDAN HILLS CU	MINNETONKA	55391	1	
185	185	00204025	WEL	A	W000	1111722130019	LA MANTIA, CHARLES	2434SHERWOOD HILLS R	MINNETONKA	55305	1	
186	186	00204026	WEL	A	W000	1111722130048	SCHMITT	2439SHERWOOD HILLS R	MINNETONKA	55305	1	
187	187	00204001	WEL	A	W000	0911722240024	FRA-TIM	2442SHERIDAN HILLS CU	MINNETONKA	55391	1	
188	188	00203775	WEL	A	W000	0811722140008	KLINK, STAN	2500CROSBY RD	MINNETONKA	55391	1	
189	189	00692506	WEL	A	W000	0711722310040		2520CEDAR POINT DR	WOODLAND	55391	1	
190	190	00251285	WEL	U	W000	0811722320003		663BUSHAWAY RD	WAYZATA	55391	1	
191	191	00204053	WEL	A	W000	1211722320087	MARTIN, J.V.	10794CEDAR BEND	MINNETONKA	55305	1	
192	192	00203779	WEL	A	W000	0811722410014	BRINK, ROBERT	2612CROSBY RD	MINNETONKA	55391	1	
193	193	00420513	WEL	A	W000	0711722310039	DURR, KEN	2520CEDAR RIDGE RD	WOODLAND	55391	1	
194	194	00203780	WEL	A	W000	0811722410014	WANGBERG, FRED W.	2612CROSBY RD	MINNETONKA	55391	1	
195	195	00711471	WEL	A	W000	0711722320025	MORRISON, JOHN	2550CEDAR RIDGE RD	WOODLAND	55391	1	
196	196	00419449	WEL	A	W000	0711722320023	GAILLARD, CHARLES	2580CEDAR RIDGE RD	WOODLAND	55391	1	
197	197	00478387	WEL	A	W000	0711722310034	THORPE, A. SKIDMORE	2505CEDAR POINT DR	WOODLAND	55391	1	
198	198	00239942	WEL	A	W000	0711722310026	YOUNG, SUMNER B.	2600MAPLEWOOD CIR E	WOODLAND	55391	1	
199	199	00660570	WEL	A	W000	0711722310005	MASSIE, JOHN	2640MARSHLAND RD	WOODLAND	55391	1	
200	200	00783525	WEL	A	W000		ERICKSON, GERALD			55391	1	
201	201	00157836	WEL	A	W000	0711722310031	KIENKE, BRUCE	2650MARSHLAND RD	WOODLAND	55391	1	
202	202	00204436	WEL	A	W000	0711722310035	KINGMAN, HENRY	2665MAPLEWOOD CIR E	WOODLAND	55391	1	
203	203	00203782	WEL	A	W000		GRAY'S BAY PILOT WELL 2			55391	1	
204	204	00272113	WEL	A	W000		DNR OB 27007			55391	1	
205	205	00243811	WEL	U	W000	0811722420008	USGS GRAY'S BAY	16501GRAYS BAY BLVD	MINNETONKA	55391	1	
206	206	00243810	WEL	U	W000	0811722420008	USGS GRAY'S BAY	16501GRAYS BAY BLVD	MINNETONKA	55391	1	
207	207	00204033	WEL	A	W000	1111722310010	JOHNSON, DOUG	12012ORCHARD AVE W	MINNETONKA	55305	1	
208	208	00742374	WEL	A	W000	0711722330029	MACHALEC, GARY	2740GALE RD	WOODLAND	55391	1	
209	209	00591540	WEL	A	W000	0711722430023	FRENCH, GINA	2660WOOLSEY LA	WOODLAND	55391	1	
210	210	00718314	WEL	A	W000	0711722310012		2705MAPLEWOOD CIR E	WOODLAND	55391	1	
211	211	00756059	WEL	A	W000	0711722430021	BASSETT, PATRICK & AN	2670WOOLSEY LA	WOODLAND	55391	1	
212	212	00426517	WEL	A	W000	0711722320011	JAMES, CHARLIE	2715MAPLEWOOD CIR W	WOODLAND	55391	1	
213	213	00586480	WEL	A	W000	1211723440002		2750GALE RD	WOODLAND	55391	1	
214	214	00204009	WEL	A	W000	1011722340035	SIEGEL, WILLIAM	13709COYOTE CT	MINNETONKA	55305	1	
215	215	00681634	WEL	A	W000	0711722330030	HUNT, KYLE	2730GALE RD	WOODLAND	55391	1	
216	216	00665811	WEL	A	W000	0711722340004	STANCHFIELD, RON	2805MAPLEWOOD CIR E	WOODLAND	55391	1	
217	217	00447079	WEL	A	W000	0711722330009	WEISMAN, ROBERT	2755MAPLEWOOD CIR W	WOODLAND	55391	1	
218	218	00760649	WEL	A	W000	0711722430027		18150BREEZY POINT RD	WOODLAND	55391	1	
219	219	00485078	WEL	A	W000	0711722330012	THYSELL, JOHN	2720GALE RD	WOODLAND	55391	1	
220	220	00255722	WEL	I	W000	0911722330004	CARGILL LAKE OFFICE W	15407MCGINTY RD W	MINNETONKA	55391	1	
221	221	00724562	WEL	A	W000	0711722340008		2760WOOLSEY LA	WOODLAND	55391	1	
222	222	00436314	WEL	A	W000		MEYER, FREDRICK			55391	1	
223	223	00580436	WEL	A	W000	1211723440007	CASE, BENTON	2770GALE RD	WOODLAND	55391	1	
224	224	00426893	WEL	A	W000	0911722440025	COLWELL, FELTON	14700COPPERFIELD PL	MINNETONKA	55391	1	
225	225	00204003	WEL	A	W000	0911722430046	KAYONEN, HUGO	15101MCGINTY RD W	MINNETONKA	55391	1	
226	226	00441146	WEL	A	W000	0711722330015	DERIKRAVA, SAM	2768GALE RD	WOODLAND	55391	1	
227	227	00426836	WEL	A	W000	0711722340004	YOUNG, SUMNER B.	2805MAPLEWOOD CIR E	WOODLAND	55391	1	
228	228	00162099	WEL	A	W000	0711722430011	KYTONEN, MILFRED	2805BREEZY HEIGHTS RD	WOODLAND	55391	1	
229	229	00162019	WEL	A	W000	0711722430027	GLEESON, FRANK	18150BREEZY POINT RD	WOODLAND	55391	1	
230	230	00792002	WEL	A	W000	0711722330028		2800MAPLEWOOD CIR W	WOODLAND	55391	1	
231	231	00790843	WEL	A	W000	0711722340019	ARUNDEL, STEVE	2830MAPLEWOOD RD	WOODLAND	55391	1	
232	232	00204054	WEL	A	W000	1211722340002	MINNETONKA 6	10721GREENBRIER RD	MINNETONKA	55305	1	
233	233	00208012	WEL	A	W000	1211722340002	MINNETONKA 6A	10721GREENBRIER RD	MINNETONKA	55305	1	
234	234	00223810	WEL	A	W000	0911722430011		14901MCGINTY RD W	MINNETONKA	55391	1	
235	235	00623564	WEL	A	W000	0711722430025	JOHNSON, MYLES	2840BREEZY HEIGHTS RD	WOODLAND	55391	1	
236	236	W0000111	WEL	A	W000	0811722430024	RAY ANDERSON CONSTR	16600GRAYS BAY BLVD	MINNETONKA	55391	1	
237	237	00204004	WEL	A	W000	0911722440013	WATERHOUSE, RAY	2821MAYFIELD RD	MINNETONKA	55391	1	
238	238	00705932	WEL	A	W000	0711722330027	SNYDER, DANIELA	2870GALE RD	WOODLAND	55391	1	
239	239	00112213	WEL	A	W000	1211723440003	MCCARTHY, DONALD	2850GALE RD	WOODLAND	55391	1	
240	240	00799015	WEL	A	W000	1211723440005		2856GALE RD	WOODLAND	55391	1	

Appendix D
 Minnetonka Wellhead Protection Plan
 Potential Contaminant Source Inventory



MapID	PCSI_ID	PROGRAM_ID	PCS_C	STATUS_C	MAT_C	PIN	FAC_NAME	ADDRESS	CITY	ZIP5_CODE	TOTAL	Comment
241	241	00203776	WEL	A	W000	0811722340017	GRAYS BAY RESORT	17232CO RD NO 101	MINNETONKA	55391	1	
242	242	00233123	WEL	A	W000	0711722440158	METHODIST LAKESIDE AS	15ADDRESS UNASSIGNE	WOODLAND	55391	1	
243	243	00203787	WEL	A	W000	0811722430009	HERBERT THOMPSON + S	16615MEADOWBROOK LA	MINNETONKA	55391	1	
244	244	00114368	WEL	A	W000	0711722430013	STINCHFIELD, JOHN	2865BREEZY HEIGHTS RD	WOODLAND	55391	1	
245	245	00203788	WEL	A	W000	0811722430010	HERB THOMPSON + SON	16623MEADOWBROOK LA	MINNETONKA	55391	1	
246	246	00204005	WEL	A	W000	0911722440014	WATERHOUSE, RAY	2833MAYFIELD RD	MINNETONKA	55391	1	
247	247	00223814	WEL	A	W000	0811722430023	HARRIS, WALLACE L.	16624GRAYS BAY BLVD	MINNETONKA	55391	1	
248	248	00203784	WEL	A	W000	0811722430021	LANDSTROM, DON	16617GRAYS BAY BLVD	MINNETONKA	55391	1	
249	249	00204011	WEL	A	W000	1011722340014	UNDERSTAD	13807GREEN BRIAR DR	MINNETONKA	55305	1	
250	250	00223811	WEL	A	W000	0811722440004		16639MEADOWBROOK LA	MINNETONKA	55391	1	
251	251	00596672	WEL	A	W000	0711722440002		17820BREEZY POINT RD	WOODLAND	55391	1	
252	252	00204006	WEL	A	W000	0911722440010	WATERHOUSE, RAY	2836MAYFIELD RD	MINNETONKA	55391	1	
253	253	00223812	WEL	A	W000	0811722440004	VAN BOCKLE	16639MEADOWBROOK LA	MINNETONKA	55391	1	
254	254	00203790	WEL	A	W000	0811722430020	CLASEN, H. G.	16631GRAYS BAY BLVD	MINNETONKA	55391	1	
255	255	00272620	WEL	A	W000	0811722430034	THOMPSON, HERB	16700GRAYS BAY BLVD	MINNETONKA	55391	1	
256	256	00203783	WEL	A	W000	0811722430035		16722GRAYS BAY BLVD	MINNETONKA	55391	1	
257	257	00223813	WEL	A	W000	0811722340001	THOMPSON, HERB	16744GRAYS BAY BLVD	MINNETONKA	55391	1	
258	258	00203778	WEL	A	W000	0811722330006	KALKES, J.W.	17306CO RD NO 101	MINNETONKA	55391	1	
259	259	00203777	WEL	A	W000	0811722330005	BROWN, PHILLIP G.	17310CO RD NO 101	MINNETONKA	55391	1	
260	260	00464921	WEL	A	W000	1811722220019	MCGILL, CHARLES	2875GALE RD	WOODLAND	55391	1	
261	261	00750687	WEL	A	W000	0711722330032		2900GALE RD	WOODLAND	55391	1	
262	262	00203786	WEL	A	W000	0811722430018	HERB THOMPSON + SON	2909FAIRCHILD AVE	MINNETONKA	55391	1	
263	263	00479367	WEL	A	W000	1811722210002	CARVER, CAROLYN	18275BREEZY POINT RD	WOODLAND	55391	1	
264	264	00203785	WEL	A	W000	1711722120007	HERB THOMPSON CONST	16701GRAYS BAY BLVD	MINNETONKA	55391	1	
265	265	00204007	WEL	A	W000	0911722440008	WATERHOUSE, RAY	2848MAYFIELD RD	MINNETONKA	55391	1	
266	266	00272623	WEL	A	W000	0811722340002	H T THOMPSON	16800GRAYS BAY BLVD	MINNETONKA	55391	1	
267	267	00203791	WEL	A	W000	0811722430017	LOKENS GARD	16694MEADOWBROOK LA	MINNETONKA	55391	1	
268	268	00223815	WEL	A	W000	0811722340002		16800GRAYS BAY BLVD	MINNETONKA	55391	1	
269	269	00272677	WEL	U	W000	0811722340001	THOMPSON, H T	16744GRAYS BAY BLVD	MINNETONKA	55391	1	
270	270	00458117	WEL	A	W000	1811722120014		18085BREEZY POINT RD	WOODLAND	55391	1	
271	271	00770022	WEL	A	W000	1811722220021	LAUER, RON	2925GALE RD	WOODLAND	55391	1	
272	272	00204057	WEL	A	W000	1411722120002	ALDERSONS, PETER	11701CEDAR LAKE RD	MINNETONKA	55305	1	
273	273	00441064	WEL	A	W000	1811722220008		2940GALE RD	WOODLAND	55391	1	
274	274	00272678	WEL	A	W000	0811722340003	THOMPSON, HERB	16816GRAYS BAY BLVD	MINNETONKA	55391	1	
275	275	00272293	WEL	A	W000	1511722220025	BEAN, JOHN B.	2901HAZEL LA	MINNETONKA	55305	1	
276	276	00204155	WEL	A	W000	1711722120006		2900FAIRCHILD AVE	MINNETONKA	55391	1	
277	277	00272621	WEL	A	W000	1711722120004	THOMPSON, HERB	16717GRAYS BAY BLVD	MINNETONKA	55391	1	
278	278	00649234	WEL	A	W000	1811722110041	BLANZ, CARL & DEB	17865BREEZY POINT RD	WOODLAND	55391	1	
279	279	00272554	WEL	A	W000	1711722210005	HERB THOMPSON & SON	16822GRAYS BAY BLVD	MINNETONKA	55391	1	
280	280	00211955	WEL	A	W000	1711722210083	SWANSON, OSCAR	17028GRAYS BAY BLVD	MINNETONKA	55391	1	
281	281	00510609	WEL	A	W000	1811722210003	FLOURNOY, J & P	2925MAPLEWOOD RD	WOODLAND	55391	1	
282	282	00204163	WEL	A	W000	1711722210005	THOMPSON, HERB	16822GRAYS BAY BLVD	MINNETONKA	55391	1	
283	283	00204157	WEL	A	W000	1711722120020	BORAN, BUD	16695MEADOWBROOK LA	MINNETONKA	55391	1	
284	284	00272622	WEL	A	W000	1711722120003	THOMPSON, HT	16811GRAYS BAY BLVD	MINNETONKA	55391	1	
285	285	00204165	WEL	A	W000	1711722210137	CABLE	17025GRAYS BAY BLVD	MINNETONKA	55391	1	
286	286	00204151	WEL	A	W000	1711722120022	WRIGHT, RICHARD	2901TONKAHA DR	MINNETONKA	55391	1	
287	287	00435385	WEL	A	W000	1811722110003	HILGERS, TIM	2918CO RD NO 101	WOODLAND	55391	1	
288	288	00204150	WEL	A	W000	1711722120023	MORRISON, RON	2928TONKAHA DR	MINNETONKA	55391	1	
289	289	00204158	WEL	A	W000	1711722120021	BORAN, BUD	2915FAIRCHILD AVE	MINNETONKA	55391	1	
290	290	00204152	WEL	A	W000	1711722110014	SCHULTZ, WM.	2944TONKAHA DR	MINNETONKA	55391	1	
291	291	00405060	WEL	A	W000	1811722110008	MARX, JOHN	2924CO RD NO 101	WOODLAND	55391	1	
292	292	00776871	WEL	A	W000	1811722120012		18205BREEZY POINT RD	WOODLAND	55391	1	
293	293	00535903	WEL	A	W000	1811722120005	ELLEBY, DUFFY	18065BREEZY POINT RD	WOODLAND	55391	1	
294	294	00204154	WEL	A	W000	1711722120065	HAHN, LOWELL	2937FAIRCHILD AVE	MINNETONKA	55391	1	
295	295	00415472	WEL	A	W000	1811722110042	JOHNSON, FRANK	17525BLAINE AVE	WOODLAND	55391	1	
296	296	00204164	WEL	A	W000	1711722210091	NELSON, WILLARD	16930GRAYS BAY BLVD	MINNETONKA	55391	1	
297	297	00204065	WEL	A	W000	1311722220008	CORDALIS, JAMES	17ST ALBANS RD E	HOPKINS	55305	1	
298	298	00692844	WEL	A	W000	1811722120018	OLSON, PATRICIA P.	17900SHAVERS LA	WOODLAND	55391	1	
299	299	00272557	WEL	A	W000	1511722120034	RITCHIE, ROBERT S.	3011SURRY LA	MINNETONKA	55305	1	
300	300	00204106	WEL	A	W000	1511722120005	RASMUSSEN, ERICK	3007ATWOOD DR	MINNETONKA	55305	1	
301	301	00687281	WEL	A	W000	1811722110029	ZEMAN, MIKE	17816MAPLE HILL RD	WOODLAND	55391	1	
302	302	00488203	WEL	A	W000	1811722110043	ZESBAUGH, DAVE	3000CO RD NO 101	WOODLAND	55391	1	
303	303	00204064	WEL	I	W000	1311722220007	CASH, J.P.	28ST ALBANS RD W	HOPKINS	55305	1	
304	304	00204417	WEL	A	W000	1811722220010		2970GALE RD	WOODLAND	55391	1	
305	305	00595190	WEL	A	W000	1811722120024	HUNT, KYLE	3155MAPLEWOOD RD	WOODLAND	55391	1	
306	306	00479376	WEL	A	W000	1811722120015		3103MAPLEWOOD RD	WOODLAND	55391	1	
307	307	00597219	WEL	A	W000	1811722120025		3175MAPLEWOOD RD	WOODLAND	55391	1	
308	308	00530165	WEL	A	W000	1811722120020	HACKETT, R.	17920SHAVERS LA	WOODLAND	55391	1	
309	309	00513722	WEL	A	W000	1811722110012	ZIMMERMAN, GARY	3018CO RD NO 101	WOODLAND	55391	1	

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 Minnetonka Wellhead Protection Plan
 Potential Contaminant Source Inventory



MapID	PCSI_ID	PROGRAM_ID	PCS_C	STATUS_C	MAT_C	PIN	FAC_NAME	ADDRESS	CITY	ZIP5_CODE	TOTAL	Comment
310	310	00276380	WEL	A	W000	1711722210028	FOTY, JOHN	16830EDGEWOOD AVE	MINNETONKA	55391	1	
311	311	00750619	WEL	A	W000	1811722210001		3115MAPLEWOOD RD	WOODLAND	55391	1	
312	312	00688999	WEL	A	W000	1811722110013	GREER, VICKI	3030CO RD NO 101	WOODLAND	55391	1	
313	313	00250505	WEL	U	W000	1511722220038		14274TRACE RIDGE RD	MINNETONKA	55391	1	
314	314	00475711	WEL	A	W000	1811722120021	HENRY, RICHARD	17960SHAVERS LA	WOODLAND	55391	1	
315	315	00204138	WEL	A	W000	1611722110014	BOYER, JOE	3108MINNEHAHA CT	MINNETONKA	55391	1	
316	316	00204166	WEL	A	W000	1711722210012	KVALE, BASIL	16814COTTAGE GROVE A	MINNETONKA	55391	1	
317	317	00204167	WEL	A	W000	1711722210121	CAMANCHO, JANE	16810COTTAGE GROVE A	MINNETONKA	55391	1	
318	318	00686560	WEL	A	W000	1811722220013		3200ROBINSONS BAY RD	WOODLAND	55391	1	
319	319	00548480	WEL	A	W000	1811722110015		3100CO RD NO 101	WOODLAND	55391	1	
320	320	00776897	WEL	A	W000	1811722210009		18400MAPLE RIDGE RD	WOODLAND	55391	1	
321	321	00204169	WEL	A	W000	1711722220043	SAKRY, JOHN	3101GROVELAND SCHOC	MINNETONKA	55391	1	
322	322	00439538	WEL	A	W000	1811722210013		18250SHAVERS LA	WOODLAND	55391	1	
323	323	00420475	WEL	A	W000	1811722110016	MACKIN, JAMES & SALLY	3112CO RD NO 101	WOODLAND	55391	1	
324	324	00204060	WEL	A	W000	1311722130030		3105BIRCH PL	MINNETONKA	55305	1	
325	325	00415500	WEL	A	W000	1811722110016	MACKIN, JIM	3112CO RD NO 101	WOODLAND	55391	1	
326	326	W0000012	WEL	A	W000	1711722110008	LYON, BILL	3109FAIRCHILD AVE	MINNETONKA	55391	1	
327	327	00223816	WEL	A	W000	1711722210136		17008PROSPECT PL	MINNETONKA	55391	1	
328	328	00204067	WEL	A	W000	1311722240006	LESLIE, JOHN	5MANITOBA RD	HOPKINS	55305	1	
329	329	00481899	WEL	A	W000	1811722110017	LEEKLY	3114CO RD NO 101	WOODLAND	55391	1	
330	330	00204111	WEL	A	W000	1511722210015	LEEKLY, RICHARD	13513MCGINTY RD E	MINNETONKA	55305	1	
331	331	00497630	WEL	A	W000	1811722130004	STRICKER, RUTH ANN	18125SHAVERS LA	DEEPHAVEN	55391	1	
332	332	00597249	WEL	A	W000	1811722130004	STRICKER, RUTH	18125SHAVERS LA	DEEPHAVEN	55391	1	
333	333	00204076	WEL	A	W000	1411722140001	EIDE, CLINTON	11224MINNETONKA BLVD	MINNETONKA	55305	1	
334	334	00224062	WEL	A	W000	1311722130026	JOHNSON & PETERSON	3135BIRCH PL	MINNETONKA	55305	1	
335	335	00475717	WEL	A	W000	1811722230019	CRAWFORD, CARROLL	3222ROBINSONS BAY RD	DEEPHAVEN	55391	1	
336	336	00204174	WEL	A	W000	1711722240059	CARMICHAEL, BRUCE	16726PROSPECT PL	MINNETONKA	55391	1	
337	337	00415460	WEL	A	W000	1811722240044	TRAFF, CLIFF JR.	18500MAPLE RIDGE RD	DEEPHAVEN	55391	1	
338	338	00204061	WEL	A	W000	1311722130008	CRONEST, DAVID	10312MINNETONKA BLVD	MINNETONKA	55305	1	
339	339	00190306	WEL	A	W000	1811722240030	POSTREGNA, DENNIS	3240MAPLEWOOD RD	DEEPHAVEN	55391	1	
340	340	00204059	WEL	A	W000	1311722130040	NORBERG, CARL	10024MINNETONKA BLVD	MINNETONKA	55305	1	
341	341	00204170	WEL	A	W000	1711722230044	LEBO, T. E. SR.	3126GROVELAND SCHOC	MINNETONKA	55391	1	
342	342	00204160	WEL	A	W000	1711722130010		3169LAKE SHORE BLVD	MINNETONKA	55391	1	
343	343	00157897	WEL	A	W000	1811722240023	HICKOK, EUGENE	18475MAPLE RIDGE RD	DEEPHAVEN	55391	1	
344	344	00204159	WEL	A	W000	1711722130012	CHARLESTON, DON	3177LAKE SHORE BLVD	MINNETONKA	55391	1	
345	345	00204112	WEL	A	W000	1511722240008	SCHULTZ, WM. B.	13527WENTWORTH TR	MINNETONKA	55305	1	
346	346	00673887	WEL	A	W000	1811722130035		18004SHAVERS LAKE DR	DEEPHAVEN	55391	1	
347	347	00204113	WEL	A	W000	1511722240026	LOSCHIEDER, P.	13531WENTWORTH TR	MINNETONKA	55305	1	
348	348	00163896	WEL	A	W000	1811722240012	DURR, KENNETH	3300HILL LA	DEEPHAVEN	55391	1	
349	349	00615593	WEL	A	W000	1811722230023		3266ROBINSONS BAY RD	DEEPHAVEN	55391	1	
350	350	00204130	WEL	A	W000	1511722240011	OSTROM + SONS	3251ELDORADO TR E	MINNETONKA	55305	1	
351	351	00572679	WEL	A	W000	1811722130032	SAYRE, JAMES	18150SHAVERS LAKE DR	DEEPHAVEN	55391	1	
352	352	00586474	WEL	A	W000	1811722240022	WEBSTER, CHUCK	18525MAPLE RIDGE RD	DEEPHAVEN	55391	1	
353	353	00204415	WEL	A	W000	1811722140116	KINGMAN, JOE	17621COPPERWOOD LA	MINNETONKA	55391	1	
354	354	00204066	WEL	A	W000	1311722230040	MOE, DR. JOHN	6WEBSTER PL	HOPKINS	55305	1	
355	355	00580429	WEL	A	W000	1811722230001		3308ROBINSONS BAY RD	DEEPHAVEN	55391	1	
356	356	00122142	WEL	A	W000	1811722240035	HILL, DAVE	3280MAPLEWOOD RD	DEEPHAVEN	55391	1	
357	357	W0000120	WEL	A	W000	1711722240064	THORKEN, LINDA	3214LARCHMORE AVE	MINNETONKA	55391	1	
358	358	00661401	WEL	A	W000	1611722140002	MINNETONKA 16A	3391WILLISTON RD	MINNETONKA	55345	1	
359	359	00586463	WEL	A	W000	1811722130024	COUSINS, WILLIS C	3300SHAVERS LAKE RD	DEEPHAVEN	55391	1	
360	360	00127391	WEL	A	W000	1811722230002	COLE, CHARLES	3320ROBINSONS BAY RD	DEEPHAVEN	55391	1	
361	361	00799011	WEL	A	W000	1811722230002	KAHLER, MIKE	3320ROBINSONS BAY RD	DEEPHAVEN	55391	1	
362	362	00532592	WEL	A	W000	1811722130014	NEWTON, KIRK & MARJOR	17900SHAVERS LAKE DR	DEEPHAVEN	55391	1	
363	363	00508062	WEL	A	W000	1811722130036	FRANCHOT, POLLY	3305SHAVERS LAKE RD	DEEPHAVEN	55391	1	
364	364	00204110	WEL	A	W000	1511722140014	HANLEY, JAMES	12838BURWELL DR	MINNETONKA	55305	1	
365	365	00724559	WEL	A	W000	1811722130031	GIGERION, DAVID	18202SHAVERS LAKE DR	DEEPHAVEN	55391	1	
366	366	00204107	WEL	A	W000	1511722130002	BURTON	13399MCGINTY RD E	MINNETONKA	55305	1	
367	367	00792000	WEL	A	W000	1811722130028		18306SHAVERS LAKE DR	DEEPHAVEN	55391	1	
368	368	00580640	WEL	A	W000	1811722130025	FOSTER, BOB	3320SHAVERS LAKE RD	DEEPHAVEN	55391	1	
369	369	00591525	WEL	A	W000	1811722130022	LADNER, FRED	18179SHAVERS LAKE DR	DEEPHAVEN	55391	1	
370	370	00403768	WEL	A	W000	1811722240014	MICHAEL, JOSEPH	3340HILL LA	DEEPHAVEN	55391	1	
371	371	00204161	WEL	A	W000	1711722130046	ROBINSON, E. I.	3230HIGHLAND AVE	MINNETONKA	55391	1	
372	372	00204414	WEL	A	W000	1811722130030	SILL, MIKE	18254SHAVERS LAKE DR	DEEPHAVEN	55391	1	
373	373	00136727	WEL	A	W000	1811722240014	MICHAEL, JOSEPH	3340HILL LA	DEEPHAVEN	55391	1	
374	374	00735051	WEL	A	W000	1811722240025	HAUGE, TRYGVE	3360MAPLEWOOD RD	DEEPHAVEN	55391	1	
375	375	00150356	WEL	A	W000	1611722140002	MINNETONKA 10A	3391WILLISTON RD	MINNETONKA	55345	1	
376	376	00600244	WEL	A	W000	1811722240038	JURAN, WYNN	3380MAPLEWOOD RD	DEEPHAVEN	55391	1	
377	377	00136682	WEL	A	W000	1811722130021	WEST, WILLIAM	18221SHAVERS LAKE DR	DEEPHAVEN	55391	1	
378	378	00572702	WEL	A	W000	1311723140006	CORSON, RICHARD	19450CEDARHURST	DEEPHAVEN	55391	1	

Appendix D
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MapID	PCSI_ID	PROGRAM_ID	PCS_C	STATUS_C	MAT_C	PIN	FAC_NAME	ADDRESS	CITY	ZIP5_CODE	TOTAL	Comment
379	379	00551807	WEL	A	W000	1811722130020	O'HALLORAN, L.W.	18273SHAVERS LAKE DR	DEEPHAVEN	55391	1	
380	380	00597246	WEL	A	W000	1811722240009	MILLER, MARK	3365HILL LA	DEEPHAVEN	55391	1	
381	381	00224061	WEL	A	W000	1311722230019	BOCK, ALLAN C.	12LORING RD	HOPKINS	55305	1	
382	382	00765521	WEL	A	W000	1811722240016		3355ROBINSONS BAY RD	DEEPHAVEN	55391	1	
383	383	00750681	WEL	A	W000	1811722130046	ROCHON CORPORATION	18258MINNETONKA BLVD	DEEPHAVEN	55391	1	
384	384	00750691	WEL	A	W000	1811722130046	ROCHON CORPORATION	18258MINNETONKA BLVD	DEEPHAVEN	55391	1	
385	385	00414026	WEL	A	W000	1811722230004	LONGMAN, STEVE	18950NORTHOME BLVD	DEEPHAVEN	55391	1	
386	386	00204109	WEL	A	W000	1511722230039	SCHULTZ, BILL	13216MCGINTY RD E	MINNETONKA	55305	1	
387	387	00415477	WEL	A	W000	1811722130027	RESKIN, MARSHALL	3360SHAVERS LAKE RD	DEEPHAVEN	55391	1	
388	388	00204173	WEL	A	W000	1711722240028	GRODAHL, ARNIE	3314SHORES BLVD	MINNETONKA	55391	1	
389	389	00426505	WEL	A	W000	1311723140010	HAVERSTOCK, JEAN	3360NORTHOME RD	DEEPHAVEN	55391	1	
390	390	W0007303	WEL	U	W000	1711722230083		17408MINNETONKA BLVD	MINNETONKA	55345	1	
391	391	00436317	WEL	A	W000	1811722240037	JOHNSON, HERB	3390MAPLEWOOD RD	DEEPHAVEN	55391	1	
392	392	00655078	WEL	A	W000	1311723140012		3440NORTHOME RD	DEEPHAVEN	55391	1	
393	393	00735733	WEL	A	W000	1811722230016	MURMAN, RUTH	18700NORTHOME BLVD	DEEPHAVEN	55391	1	
394	394	00453964	WEL	A	W000	1811722230009	BRACKET, DAVID	19050NORTHOME BLVD	DEEPHAVEN	55391	1	
395	395	00206922	WEL	A	W000	1711722230034	DEEPHAVEN DRUGSTOR	17516MINNETONKA BLVD	MINNETONKA	55345	1	
396	396	00204172	WEL	A	W000	1711722230055	GROVELAND SCHOOL NC	17310MINNETONKA BLVD	MINNETONKA	55345	1	
397	397	00157831	WEL	A	W000		WINTON			55345	1	
398	398	00204140	WEL	A	W000	1611722140002	MINNETONKA 10	3391WILLISTON RD	MINNETONKA	55345	1	
399	399	00204416	WEL	A	W000		DEEPHAVEN CAR WASH			55345	1	
400	400	00204171	WEL	A	W000	1711722230016	TOM THUMB SUPERETTE	17420MINNETONKA BLVD	MINNETONKA	55345	1	
401	401	00248512	WEL	A	W000		CORNER OFFICE 1			55345	1	
402	402	W0000107	WEL	A	W000	1511722140010	BURNELL COMM.CTR.	3395PLYMOUTH RD	MINNETONKA	55305	1	
403	403	00204139	WEL	A	W000	1611722130012	CUNNINGHAM, GORDON	14869TIMBERHILL RD	MINNETONKA	55345	1	
404	404	00776895	WEL	A	W000	1811722310037	CHRISTENSEN, DON	18445NORTHOME BLVD	DEEPHAVEN	55391	1	
405	405	00224801	WEL	A	W000	1711722140006	RODGERS, GEORGE	3325FAIRCHILD AVE	MINNETONKA	55391	1	
406	406	00659868	WEL	A	W000	1311723410015	PRIEDEMAN, WILLIAM	19400CEDARHURST	DEEPHAVEN	55391	1	
407	407	00204420	WEL	A	W000	1811722320064	HAVERSTOCK, J. E.	3403NORTHOME RD	DEEPHAVEN	55391	1	
408	408	00580583	WEL	A	W000	1311723410016	STRICKLAND, NANSI	19300CEDARHURST	DEEPHAVEN	55391	1	
409	409	00114405	WEL	A	W000	1611722230001	MOE, DR. JOHN	3332MARTHA LA	MINNETONKA	55345	1	
410	410	00453869	WEL	A	W000	1811722310063	ARMSTRON, JIM	18505NORTHOME BLVD	DEEPHAVEN	55391	1	
411	411	00441083	WEL	A	W000	1311723410016	MITHUN, RAY	19300CEDARHURST	DEEPHAVEN	55391	1	
412	412	00726405	WEL	A	W000	1811722310015	NELSON, CHRIS	18365NORTHOME BLVD	DEEPHAVEN	55391	1	
413	413	00530170	WEL	A	W000	1811722310038	PENTU, GARY	18465NORTHOME BLVD	DEEPHAVEN	55391	1	
414	414	00624955	WEL	A	W000	1811722320001		18885NORTHOME BLVD	DEEPHAVEN	55391	1	
415	415	00488214	WEL	A	W000	1811722310104	DUFFY, DAVID	18605NORTHOME BLVD	DEEPHAVEN	55391	1	
416	416	00171059	WEL	A	W000	1811722320002	KAUFMAN, JAMES	3445DEEPHAVEN AVE	DEEPHAVEN	55391	1	
417	417	00719812	WEL	A	W000	1311723410012		19405CEDARHURST	DEEPHAVEN	55391	1	
418	418	00182093	WEL	A	W000	1311723410031	JOHNSON, NORMA	3420NORTHOME RD	DEEPHAVEN	55391	1	
419	419	00779958	WEL	A	W000	1811722320025	RICE, DEANNA	3430CREST AVE	DEEPHAVEN	55391	1	
420	420	00791978	WEL	A	W000	1811722310016	JAEGER, AMY	18385NORTHOME BLVD	DEEPHAVEN	55391	1	
421	421	00204422	WEL	A	W000	1811722410001	ELLIOT, DR. ROBERT	17601MINNETONKA BLVD	MINNETONKA	55391	1	
422	422	00204425	WEL	A	W000	1811722410028	ALBRIECHT, DON. R.	17925MINNETONKA BLVD	MINNETONKA	55391	1	
423	423	00792014	WEL	A	W000	1811722320029	CHRISTENSEN, JULIE	3425NORTHOME RD	DEEPHAVEN	55391	1	
424	424	00548516	WEL	A	W000	1811722310035	RINGSTAD, BOB	3430MONTGOMERIE AVE	DEEPHAVEN	55391	1	
425	425	00122845	WEL	A	W000	1811722320020	GUDMUNSEN, RICHARD	3455CREST AVE	DEEPHAVEN	55391	1	
426	426	00705925	WEL	A	W000	1811722310003		18304MINNETONKA BLVD	DEEPHAVEN	55391	1	
427	427	00595191	WEL	A	W000	1311723410019	FLYNN, JOHN	19200CEDARHURST	DEEPHAVEN	55391	1	
428	428	00551823	WEL	A	W000	1811722320024	ABTS, DAN	3440CREST AVE	DEEPHAVEN	55391	1	
429	429	00227321	WEL	A	W000	1811722320024	SUTPHEN, ROBERT	3440CREST AVE	DEEPHAVEN	55391	1	
430	430	00639101	WEL	A	W000	1811722310092	ERICKSON, STEVE	3449HAMILTON AVE	DEEPHAVEN	55391	1	
431	431	00658630	WEL	A	W000	1811722310096		18312MINNETONKA BLVD	DEEPHAVEN	55391	1	
432	432	00204035	WEL	A	W000	1711722310007	JANESEL, ERIC	3407MEADOW LA	MINNETONKA	55345	1	
433	433	00204424	WEL	A	W000	1811722410051	FREDICKSON, GLENN	3417LEROY ST	MINNETONKA	55391	1	
434	434	00127494	WEL	A	W000	1811722320062	ANDERSON, JOHN	3495CREST AVE	DEEPHAVEN	55391	1	
435	435	00458091	WEL	A	W000	1811722310034	BALL, DON	3440MONTGOMERIE AVE	DEEPHAVEN	55391	1	
436	436	00204195	WEL	A	W000	1711722420091	HILL, DAVE	3413MEADOW LA	MINNETONKA	55345	1	
437	437	00453803	WEL	A	W000	1811722310033	SLOCUM, PETER	3450MONTGOMERIE AVE	DEEPHAVEN	55391	1	
438	438	00122824	WEL	A	W000	1811722310019	JOSWICK, JACK	3455MONTGOMERIE AVE	DEEPHAVEN	55391	1	
439	439	00706012	WEL	A	W000	1811722320032	WERNEIWSKI, BOB	3465DEEPHAVEN AVE	DEEPHAVEN	55391	1	
440	440	00804555	WEL	A	W000	1811722320022		3470CREST AVE	DEEPHAVEN	55391	1	
441	441	00130783	WEL	A	W000		ODOMS, DENNIS			55345	1	
442	442	00621573	WEL	A	W000	1311723410021	SCHEER, SAGE ANN	19150CEDARHURST	DEEPHAVEN	55391	1	
443	443	00204193	WEL	A	W000	1711722410034	HAVERTY, PAT	16026MINNETONKA BLVD	MINNETONKA	55345	1	
444	444	W0007345	WEL	U	W000	1811722410005		3460CO RD NO 101	MINNETONKA	55345	1	
445	445	00673897	WEL	A	W000	1311723420002		3550NORTHOME RD	DEEPHAVEN	55391	1	
446	446	00100121	WEL	A	W000	1811722320057	STREETER, DON	3480CREST AVE	DEEPHAVEN	55391	1	
447	447	00776873	WEL	A	W000	1811722320059	AURA, JAMES	3450DEEPHAVEN AVE	DEEPHAVEN	55391	1	

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MapID	PCSI_ID	PROGRAM_ID	PCS_C	STATUS_C	MAT_C	PIN	FAC_NAME	ADDRESS	CITY	ZIP5_CODE	TOTAL	Comment
448	448	00536180	WEL	A	W000	1811722310032		3460MONTGOMERIE AVE	DEEPHAVEN	55391	1	
449	449	00204145	WEL	A	W000	1611722420003	JUNIOR ACADEMY	3500WILLISTON RD	MINNETONKA	55345	1	
450	450	00276379	WEL	U	W000	1511722420034		13410MINNETONKA BLVD	MINNETONKA	55305	1	
451	451	00204141	WEL	A	W000	1611722320010	WILTSE, RAY	3436MARTHA LA	MINNETONKA	55345	1	
452	452	00204421	WEL	A	W000	1811722320055	SVABODA, DAN	3475DEEPHAVEN AVE	DEEPHAVEN	55391	1	
453	453	00151461	WEL	A	W000	1811722310031	HOLDEN, JOHN	3470MONTGOMERIE AVE	DEEPHAVEN	55391	1	
454	454	00204423	WEL	A	W000	1811722410005	TENNIS CLUB	3460CO RD NO 101	MINNETONKA	55345	1	
455	455	00204128	WEL	A	W000	1511722410015	QUAM, GEORGE	13131MINNETONKA DR	MINNETONKA	55305	1	
456	456	W0000143	WEL	A	W000	1811722310056	SCHOLATAD, MIKE	3470HAMILTON AVE	DEEPHAVEN	55391	1	
457	457	00248517	WEL	A	W000	1811722310108	KEMMETMUELLER PHOTO	18320MINNETONKA BLVD	DEEPHAVEN	55391	1	
458	458	00760622	WEL	A	W000	1811722310056		3470HAMILTON AVE	DEEPHAVEN	55391	1	
459	459	00272531	WEL	U	W000	1711722420088	PETERSON SR. , L G	3430THE MALL	MINNETONKA	55345	1	
460	460	00127502	WEL	A	W000	1811722310021	NELSON, JOHN	3475MONTGOMERIE AVE	DEEPHAVEN	55391	1	
461	461	00519714	WEL	A	W000	1811722310042	FULLER, JOHN	3485HAMILTON AVE	DEEPHAVEN	55391	1	
462	462	00159032	WEL	A	W000	1811722320035	FLEMMER, KATHY	3505DEEPHAVEN AVE	DEEPHAVEN	55391	1	
463	463	00276381	WEL	A	W000	1711722310052	ROBINSON, MERRIL	17014THE STRAND	MINNETONKA	55345	1	
464	464	00428218	WEL	A	W000	1811722310029	LAWLESS, TIM	3500MONTGOMERIE AVE	DEEPHAVEN	55391	1	
465	465	00249392	WEL	A	W000	1811722420023	ST. THERESE SCHOOL AN	18323MINNETONKA BLVD	DEEPHAVEN	55391	1	
466	466	00661402	WEL	A	W000	1611722410001	MINNETONKA 16B	14500MINNETONKA BLVD	MINNETONKA	55345	1	
467	467	00204180	WEL	A	W000	1711722320021	LEWIS, JIM	3505COMET LA	MINNETONKA	55345	1	
468	468	00204418	WEL	A	W000	1811722310043	CARPENTER, G. W.	3505HAMILTON AVE	DEEPHAVEN	55391	1	
469	469	00788244	WEL	A	W000	1811722310022	MILLS, STACY	3505MONTGOMERIE AVE	DEEPHAVEN	55391	1	
470	470	00447080	WEL	A	W000	1811722310054	SHELSTAD, MIKE	3520HAMILTON AVE	DEEPHAVEN	55391	1	
471	471	W0000121	WEL	A	W000	1711722320022	MCKENZIE	3509COMET LA	MINNETONKA	55345	1	
472	472	00204196	WEL	A	W000	1711722420061	VAN BOCKLE	3444FAIRLAWN DR	MINNETONKA	55345	1	
473	473	00413723	WEL	A	W000	1811722310028	HILL, ROBERT	3520MONTGOMERIE AVE	DEEPHAVEN	55391	1	
474	474	00204426	WEL	A	W000	1811722410007	WESTLUND	3514CO RD NO 101	MINNETONKA	55345	1	
475	475	00204115	WEL	A	W000	1511722310004		13800INVERNESS RD	MINNETONKA	55305	1	
476	476	00266905	WEL	A	W000	1811722310010	DESIGNWRITE 1	18340MINNETONKA BLVD	DEEPHAVEN	55391	1	
477	477	00799028	WEL	A	W000	1311723420010	DENOVO, CHARLES	3610NORTHOME RD	DEEPHAVEN	55391	1	
478	478	00100113	WEL	A	W000	1311723410025	CARLSON, ROBERT JR.	3574NORTHOME RD	DEEPHAVEN	55391	1	
479	479	00774302	WEL	A	W000	1811722310107	HILL, THOMAS J.	3535HAMILTON AVE	DEEPHAVEN	55391	1	
480	480	00696486	WEL	A	W000	1811722320039	FLIGGE, DAVID & ANNE	19000JAMES AVE	DEEPHAVEN	55391	1	
481	481	00191332	WEL	A	W000	1811722310053	LININGER, MIKE	3540HAMILTON AVE	DEEPHAVEN	55391	1	
482	482	00122943	WEL	A	W000	1811722310027	WHITE, MYRON	3540MONTGOMERIE AVE	DEEPHAVEN	55391	1	
483	483	00739130	WEL	A	W000	1811722310011		18344MINNETONKA BLVD	DEEPHAVEN	55391	1	
484	484	00204176	WEL	A	W000	1711722310041	VAN BOCKLE	3519LARCHWOOD DR	MINNETONKA	55345	1	
485	485	00204182	WEL	A	W000	1711722320029	HALVERSON	3520LILAC LA	MINNETONKA	55345	1	
486	486	00597235	WEL	A	W000	1811722320048	SAARELA, JOHN	3555DEEPHAVEN AVE	DEEPHAVEN	55391	1	
487	487	00453029	WEL	A	W000	1311723410005	RIGAS, CONSTANTINE	3550DEEPHAVEN AVE	DEEPHAVEN	55391	1	
488	488	00447093	WEL	A	W000	1811722320046	MUETZEL, T.	19005JAMES AVE	DEEPHAVEN	55391	1	
489	489	00434327	WEL	A	W000	1611722410004	CITY OF MINNETONKA	34ADDRESS UNASSIGNED	MINNETONKA	55345	1	
490	490	00204142	WEL	A	W000		LABON, CHET			55345	1	
491	491	00434267	WEL	A	W000	1811722320049	LESEUR, ANNETTE	3565DEEPHAVEN AVE	DEEPHAVEN	55391	1	
492	492	00204129	WEL	A	W000	1511722410059	OLSON, A. W.	13108INVERNESS RD	MINNETONKA	55305	1	
493	493	00190056	WEL	A	W000	1811722320042	HENSON, DON	18845JAMES AVE	DEEPHAVEN	55391	1	
494	494	00204177	WEL	A	W000	1711722310070	VAN BOCKLE	3531LARCHWOOD DR	MINNETONKA	55345	1	
495	495	00204114	WEL	A	W000	1511722310039	CASPERS, PETER	13717INVERNESS RD	MINNETONKA	55305	1	
496	496	00477425	WEL	A	W000	1811722320052	OLSON, T	18900HIGHLAND AVE	DEEPHAVEN	55391	1	
497	497	00164872	WEL	A	W000		IVERSON, RICK N			55345	1	
498	498	00168997	WEL	A	W000	1311723410006	GOLLIET, HERB	19200HIGHLAND AVE	DEEPHAVEN	55391	1	
499	499	00164897	WEL	A	W000	1811722310051	CLEVELAND, JOHN	3580HAMILTON AVE	DEEPHAVEN	55391	1	
500	500	00471329	WEL	A	W000	1811722420008	SHELLER, WILLIAM	18250HIGHLAND AVE	DEEPHAVEN	55391	1	
501	501	00804565	WEL	A	W000	1811722320050		19000HIGHLAND AVE	DEEPHAVEN	55391	1	
502	502	00204179	WEL	A	W000	1711722310034	HOLLAND, M. R.	3540CROFTVIEW TER	MINNETONKA	55345	1	
503	503	00788245	WEL	A	W000	1311723430001		3650NORTHOME RD	DEEPHAVEN	55391	1	
504	504	00111007	WEL	A	W000	1811722310083	WOSTREL, DAVID	18640HIGHLAND AVE	DEEPHAVEN	55391	1	
505	505	00204198	WEL	A	W000	1711722420032	VAN BOCKLE	3524ELMWOOD PL	MINNETONKA	55345	1	
506	506	00591546	WEL	A	W000	1311723410009	BETH ALLEN & KURT WOL	19130HIGHLAND AVE	DEEPHAVEN	55391	1	
507	507	00204419	WEL	A	W000	1811722310089	GRACE LUTHERAN CHUR	18360MINNETONKA BLVD	DEEPHAVEN	55391	1	
508	508	00655098	WEL	A	W000	1811722420007	GROBE, JOHN	18365MINNETONKA BLVD	DEEPHAVEN	55391	1	
509	509	00158070	WEL	A	W000	1811722320006	FRICK, TOM	18710HIGHLAND AVE	DEEPHAVEN	55391	1	
510	510	00546812	WEL	A	W000	1811722310082	POWERS, BILL	18600HIGHLAND AVE	DEEPHAVEN	55391	1	
511	511	00551843	WEL	A	W000	1811722310050	OLSON, PAT	18540HIGHLAND AVE	DEEPHAVEN	55391	1	
512	512	00750641	WEL	A	W000	1811722310024	GOGERTY, JOHN	18440HIGHLAND AVE	DEEPHAVEN	55391	1	
513	513	00204200	WEL	A	W000	1711722420100		3525ELMWOOD PL	MINNETONKA	55345	1	
514	514	00127301	WEL	A	W000	1811722320007	MCANDREWS, BOB	18740HIGHLAND AVE	DEEPHAVEN	55391	1	
515	515	00572678	WEL	A	W000	1811722320009	LITTLE, THOMAS	18840HIGHLAND AVE	DEEPHAVEN	55391	1	
516	516	00438251	WEL	A	W000	1811722420009	HARRIS, GEORGE	18200HIGHLAND AVE	DEEPHAVEN	55391	1	

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517	517	00765505	WEL	A	W000	1811722320008	GERLICHER, MICHAEL	18800HIGHLAND AVE	DEEPHAVEN	55391	1	
518	518	00758244	WEL	A	W000	1311723410030		3592NORTHOME RD	DEEPHAVEN	55391	1	
519	519	00405092	WEL	A	W000	1811722310024	JONES, DENNIS	18440HIGHLAND AVE	DEEPHAVEN	55391	1	
520	520	00136726	WEL	A	W000	1811722310048	ANDERSON, JAMES	18480HIGHLAND AVE	DEEPHAVEN	55391	1	
521	521	00464389	WEL	A	W000	1311723410008	FLEMMING, KATHERINE	19150HIGHLAND AVE	DEEPHAVEN	55391	1	
522	522	00100112	WEL	A	W000	1811722420012	LENARZ, LEMONT	18050HIGHLAND AVE	DEEPHAVEN	55391	1	
523	523	00485070	WEL	A	W000	1811722420011	NOONAN, BETTY	18100HIGHLAND AVE	DEEPHAVEN	55391	1	
524	524	00204133	WEL	A	W000	1511722420015	JENSEN, HARRY	13500INVERNESS RD	MINNETONKA	55305	1	
525	525	00447109	WEL	A	W000	1811722420016	LADNER, JOE	17850HIGHLAND AVE	DEEPHAVEN	55391	1	
526	526	00428231	WEL	A	W000	1311723440008	JEWETT, FRANK	3605PARKWAY	DEEPHAVEN	55391	1	
527	527	00204131	WEL	A	W000	1511722410045	WECKOFF, FRANK	3540PLYMOUTH RD	MINNETONKA	55305	1	
528	528	00481905	WEL	A	W000	1811722330032	BENNIS, CRAIG & JULIE	18935HIGHLAND AVE	DEEPHAVEN	55391	1	
529	529	00204197	WEL	A	W000	1711722310003	GRIFFS, ROGER	16801THE STRAND	MINNETONKA	55345	1	
530	530	00643152	WEL	A	W000	1811722330031	HEDREN, JOHN	18905HIGHLAND AVE	DEEPHAVEN	55391	1	
531	531	00204194	WEL	A	W000	1711722410024	KENNEDY, THOMAS P.	3524TONKAWOOD RD	MINNETONKA	55345	1	
532	532	W0000122	WEL	A	W000	1711722410022	ADAMS, DICK	3532TONKAWOOD RD	MINNETONKA	55345	1	
533	533	00204178	WEL	A	W000	1711722310035	MILLS, CLARENCE E.	3600CROFTVIEW TER	MINNETONKA	55345	1	
534	534	00204116	WEL	A	W000	1511722310020		13604INVERNESS RD	MINNETONKA	55305	1	
535	535	00520197	WEL	A	W000	1811722340056		18645HIGHLAND AVE	DEEPHAVEN	55391	1	
536	536	00435423	WEL	A	W000	1311723440009	EKLUND, PAUL	3615PARKWAY	DEEPHAVEN	55391	1	
537	537	00441085	WEL	A	W000	1811722330093		18735HIGHLAND AVE	DEEPHAVEN	55391	1	
538	538	00420459	WEL	A	W000	1811722330092	MEYO	3605JAMES AVE	DEEPHAVEN	55391	1	
539	539	00457078	WEL	A	W000	1811722430039	ONSTAD, PETER	17975HIGHLAND AVE	DEEPHAVEN	55391	1	
540	540	00449473	WEL	A	W000	1811722340055	HANSON, VERDELL	18665HIGHLAND AVE	DEEPHAVEN	55391	1	
541	541	00204199	WEL	A	W000	1711722420035	VAN BOCKLE	3537FAIRLAWN DR	MINNETONKA	55345	1	
542	542	00249991	WEL	I	W000	1711722420034	KELLING, GORDON	3544ELMWOOD PL	MINNETONKA	55345	1	
543	543	00112203	WEL	A	W000	1811722330035	POLK, SALLY	19035HIGHLAND AVE	DEEPHAVEN	55391	1	
544	544	00204132	WEL	A	W000	1511722420014	JENSEN, HARRY	13520INVERNESS RD	MINNETONKA	55305	1	
545	545	00127493	WEL	A	W000	1311723440085		3594NORTHOME RD	DEEPHAVEN	55391	1	
546	546	00272648	WEL	A	W000	1811722340015	WEST, WILLIAM	3605HAMILTON AVE	DEEPHAVEN	55391	1	
547	547	00100120	WEL	A	W000	1811722430002	MAHADY, DAVE	18275HIGHLAND AVE	DEEPHAVEN	55391	1	
548	548	00204181	WEL	A	W000	1711722320039	DIBBLE, J. H.	3544COMET LA	MINNETONKA	55345	1	
549	549	00615223	WEL	A	W000	1311723440006	MCCLURE, HAROLD	19155HIGHLAND AVE	DEEPHAVEN	55391	1	
550	550	00111041	WEL	A	W000	1811722330094	MARTINEK, WALLACE + B	18695HIGHLAND AVE	DEEPHAVEN	55391	1	
551	551	00415479	WEL	A	W000	1811722430045	HEXUM, LES	17875HIGHLAND AVE	DEEPHAVEN	55391	1	
552	552	00415485	WEL	A	W000	1811722430001	HAIDER, SAJJAD	18175HIGHLAND AVE	DEEPHAVEN	55391	1	
553	553	00127482	WEL	A	W000	1311723440097	AUSTIN, JOHN	3625PARKWAY	DEEPHAVEN	55391	1	
554	554	00127547	WEL	A	W000	1811722430040	ANDERSON, ANN	3600LAUREL DR	DEEPHAVEN	55391	1	
555	555	00479328	WEL	A	W000	1311723440012	WALKER, MARY JANE	19130EASTON RD	DEEPHAVEN	55391	1	
556	556	00639114	WEL	A	W000	1311723430003	MACWHERTER, JOHN	3670NORTHOME RD	DEEPHAVEN	55391	1	
557	557	00274162	WEL	A	W000	1711722440036	NASH, DAVID	3607STEELE ST	MINNETONKA	55345	1	
558	558	00600213	WEL	A	W000	1311723430014	DORF, JIM	3675NORTHOME RD	DEEPHAVEN	55391	1	
559	559	00447107	WEL	A	W000	1811722430046	ST. MARIE, STEVEN	3615LAUREL DR	DEEPHAVEN	55391	1	
560	560	00433450	WEL	A	W000	1311723440010	WALIN, FRANCIS	19200EASTON RD	DEEPHAVEN	55391	1	
561	561	00531531	WEL	A	W000	1811722330091		3615JAMES AVE	DEEPHAVEN	55391	1	
562	562	00204185	WEL	A	W000	1711722340046	VAN BOCKLE	3617LARCHWOOD DR	MINNETONKA	55345	1	
563	563	00572690	WEL	A	W000	1811722430043	DOWNNS, JANA	3620PAMELA PL	DEEPHAVEN	55391	1	
564	564	00204184	WEL	A	W000	1711722340038	LARSON, REED	3610DRUID LA	MINNETONKA	55345	1	
565	565	00164511	WEL	A	W000	1811722330038	MAUER, HELMUT	19050EASTON RD	DEEPHAVEN	55391	1	
566	566	00415492	WEL	A	W000	1811722330039	BRITZIUS, SCOTT	19030EASTON RD	DEEPHAVEN	55391	1	
567	567	00104862	WEL	A	W000	1811722340011	JOHNSON, GEORGE	3615MONTGOMERIE AVE	DEEPHAVEN	55391	1	
568	568	00639129	WEL	A	W000	1811722430071		18155CAROLE LA	DEEPHAVEN	55391	1	
569	569	00204187	WEL	A	W000	1711722340001	REBERS CONST. CO.	3608LARCHWOOD CIR	MINNETONKA	55345	1	
570	570	00623588	WEL	A	W000	1811722430069		18175CAROLE LA	DEEPHAVEN	55391	1	
571	571	00112351	WEL	A	W000	1811722440039	MOCCIA, COSMO	3611LOWELL ST	DEEPHAVEN	55391	1	
572	572	00495521	WEL	A	W000	1311723440095	SZYMBORSKI, PAT	3665NORTHOME RD	DEEPHAVEN	55391	1	
573	573	00204405	WEL	A	W000	1711722440035	ARCHIBALD, PETER	3608TONKAWOOD RD	MINNETONKA	55345	1	
574	574	00435422	WEL	A	W000	1811722330098	DRESSER, JOHN	18920EASTON RD	DEEPHAVEN	55391	1	
575	575	00122959	WEL	A	W000	1311723440056	SCHAEFER, HENRY	3610NORTHOME AVE	DEEPHAVEN	55391	1	
576	576	00204146	WEL	A	W000	1611722430023	HARVEY, BERT	15000MINNETONKA BLVD	MINNETONKA	55345	1	
577	577	00573111	WEL	A	W000	1311723440093		3645NORTHOME RD	DEEPHAVEN	55391	1	
578	578	00655071	WEL	A	W000	1811722430068		18275CAROLE LA	DEEPHAVEN	55391	1	
579	579	00127384	WEL	A	W000	1811722340057		3625VIRGINIA AVE	DEEPHAVEN	55391	1	
580	580	00810877	WEL	U	W000	1311723440091		3645PARKWAY	DEEPHAVEN	55391	1	
581	581	00127486	WEL	A	W000	1811722340017	STANGA, DENNIS	3610MONTGOMERIE AVE	DEEPHAVEN	55391	1	
582	582	00420522	WEL	A	W000	1811722330081	JENEWEIN	3620JAMES AVE	DEEPHAVEN	55391	1	
583	583	00204183	WEL	A	W000	1711722330004	NITS, DAVID	3613RAINBOW DR	MINNETONKA	55345	1	
584	584	00420454	WEL	A	W000	1811722430069	DUNNAVAN, C.C.	18175CAROLE LA	DEEPHAVEN	55391	1	
585	585	00572723	WEL	A	W000	1811722340023	MARSHALL, STANLEY	18505THORPE RD	DEEPHAVEN	55391	1	

Appendix D
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MapID	PCSI_ID	PROGRAM_ID	PCS_C	STATUS_C	MAT_C	PIN	FAC_NAME	ADDRESS	CITY	ZIP5_CODE	TOTAL	Comment
586	586	00157893	WEL	A	W000	1811722330050	BLOOM, RICHARD	19075EASTON RD	DEEPHAVEN	55391	1	
587	587	00551848	WEL	A	W000	1811722330049	CARBONNEAU, M.	19045EASTON RD	DEEPHAVEN	55391	1	
588	588	00536927	WEL	A	W000	1811722430011	HAMMOND, CURT	18040BERRY LA	DEEPHAVEN	55391	1	
589	589	00688978	WEL	A	W000	1311723430015	HEITHOFF, KEN & KAREN	3705NORTHOME RD	DEEPHAVEN	55391	1	
590	590	00451381	WEL	A	W000	1311723440049	JAMES, JOHN	19205EASTON RD	DEEPHAVEN	55391	1	
591	591	00204189	WEL	A	W000	1711722340002	KRAFVE, MARVIN	3616LARCHWOOD CIR	MINNETONKA	55345	1	
592	592	00724557	WEL	A	W000	1811722340061	BAKER, BRYCE	3620HAMILTON AVE	DEEPHAVEN	55391	1	
593	593	00677877	WEL	A	W000	1311723440045	STOUT, JOHN HUBBARD	19105EASTON RD	DEEPHAVEN	55391	1	
594	594	00435413	WEL	A	W000	1811722330047	GEHRKE, DENNIS	19005EASTON RD	DEEPHAVEN	55391	1	
595	595	00615216	WEL	A	W000	1811722330045	WAGNER, JOE	18945EASTON RD	DEEPHAVEN	55391	1	
596	596	00464924	WEL	A	W000	1311723430006	ROVICK, ROGER	3680NORTHOME RD	DEEPHAVEN	55391	1	
597	597	00688964	WEL	A	W000	1811722330043	GLOCKNER, JAMES & LAUREN	18905EASTON RD	DEEPHAVEN	55391	1	
598	598	00204188	WEL	A	W000	1711722340007	GIBSON, RICHARD	3615LARCHWOOD CIR	MINNETONKA	55345	1	
599	599	00624901	WEL	A	W000	1311723440094		3655NORTHOME RD	DEEPHAVEN	55391	1	
600	600	00204401	WEL	A	W000	1711722430045	SMITH, DONALD	34ADDRESS UNASSIGNED	MINNETONKA	55345	1	
601	601	00204124	WEL	A	W000	1511722340001	PEHAN, LEROY	13700SUMMIT LA	MINNETONKA	55305	1	
602	602	00204190	WEL	A	W000	1711722340003	REBERS CONSTRUCTION	3624LARCHWOOD CIR	MINNETONKA	55345	1	
603	603	00799006	WEL	A	W000	1311723440060	GEORGENS, KATHERINE	3660NORTHOME AVE	DEEPHAVEN	55391	1	
604	604	00563081	WEL	A	W000	1811722340004	BROOKS, CHARLES JR.	18310RUTLEDGE RD	DEEPHAVEN	55391	1	
605	605	00600235	WEL	A	W000	1311723430005	TOLL, DAVID	3710NORTHOME RD	DEEPHAVEN	55391	1	
606	606	00204149	WEL	A	W000	1611722440076	MINNETONKA ATHLETIC CENTER	14509MINNETONKA DR	MINNETONKA	55345	1	
607	607	00204406	WEL	A	W000	1711722440002	VAN BOCKLE	16250THE STRAND	MINNETONKA	55345	1	
608	608	00743444	WEL	A	W000	1811722340025	NORSETH, MARCELLA	18450RUTLEDGE RD	DEEPHAVEN	55391	1	
609	609	00413357	WEL	A	W000	1811722340021	LAZIER, ROBERT C.	3630HAMILTON AVE	DEEPHAVEN	55391	1	
610	610	00580217	WEL	A	W000	1611722410007	MW-11	34ADDRESS UNASSIGNED	MINNETONKA	55345	1	
611	611	00204408	WEL	A	W000	1711722440003	VAN BOCKLE	16238THE STRAND	MINNETONKA	55345	1	
612	612	00434282	WEL	A	W000	1311723440053	SZATER, A.H.	19150RUTLEDGE RD	DEEPHAVEN	55391	1	
613	613	00204407	WEL	A	W000	1711722440004	VAN BOCKLE	16230THE STRAND	MINNETONKA	55345	1	
614	614	00600229	WEL	A	W000	1811722340004	KVEGTER, DICK	18310RUTLEDGE RD	DEEPHAVEN	55391	1	
615	615	00532576	WEL	A	W000	1811722340009	BENSON, EARL	3630WESTVIEW DR	DEEPHAVEN	55391	1	
616	616	00572708	WEL	A	W000	1811722330102	GUSTAFSON, DARRELL	19030RUTLEDGE RD	DEEPHAVEN	55391	1	
617	617	00687294	WEL	A	W000	1311723440054	KRUMWIEDE, DARNELL	19100RUTLEDGE RD	DEEPHAVEN	55391	1	
618	618	00799031	WEL	A	W000		MAHIN, BRIAN			55391	1	
619	619	00127339	WEL	A	W000	1811722330083	JANDRO, DOUG E.	18870RUTLEDGE RD	DEEPHAVEN	55391	1	
620	620	00439547	WEL	A	W000	1811722340025	NORDSTROM, HAROLD	18450RUTLEDGE RD	DEEPHAVEN	55391	1	
621	621	00174340	WEL	A	W000	1311723440053	KERBER, BRIAN	19150RUTLEDGE RD	DEEPHAVEN	55391	1	
622	622	00204186	WEL	A	W000	1711722340030	STRONG, HARLAN	3627DRUID LA	MINNETONKA	55345	1	
623	623	00204191	WEL	A	W000	1711722340008	GIBSON, RICHARD	3625LARCHWOOD CIR	MINNETONKA	55345	1	
624	624	00127483	WEL	A	W000	1811722330085	PRILL, DUANE	18740RUTLEDGE RD	DEEPHAVEN	55391	1	
625	625	00100122	WEL	A	W000	1811722430065	THOMPSON, WILL	18150BERRY LA	DEEPHAVEN	55391	1	
626	626	00696470	WEL	A	W000	1811722340005	CHOUANARD, HARVEY	3645WESTVIEW DR	DEEPHAVEN	55391	1	
627	627	00204402	WEL	A	W000	1711722430054	YBUSO, GARY	3632ELMWOOD PL	MINNETONKA	55345	1	
628	628	00797091	WEL	A	W000	1611722430011	MW-GS	15100MINNETONKA INDUSTRIAL	MINNETONKA	55345	1	
629	629	00204123	WEL	A	W000	1511722340007	OERTEL, FRITZ	13827FAVORITE LA	MINNETONKA	55305	1	
630	630	00797093	WEL	A	W000	1611722430011	MW-FB	15100MINNETONKA INDUSTRIAL	MINNETONKA	55345	1	
631	631	00717727	WEL	A	W000	1611722430012	MW-B-S	15000MINNETONKA INDUSTRIAL	MINNETONKA	55345	1	
632	632	00717732	WEL	A	W000	1611722430012	MW-B-D	15000MINNETONKA INDUSTRIAL	MINNETONKA	55345	1	
633	633	00797092	WEL	A	W000	1611722430011	MW-FS	15100MINNETONKA INDUSTRIAL	MINNETONKA	55345	1	
634	634	00804648	WEL	A	W000	1811722330060	DECARKE, JOELLE	19045RUTLEDGE RD	DEEPHAVEN	55391	1	
635	635	00259790	WEL	A	W000	1811722440112	SULLIVAN UTILITIES SERVICE	17700VALLEY COVE CT	DEEPHAVEN	55391	1	
636	636	00457093	WEL	A	W000	1811722340029	HEIRZEN, GERALD	18605RUTLEDGE RD	DEEPHAVEN	55391	1	
637	637	00206920	WEL	A	W000	1311723430004	WALKER, ARCHIE SR.	3750NORTHOME RD	DEEPHAVEN	55391	1	
638	638	00204126	WEL	A	W000	1511722340028	HODGES, JACK	13711SUMMIT LA	MINNETONKA	55305	1	
639	639	00204411	WEL	A	W000	1711722440008	VAN BOCKLE	16213THE STRAND	MINNETONKA	55345	1	
640	640	00204410	WEL	A	W000	1711722440007	ROELOTS, KEN	16225THE STRAND	MINNETONKA	55345	1	
641	641	00204409	WEL	A	W000	1711722440006	VAN BOCKLE	16237THE STRAND	MINNETONKA	55345	1	
642	642	00510607	WEL	A	W000	1311723440087		19145RUTLEDGE RD	DEEPHAVEN	55391	1	
643	643	00112206	WEL	A	W000	1311723430004	BRADFORD, DR DAVID	3750NORTHOME RD	DEEPHAVEN	55391	1	
644	644	00548557	WEL	A	W000	1311723440035	JACOBS, BILL	19175RUTLEDGE RD	DEEPHAVEN	55391	1	
645	645	00591519	WEL	A	W000	1311723440084	BARTON, ALICE	19135RUTLEDGE RD	DEEPHAVEN	55391	1	
646	646	00750699	WEL	A	W000	1311723440015	BOISCLAIR, ROBERT	19400AZURE RD	DEEPHAVEN	55391	1	
647	647	00717729	WEL	A	W000	1611722430012	MW-D-S	15000MINNETONKA INDUSTRIAL	MINNETONKA	55345	1	
648	648	00717734	WEL	A	W000	1611722430012	MW-D-D	15000MINNETONKA INDUSTRIAL	MINNETONKA	55345	1	
649	649	00434258	WEL	A	W000	1811722340054	SAYER III, GEO W.	3705WESTVIEW DR	DEEPHAVEN	55391	1	
650	650	00204427	WEL	A	W000	1811722430050	BRUCE CONST.	18120HUMMINGBIRD RD	DEEPHAVEN	55391	1	
651	651	00572695	WEL	A	W000	1311723440030	OSMONSON, DAVE	19115RUTLEDGE RD	DEEPHAVEN	55391	1	
652	652	00782483	WEL	A	W000	1811722330059	PFAENDTNER, JEFFREY	19005RUTLEDGE RD	DEEPHAVEN	55391	1	
653	653	00182081	WEL	A	W000	1811722340027	TAFFE, WILLIAM	18545RUTLEDGE RD	DEEPHAVEN	55391	1	
654	654	00204432	WEL	A	W000	1811722430053		18000HUMMINGBIRD RD	DEEPHAVEN	55391	1	

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MapID	PCSI_ID	PROGRAM_ID	PCS_C	STATUS_C	MAT_C	PIN	FAC_NAME	ADDRESS	CITY	ZIP5_CODE	TOTAL	Comment
655	655	00204435	WEL	A	W000	1811722430052		18040HUMMINGBIRD RD	DEEPHAVEN	55391	1	
656	656	00424034	WEL	A	W000	1311723440096	SHIPSTAD, JIM	19230AZURE RD	DEEPHAVEN	55391	1	
657	657	00223817	WEL	A	W000	1711722340023	HOSS, R. D.	16811LINDEN DR	MINNETONKA	55345	1	
658	658	00643185	WEL	A	W000	1811722330010	THRONGRAD, CHERLY	18790AZURE RD	DEEPHAVEN	55391	1	
659	659	00791990	WEL	A	W000	1811722340031		18660AZURE RD	DEEPHAVEN	55391	1	
660	660	00434049	WEL	A	W000	1811722330064	THOMPSON, TIM	19000AZURE RD	DEEPHAVEN	55391	1	
661	661	00451404	WEL	A	W000	1811722330007	HANSON, WALT	18870AZURE RD	DEEPHAVEN	55391	1	
662	662	00204404	WEL	A	W000	1711722430069	HARDING, W. J.	3660FAIRLAWN DR	MINNETONKA	55345	1	
663	663	00778734	WEL	A	W000	1311723430009	DEAL, GREGORY & KATH	3770NORTHOME RD	DEEPHAVEN	55391	1	
664	664	W0000140	WEL	A	W000	1811722340032	NOBLE, PETER	18600AZURE RD	DEEPHAVEN	55391	1	
665	665	00660579	WEL	A	W000	1811722430059	HICKS, LUCY	18025HUMMINGBIRD RD	DEEPHAVEN	55391	1	
666	666	00447102	WEL	A	W000	1811722330065	FARMER, W.	18970AZURE RD	DEEPHAVEN	55391	1	
667	667	00810855	WEL	A	W000	1811722430054	WEST, TOM	18275HUMMINGBIRD RD	DEEPHAVEN	55391	1	
668	668	00591505	WEL	A	W000	1311723440065	CONERY, NANCY	3745PARKWAY	DEEPHAVEN	55391	1	
669	669	00204431	WEL	A	W000	1811722430061		3715LAUREL DR	DEEPHAVEN	55391	1	
670	670	00204433	WEL	A	W000	1811722430059		18025HUMMINGBIRD RD	DEEPHAVEN	55391	1	
671	671	00164898	WEL	A	W000	1811722330099	WALLER, KEN	19040AZURE RD	DEEPHAVEN	55391	1	
672	672	00441107	WEL	A	W000	1311723440064	VIEHWEG, MARK	19350AZURE RD	DEEPHAVEN	55391	1	
673	673	00426527	WEL	A	W000	1811722340035	BICKFORD, DAVID	3710HAMILTON AVE	DEEPHAVEN	55391	1	
674	674	00123000	WEL	A	W000	1811722330013	ALLAR, RONALD	18710AZURE RD	DEEPHAVEN	55391	1	
675	675	00204135	WEL	A	W000	1511722430034	GRUMMAR	13234DAHLGREN RD	MINNETONKA	55305	1	
676	676	00464903	WEL	A	W000	1811722330009	OLSON, IRENE	18800AZURE RD	DEEPHAVEN	55391	1	
677	677	00204434	WEL	A	W000	1811722430060		17975HUMMINGBIRD RD	DEEPHAVEN	55391	1	
678	678	00130782	WEL	A	W000	1811722340032	KOTTKE, BRAD	18600AZURE RD	DEEPHAVEN	55391	1	
679	679	00405091	WEL	A	W000	1811722340034	NOBLE, PETER	18540AZURE RD	DEEPHAVEN	55391	1	
680	680	00447119	WEL	A	W000	1811722340034	LEWIS, DAVID	18540AZURE RD	DEEPHAVEN	55391	1	
681	681	00204118	WEL	A	W000	1511722330041	STOCKDILL, R. G.	3701CARDINAL RD	MINNETONKA	55345	1	
682	682	00272639	WEL	A	W000	1711722430035	WALKER, STEWART	3706HAZELMOOR PL	MINNETONKA	55345	1	
683	683	00204428	WEL	A	W000	1811722430056	BRUCE PROPERTIES	18145HUMMINGBIRD RD	DEEPHAVEN	55391	1	
684	684	00204429	WEL	A	W000	1811722430057		18105HUMMINGBIRD RD	DEEPHAVEN	55391	1	
685	685	W0000139	WEL	A	W000	1311723440018	STOCKEN, ALAN	19135AZURE RD	DEEPHAVEN	55391	1	
686	686	00591506	WEL	A	W000	1311723440074	BRIDGE, BETTY	19365AZURE RD	DEEPHAVEN	55391	1	
687	687	00405076	WEL	A	W000	1311723440021	MOELTER, ROBERT	19215AZURE RD	DEEPHAVEN	55391	1	
688	688	00413375	WEL	A	W000	1811722330018	BOMSTEIN, RALPH	18845AZURE RD	DEEPHAVEN	55391	1	
689	689	00205623	WEL	A	W000	1311723440003	HILL, DON	19255AZURE RD	DEEPHAVEN	55391	1	
690	690	00615211	WEL	A	W000	1811722340037	FALK, MARGARET	18545AZURE RD	DEEPHAVEN	55391	1	
691	691	00655018	WEL	A	W000	1811722330072	GEMMILL, JIM	19065AZURE RD	DEEPHAVEN	55391	1	
692	692	00434296	WEL	A	W000	1311723440017	STOCKER, ALAN	19115AZURE RD	DEEPHAVEN	55391	1	
693	693	00100115	WEL	A	W000	1811722340049	ST. JAMES, BONNIE	18390MINNETONKA BLVD	DEEPHAVEN	55391	1	
694	694	00207095	WEL	A	W000	1811722330017	HOLTER, R H	18805AZURE RD	DEEPHAVEN	55391	1	
695	695	00204119	WEL	A	W000	1511722330040		3711CARDINAL RD	MINNETONKA	55345	1	
696	696	00204403	WEL	A	W000	1711722430036	BUTTERWORTH, C. I.	3720HAZELMOOR PL	MINNETONKA	55345	1	
697	697	00580218	WEL	A	W000		MW-12			55345	1	
698	698	00591542	WEL	A	W000	1811722430026	EINSPAHR, JOHN	18200FAIRHOMES LA	DEEPHAVEN	55391	1	
699	699	00457081	WEL	A	W000	1811722340038	NELSON, WARREN	18575AZURE RD	DEEPHAVEN	55391	1	
700	700	00204136	WEL	A	W000	1511722430035	NOR-VIC CONSTRUCTION	13240DAHLGREN RD	MINNETONKA	55305	1	
701	701	00158115	WEL	A	W000	1811722330015	CHEPOKAS, JEAN	18755AZURE RD	DEEPHAVEN	55391	1	
702	702	00204125	WEL	A	W000	1511722340019	OLSON, PAUL	3723PARK VALLEY RD	MINNETONKA	55305	1	
703	703	00204117	WEL	A	W000	1511722330039	SPETZ + BERG	3719CARDINAL RD	MINNETONKA	55345	1	
704	704	00580219	WEL	A	W000	1611722430015	MW-14	14901MINNETONKA INDU	MINNETONKA	55345	1	
705	705	00647743	WEL	A	W000	1811722330070	WAY, STEVE	18985AZURE RD	DEEPHAVEN	55391	1	
706	706	00204144	WEL	A	W000	1611722330013	DAHLMER, JAMES	15801ROBINWOOD DR	MINNETONKA	55345	1	
707	707	00441070	WEL	A	W000	1811722330069	LAZIER, L.C.	18945AZURE RD	DEEPHAVEN	55391	1	
708	708	00204143	WEL	A	W000	1611722330010	BETCHER	15909ROBINWOOD DR	MINNETONKA	55345	1	
709	709	00778743	WEL	A	W000	1811722430019	GERMANN, CHAD & SWEN	17950FAIRHOMES LA	DEEPHAVEN	55391	1	
710	710	00658638	WEL	A	W000	1811722330024	HARRY, LISA	18750LAKE AVE	DEEPHAVEN	55391	1	
711	711	00572692	WEL	A	W000	1811722340044	SHEEHAN, DONNA	18540LAKE AVE	DEEPHAVEN	55391	1	
712	712	00127382	WEL	A	W000	1311723440023	OLIN, JOHN	19200LAKE AVE	DEEPHAVEN	55391	1	
713	713	00799038	WEL	A	W000	1811722340045	ABD CONSULTING SERVI	18520LAKE AVE	DEEPHAVEN	55391	1	
714	714	00573571	WEL	A	W000	1311723440078	BARNARD, RUSSEL	19370LAKE AVE	DEEPHAVEN	55391	1	
715	715	00420468	WEL	A	W000	1811722330096	BORAN, STEVE	18930LAKE AVE	DEEPHAVEN	55391	1	
716	716	00597208	WEL	A	W000	1811722330022	MYERS, KATHY	3790MONALTRIE AVE	DEEPHAVEN	55391	1	
717	717	00549072	WEL	A	W000	1311723440028	WEISS, RODNEY	19110LAKE AVE	DEEPHAVEN	55391	1	
718	718	00615227	WEL	A	W000	1311723440023	COUNTRYMAN, STEVE	19200LAKE AVE	DEEPHAVEN	55391	1	
719	719	00453907	WEL	A	W000	1811722330023	VOGT, RICK	18780LAKE AVE	DEEPHAVEN	55391	1	
720	720	00204192	WEL	A	W000	1711722340050	LINDGREN	3723DARTMOUTH DR	MINNETONKA	55345	1	
721	721	00127540	WEL	A	W000	1311723440086	RIFLEY, BILL	19380LAKE AVE	DEEPHAVEN	55391	1	
722	722	00530155	WEL	A	W000	1811722430067	EMICH, CHUCK	18195FAIRHOMES LA	DEEPHAVEN	55391	1	
723	723	00122990	WEL	A	W000		HEGER, HOWARD			55391	1	

Appendix D
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MapID	PCSI_ID	PROGRAM_ID	PCS_C	STATUS_C	MAT_C	PIN	FAC_NAME	ADDRESS	CITY	ZIP_CODE	TOTAL	Comment
724	724	00591534	WEL	A	W000	1811722330101	STEINGAS, DAVID	19010LAKE AVE	DEEPHAVEN	55391	1	
725	725	00591510	WEL	A	W000	1811722430030	ZIMMERMAN, FRED	18125FAIRHOMES LA	DEEPHAVEN	55391	1	
726	726	00458092	WEL	A	W000	1811722430035	SUTHERLAND, LYNN	17975FAIRHOMES LA	DEEPHAVEN	55391	1	
727	727	00510900	WEL	A	W000	1811722430029	BECKER, SCOTT	18175FAIRHOMES LA	DEEPHAVEN	55391	1	
728	728	00770012	WEL	A	W000	1811722340041	MCKINNEY, JIM	18660LAKE AVE	DEEPHAVEN	55391	1	
729	729	00615236	WEL	A	W000	1811722430032	HOLT, MARY	18075FAIRHOMES LA	DEEPHAVEN	55391	1	
730	730	00204120	WEL	A	W000	1511722330048	REITEN, R. D.	3710CARDINAL RD	MINNETONKA	55345	1	
731	731	W0000110	WEL	A	W000	1611722340023	BENDELL, MIKE	15405ROBINWOOD DR	MINNETONKA	55345	1	
732	732	00223746	WEL	A	W000	1511722330019	GERSTNER, PHIL	3727SUNRISE DR W	MINNETONKA	55345	1	
733	733	00551817	WEL	A	W000	1811722340043	SOPKA, LEWIS	18570LAKE AVE	DEEPHAVEN	55391	1	
734	734	00561635	WEL	A	W000	1311723440026	MCKINNEY, JEFF	19140LAKE AVE	DEEPHAVEN	55391	1	
735	735	00437974	WEL	A	W000	1311723440025	PECK, ELLIS	19150LAKE AVE	DEEPHAVEN	55391	1	
736	736	00137351	WEL	A	W000	1811722330020	FORSBERG, JOHN	18870LAKE AVE	DEEPHAVEN	55391	1	
737	737	00204137	WEL	A	W000	1511722440028	BAER, LARRY	3740FARMINGTON RD	MINNETONKA	55305	1	
738	738	00204148	WEL	A	W000	1611722430015	THOMAS MACHINE CO.	14901MINNETONKA INDU	MINNETONKA	55345	1	
739	739	00405081	WEL	A	W000	1811722330025	KERSTEN, JIM	18720LAKE AVE	DEEPHAVEN	55391	1	
740	740	00621564	WEL	A	W000	1811722340046	THORPE PARK	3725HAMILTON AVE	DEEPHAVEN	55391	1	
741	741	00441082	WEL	A	W000	1811722330021	SAWINSKI, GREG	18850LAKE AVE	DEEPHAVEN	55391	1	
742	742	00548547	WEL	A	W000	2411723120003		3805NORTHOME RD	DEEPHAVEN	55391	1	
743	743	00178137	WEL	A	W000	1811722430031	PASCHKO, JANET	18105FAIRHOMES LA	DEEPHAVEN	55391	1	
744	744	00405086	WEL	A	W000		LANDIS, D.D.			55391	1	
745	745	00204127	WEL	A	W000	1511722340026	ANDERSON, BRUCE	3739PARK VALLEY RD	MINNETONKA	55305	1	
746	746	00204439	WEL	A	W000	1811722440005	LEEMAN CONST.	17810SUSAN LA	MINNETONKA	55345	1	
747	747	00621594	WEL	A	W000	2411723110009	LYON, TANYA	19395LAKE AVE	DEEPHAVEN	55391	1	
748	748	00615245	WEL	A	W000	2411723110020	RAMSTAD, KARLA	19235LAKE AVE	DEEPHAVEN	55391	1	
749	749	00204134	WEL	A	W000	1511722430064	SMITH, PAUL HOWARD	13516ORCHARD RD	MINNETONKA	55305	1	
750	750	00595866	WEL	A	W000	2411723110019	PIETRICK, CAROL	19205LAKE AVE	DEEPHAVEN	55391	1	
751	751	00400896	WEL	A	W000	1911722220033	BONNEY	18875LAKE AVE	DEEPHAVEN	55391	1	
752	752	00615225	WEL	A	W000	2411723110018	TIMMERS, MATT	19175LAKE AVE	DEEPHAVEN	55391	1	
753	753	00779630	WEL	A	W000	1911722220042	LANDIS, TIM	19025LAKE AVE	DEEPHAVEN	55391	1	
754	754	00178981	WEL	A	W000	1911722220043	STRAUSS, GEORGE	18985LAKE AVE	DEEPHAVEN	55391	1	
755	755	00204122	WEL	A	W000	1511722330008	JESSING	3727SUNRISE DR E	MINNETONKA	55345	1	
756	756	00551828	WEL	A	W000	2411723110014	HAGGERTY, DENNIS	19105LAKE AVE	DEEPHAVEN	55391	1	
757	757	00170245	WEL	A	W000	2411723110016	MACKLIN, RICHARD	19125LAKE AVE	DEEPHAVEN	55391	1	
758	758	00405087	WEL	A	W000	1911722220021	AVERILL, GREG	18805LAKE AVE	DEEPHAVEN	55391	1	
759	759	00658642	WEL	A	W000	1911722210027	JUDD, BILL	3825VIRGINIA AVE	DEEPHAVEN	55391	1	
760	760	00477407	WEL	A	W000	1911722220007	HAMILTON, GEORGE	3810VIRGINIA AVE	DEEPHAVEN	55391	1	
761	761	00405062	WEL	A	W000	1911722210029	HOWARD, JOHN	18398MINNETONKA BLVD	DEEPHAVEN	55391	1	
762	762	00223747	WEL	A	W000	1611722330020		15718DAY PL	MINNETONKA	55345	1	
763	763	00530157	WEL	A	W000	2411723120004		3825NORTHOME RD	DEEPHAVEN	55391	1	
764	764	00579489	WEL	A	W000	2411723120004	YOUNGDAHL, RONALD	3825NORTHOME RD	DEEPHAVEN	55391	1	
765	765	00735726	WEL	A	W000	2411723110010	MITCHELL, KIRK	19365LAKE AVE	DEEPHAVEN	55391	1	
766	766	00438339	WEL	A	W000	1911722220008	MOLZAHN, FRED	3820VIRGINIA AVE	DEEPHAVEN	55391	1	
767	767	00204526	WEL	A	W000	2211722110005	KRUSTOON, OSCAR	12831DO LITTLE DR	MINNETONKA	55305	1	
768	768	00477418	WEL	A	W000	1911722220040	WARDRID, SCOTT	19045LAKE AVE	DEEPHAVEN	55391	1	
769	769	00204525	WEL	A	W000	2211722110075	LARSONS	12801DO LITTLE DR	MINNETONKA	55305	1	
770	770	00655037	WEL	A	W000	1911722220045	RIGAS, KARL	18945LAKE AVE	DEEPHAVEN	55391	1	
771	771	00204121	WEL	A	W000	1511722330050		14320ORCHARD RD	MINNETONKA	55345	1	
772	772	00457103	WEL	A	W000	2411723110007	ST. MARTIN, BARBARA	3840NORTHOME AVE	DEEPHAVEN	55391	1	
773	773	00204438	WEL	A	W000	1911722110041	LEEMAN CONSTRUCTION	17714LEEMANS CT	MINNETONKA	55345	1	
774	774	00227322	WEL	A	W000	1911722220022	SIKORSKI, H.L.	3820MONALTRIE AVE	DEEPHAVEN	55391	1	
775	775	00776879	WEL	A	W000	1911722220038	KOSTRON, JODI	3815DEEPHAVEN AVE	DEEPHAVEN	55391	1	
776	776	00272638	WEL	A	W000	1911722120022	FULLER	3800FAIRHOMES RD	DEEPHAVEN	55391	1	
777	777	00127541	WEL	A	W000	2411723110026	OSBURN, NONA	3840DEEPHAVEN AVE	DEEPHAVEN	55391	1	
778	778	00204437	WEL	A	W000	1911722110043	LEEMAN CONSTRUCTION	17632LEEMANS CT	MINNETONKA	55345	1	
779	779	00204442	WEL	A	W000	1911722110038	LEEMAN CONST.	17817SUSAN LA	MINNETONKA	55345	1	
780	780	00530171	WEL	A	W000	1911722220009	YOUNGSTROM, STEVEN	3830VIRGINIA AVE	DEEPHAVEN	55391	1	
781	781	00726402	WEL	A	W000	1911722120004	SEEL, CHARLIE & JILL	18250HONEYBUCKLE LA	DEEPHAVEN	55391	1	
782	782	00204527	WEL	A	W000	2211722110006	PYHONEN, R. J.	12825DO LITTLE DR	MINNETONKA	55305	1	
783	783	W0000142	WEL	A	W000		CITY OF DEEPHAVEN			55391	1	
784	784	00765075	WEL	A	W000	1911722220010	SHIPSTAD, SCOTT & JENI	3840VIRGINIA AVE	DEEPHAVEN	55391	1	
785	785	00435421	WEL	A	W000	2411723110048	BOYER, BOB	19150PARK AVE	DEEPHAVEN	55391	1	
786	786	00643194	WEL	A	W000	2411723110013	MCINTOSH, DOUG	19350PARK AVE	DEEPHAVEN	55391	1	
787	787	00505084	WEL	A	W000	2411723110002	BUDD, DON	3865NORTHOME AVE	DEEPHAVEN	55391	1	
788	788	00204440	WEL	A	W000	1911722110039	LEEMAN CONST.	17808LEEMANS DR	MINNETONKA	55345	1	
789	789	00770024	WEL	A	W000	1911722220076	SCHULTZ, TRAVIS J	3840TALTON PL	DEEPHAVEN	55391	1	
790	790	00204443	WEL	A	W000	1911722110033	LEEMAN CONST.	3816SUSAN LA	MINNETONKA	55345	1	
791	791	00272359	WEL	A	W000	2011722110037	FENSKA, FRED	3808TONKAWOOD RD	MINNETONKA	55345	1	
792	792	00204477	WEL	A	W000	2111722120043	DEVEAU BUS CO.	14851DEVEAU PL	MINNETONKA	55345	1	

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MapID	PCSI_ID	PROGRAM_ID	PCS_C	STATUS_C	MAT_C	PIN	FAC_NAME	ADDRESS	CITY	ZIP5_CODE	TOTAL	Comment
793	793	00204441	WEL	A	W000	1911722110045	LEEMAN CONST.	17620LEEMANS CT	MINNETONKA	55345	1	
794	794	00263655	WEL	I	W000	2311723210001	BIG ISLAND VETERANS C	100BIG ISLAND	ORONO	55331	1	
795	795	00719847	WEL	A	W000	1911722120040		18225HONEYSUCKLE LA	DEEPHAVEN	55391	1	
796	796	00158134	WEL	A	W000	1911722220031	JACOBS, JOHN	3865TALTON PL	DEEPHAVEN	55391	1	
797	797	00739138	WEL	A	W000	2311723210001	VETS CAMP	100BIG ISLAND	ORONO	55331	1	
798	798	00508072	WEL	A	W000	1911722220012	HAGBERG, C & A	3860VIRGINIA AVE	DEEPHAVEN	55391	1	
799	799	00204457	WEL	A	W000	2011722110039	HANUS, GLADY	3816TONKAWOOD RD	MINNETONKA	55345	1	
800	800	00204450	WEL	A	W000		PETER, M.			55391	1	
801	801	00750533	WEL	A	W000	1911722220051	WILSON, ROBERT AND C	3860TALTON PL	DEEPHAVEN	55391	1	
802	802	00204530	WEL	A	W000	2211722220018	IVANEK, MEL	14122WOODHAVEN RD	MINNETONKA	55345	1	
803	803	00420478	WEL	A	W000	1911722220075	BAKKEN, CRAIG	18990PARK AVE	DEEPHAVEN	55391	1	
804	804	00438257	WEL	U	W000	2211722210018	BESTLER, TOM	13613ORCHARD RD	MINNETONKA	55305	1	
805	805	00591503	WEL	A	W000	1911722220025		3870MONALTRIE AVE	DEEPHAVEN	55391	1	
806	806	00127463	WEL	A	W000	1911722220026	SIKORRA, MICHAEL	3890MONALTRIE AVE	DEEPHAVEN	55391	1	
807	807	00420511	WEL	A	W000	1911722220073		18920PARK AVE	DEEPHAVEN	55391	1	
808	808	00615215	WEL	A	W000	1911722220014	BENNIS, CINDY	3875MONALTRIE AVE	DEEPHAVEN	55391	1	
809	809	00204444	WEL	A	W000	1911722110035	LEEMAN CONST.	3832SUSAN LA	MINNETONKA	55345	1	
810	810	00464909	WEL	A	W000	2411723120001	MINNETONKA YACHT CLU	19500PARK AVE	DEEPHAVEN	55391	1	
811	811	00530195	WEL	A	W000	1911722220069	HENRIKSON, KERMIT	3880VIRGINIA AVE	DEEPHAVEN	55391	1	
812	812	00485069	WEL	A	W000	2411723110034	BLYTH, P.	3915WALDEN RD	DEEPHAVEN	55391	1	
813	813	00147853	WEL	A	W000	1911722210005	TALMO, THOMAS	18650MINNETONKA BLVD	DEEPHAVEN	55391	1	
814	814	00204492	WEL	A	W000	2111722220058	CARLSON, CURT	15845SUNSET RD	MINNETONKA	55345	1	
815	815	00519260	WEL	A	W000	1911722220070	KAYE, MARTY	18720MINNETONKA BLVD	DEEPHAVEN	55391	1	
816	816	00485076	WEL	A	W000	1911722220061	ZEISS, JOHN	3905WALDEN LA	DEEPHAVEN	55391	1	
817	817	00687276	WEL	A	W000	1911722220062	PETERSON, CLAIR	3945WALDEN RD	DEEPHAVEN	55391	1	
818	818	00621600	WEL	A	W000	1911722210010	BETZ, CHARLES	18409MINNETONKA BLVD	DEEPHAVEN	55391	1	
819	819	00204458	WEL	A	W000	2011722110007	WAHL, ED	16300PINE ST	MINNETONKA	55345	1	
820	820	00508067	WEL	A	W000	1911722210017	SUMNER, JOHN	3909HEATHCOTE RD	DEEPHAVEN	55391	1	
821	821	00457104	WEL	A	W000	1911722220035	LEHMEZER, ALITA	18780MINNETONKA BLVD	DEEPHAVEN	55391	1	
822	822	00204532	WEL	A	W000	2211722220054	REEVES, G. B.	3918HAVEN RD	MINNETONKA	55345	1	
823	823	00159613	WEL	A	W000	1911722220037	SELSETH, ALLEN	18760MINNETONKA BLVD	DEEPHAVEN	55391	1	
824	824	00204449	WEL	A	W000	1911722210017	HAGGLUND, CLARENCE	3909HEATHCOTE RD	DEEPHAVEN	55391	1	
825	825	00100126	WEL	A	W000	1911722120032	VAN EECKHOUT BLDG	3901HILLCREST WAY	DEEPHAVEN	55391	1	
826	826	00675984	WEL	A	W000	1911722220054	AYEN, ED	18855PARK AVE	DEEPHAVEN	55391	1	
827	827	00204478	WEL	A	W000	2111722120031	JOHNSON & PETERSON	14901WALKER PL	MINNETONKA	55345	1	
828	828	00272325	WEL	A	W000	2411723110038	CAVANAUGH, PHIL	3900WALDEN RD	DEEPHAVEN	55391	1	
829	829	00204460	WEL	A	W000	2011722110009	VAN BOCKLE	16310PINE ST	MINNETONKA	55345	1	
830	830	00204531	WEL	A	W000	2211722220033	JOHNSON, AXEL	14213WOODHAVEN RD	MINNETONKA	55345	1	
831	831	00204446	WEL	A	W000	1911722110013	FRANZEN, JACK	3944HUNTERS HILL WAY	MINNETONKA	55345	1	
832	832	00686552	WEL	A	W000	1911722210033		3922TRAMORE LA	DEEPHAVEN	55391	1	
833	833	00572714	WEL	A	W000	1911722210012	LAMBERT, JEFF	3922HEATHCOTE RD	DEEPHAVEN	55391	1	
834	834	00204493	WEL	A	W000	2111722220060	CARLSON, ART	15833SUNSET RD	MINNETONKA	55345	1	
835	835	00100127	WEL	A	W000	1911722120033	LEADFORDS, PAYTON	3900HILLCREST WAY	DEEPHAVEN	55391	1	
836	836	00206918	WEL	A	W000	1911722210017	WHITE, G. M.	3909HEATHCOTE RD	DEEPHAVEN	55391	1	
837	837	00615218	WEL	A	W000	1911722220057	TAPPER, BILL	3935WALDEN LA	DEEPHAVEN	55391	1	
838	838	00138737	WEL	A	W000	1911722120031	GRUSSIN, BRUCE	3925HILLCREST WAY	DEEPHAVEN	55391	1	
839	839	00719828	WEL	A	W000	1911722210034		3924TRAMORE LA	DEEPHAVEN	55391	1	
840	840	00776852	WEL	A	W000	2411723110036		19250WALDEN TR	DEEPHAVEN	55391	1	
841	841	00677953	WEL	A	W000	2411723110031	NELSON, JOAN	3955WALDEN SHORES RD	DEEPHAVEN	55391	1	
842	842	00204459	WEL	A	W000	2011722110013	VAN BOCKEL	3916AVONDALE ST	MINNETONKA	55345	1	
843	843	00127488	WEL	A	W000	1911722220004	JAHNKE, H.M.	18735MINNETONKA BLVD	DEEPHAVEN	55391	1	
844	844	00142776	WEL	A	W000	1911722220002	WOOD, PETER	18880MINNETONKA BLVD	DEEPHAVEN	55391	1	
845	845	00114363	WEL	A	W000	1911722120029	MARIANI, JOHN	3945HILLCREST WAY	DEEPHAVEN	55391	1	
846	846	00711482	WEL	A	W000	1911722210036		3923TRAMORE LA	DEEPHAVEN	55391	1	
847	847	00760614	WEL	A	W000		ANDERSON, JOHN & JUDY			55391	1	
848	848	00204494	WEL	A	W000	2111722220062	FRA-TIM	15821SUNSET RD	MINNETONKA	55345	1	
849	849	00204467	WEL	A	W000	2011722220029	WAHL, ED	3969EARLYNN LA	MINNETONKA	55345	1	
850	850	00100116	WEL	A	W000	1911722120035	KRUEGER, WARD	3930HILLCREST WAY	DEEPHAVEN	55391	1	
851	851	00127479	WEL	A	W000	1911722220005	DONICHT	18755MINNETONKA BLVD	DEEPHAVEN	55391	1	
852	852	00668036	WEL	A	W000	1911722120011	VITTERA, JOHN	3945HILLCREST RD	DEEPHAVEN	55391	1	
853	853	00204445	WEL	A	W000	1911722110019	THE MORTON CO.	3992HUNTERS HILL WAY	MINNETONKA	55345	1	
854	854	00469548	WEL	A	W000	2411723110030	HEFFELFINGER, LOISE	3980WALDEN SHORES RD	DEEPHAVEN	55391	1	
855	855	00204468	WEL	A	W000	2011722220034	KALKES	3980VANDAN RD	MINNETONKA	55345	1	
856	856	00802725	WEL	A	W000	2411723140022	TORRES, RICARDO & DO	19155WALDEN TR	DEEPHAVEN	55391	1	
857	857	00180938	WEL	A	W000	1911722210019	MOORE, HOWARD	3983HEATHCOTE RD	DEEPHAVEN	55391	1	
858	858	00204451	WEL	A	W000	1911722230014	LOSCHIEDER, PETE	19025WALDEN TR	DEEPHAVEN	55391	1	
859	859	00204476	WEL	A	W000	2111722110040	SAUTIER	14423SPRING LAKE RD	MINNETONKA	55345	1	
860	860	00462292	WEL	A	W000	1911722120009	KLOSTERMAN, MARGARE	3979HILLCREST RD	DEEPHAVEN	55391	1	
861	861	00204466	WEL	A	W000	2011722210045	S & M BUILDERS	3949BROWN LA	MINNETONKA	55345	1	

Appendix D
 Minnetonka Wellhead Protection Plan
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MapID	PCSI_ID	PROGRAM_ID	PCS_C	STATUS_C	MAT_C	PIN	FAC_NAME	ADDRESS	CITY	ZIP_CODE	TOTAL	Comment
862	862	00204479	WEL	A	W000	2111722120037	CURTISS, PAUL	3930WILLISTON RD	MINNETONKA	55345	1	
863	863	00420524	WEL	A	W000	1911722230037		4015EAST VALLEY RD	DEEPHAVEN	55391	1	
864	864	00204490	WEL	A	W000	2111722210015	WOODROW	15416MCKENZIE BLVD	MINNETONKA	55345	1	
865	865	00204461	WEL	A	W000	2011722110020	CROWN CONST. CO.	16150HIDDEN VALLEY RD	MINNETONKA	55345	1	
866	866	00443750	WEL	A	W000	1911722130002	HOGAN, RICHARD	3993HILLCREST RD	DEEPHAVEN	55391	1	
867	867	00413362	WEL	A	W000	1911722240012	GALE, JERRY	18473HEATHCOTE LA	DEEPHAVEN	55391	1	
868	868	00204489	WEL	A	W000	2111722220057	GRAHDE, E. W.	15601SUNSET RD	MINNETONKA	55345	1	
869	869	00621565	WEL	A	W000	1911722130034	SWANSON, CAROL	4044HILLCREST CT	DEEPHAVEN	55391	1	
870	870	00687293	WEL	A	W000	1911722130005	BOSELMMANN, JOHN & P	4000HILLCREST RD	DEEPHAVEN	55391	1	
871	871	00204529	WEL	A	W000	2211722140047	ANDERSON	4005BAKER RD	MINNETONKA	55305	1	
872	872	00171021	WEL	A	W000	2011722240016	MINNETONKA 3A	34ADDRESS UNASSIGNED	MINNETONKA	55345	1	
873	873	00127476	WEL	A	W000	1911722130032	KOPLAN	4025HILLCREST CT	DEEPHAVEN	55391	1	
874	874	00204475	WEL	A	W000	2111722140004	NOYES, PAUL	14618OAKWOOD RD	MINNETONKA	55345	1	
875	875	00204464	WEL	A	W000	2011722130022	GEDDEIS, J. R.	16409HIDDEN VALLEY RD	MINNETONKA	55345	1	
876	876	00204496	WEL	A	W000	2111722230070	BERGMAN, RAY	4017TONKAWOOD RD	MINNETONKA	55345	1	
877	877	00111032	WEL	A	W000	2411723140023	COLLITON, TOM	4060SIBLEY AVE	DEEPHAVEN	55391	1	
878	878	00204470	WEL	A	W000	2011722240016	MINNETONKA 3	34ADDRESS UNASSIGNED	MINNETONKA	55345	1	
879	879	00204536	WEL	A	W000	2211722240013	BLOOM, JEROME	13929SPRING LAKE RD	MINNETONKA	55345	1	
880	880	00204480	WEL	A	W000	2111722130059	PASQUARETTE	4016WILLISTON RD	MINNETONKA	55345	1	
881	881	00623553	WEL	A	W000	1911722240005	OHANIAN, LEO	18374HEATHCOTE LA	DEEPHAVEN	55391	1	
882	882	00206919	WEL	A	W000		NEILSEN			55391	1	
883	883	00173232	WEL	A	W000	1911722240009	SEELY, FRED	18407HEATHCOTE LA	DEEPHAVEN	55391	1	
884	884	00204498	WEL	A	W000	2111722240040	HOST CONST. CO	4017SKYVIEW RD	MINNETONKA	55345	1	
885	885	00100114	WEL	A	W000	1911722230019		4085SIBLEY AVE	DEEPHAVEN	55391	1	
886	886	00726412	WEL	A	W000	1911722130006	ROTH, ROBERT	4194HILLCREST LA	DEEPHAVEN	55391	1	
887	887	00204534	WEL	A	W000	2211722230014	JOHNSON, AXEL	14032OAKWOOD RD EXT	MINNETONKA	55345	1	
888	888	00204495	WEL	A	W000	2111722230034	CLAPP, JACK	15717LEXINGTON AVE	MINNETONKA	55345	1	
889	889	00791996	WEL	A	W000	2211722240044		13733SPRING LAKE RD	MINNETONKA	55345	1	
890	890	00111019	WEL	A	W000	1911722240004	GOLDSTIEN	18332HEATHCOTE LA	DEEPHAVEN	55391	1	
891	891	00204502	WEL	A	W000	2111722240040	PAUL HOST	4017SKYVIEW RD	MINNETONKA	55345	1	
892	892	00189614	WEL	A	W000	1911722130004	HAYNES, NED	4044HILLCREST RD	DEEPHAVEN	55391	1	
893	893	00190432	WEL	A	W000	1911722230031	IRWIN	18815HEATHCOTE DR	DEEPHAVEN	55391	1	
894	894	00204462	WEL	A	W000	2011722140041	VEITS, F. J.	4028TONKAWOOD RD	MINNETONKA	55345	1	
895	895	00434259	WEL	A	W000	1911722230017	OLSON, D.	19085RAMSEY RD	DEEPHAVEN	55391	1	
896	896	00170360	WEL	A	W000	1911722240007	SHRONTS, JACK	18353HEATHCOTE LA	DEEPHAVEN	55391	1	
897	897	00811391	WEL	A	W000	1911722240007	THIBODEAU, TROY + MAR	18353HEATHCOTE LA	DEEPHAVEN	55391	1	
898	898	00204535	WEL	A	W000	2211722240030	KENNEN, BERNARD A.	13641SPRING LAKE RD	MINNETONKA	55345	1	
899	899	00756047	WEL	A	W000	2411723140020	BURGUM, BARBARA	19380WALDEN TR	DEEPHAVEN	55391	1	
900	900	00204500	WEL	A	W000	2111722240041	PAUL HOST	15318SKYVIEW CIR	MINNETONKA	55345	1	
901	901	00205643	WEL	A	W000	2411723140020	DALBERG, KEN	19380WALDEN TR	DEEPHAVEN	55391	1	
902	902	00204499	WEL	A	W000		PAUL HOST			55345	1	
903	903	00441071	WEL	A	W000	2411723140016	SLATEN, PAUL	19125RAMSEY RD	DEEPHAVEN	55391	1	
904	904	00204504	WEL	A	W000	2111722240029	BARRETT, JOHN P.	4035VICTORIA ST	MINNETONKA	55345	1	
905	905	00204491	WEL	A	W000	2111722230061	ERICKSON, PAUL	4039TONKAWOOD RD	MINNETONKA	55345	1	
906	906	00204547	WEL	A	W000	2311722230008	OLSON, ROGER	4100MERRIAM RD	MINNETONKA	55305	1	
907	907	00204548	WEL	A	W000	2311722230020		4101MERRIAM RD	MINNETONKA	55305	1	
908	908	00548539	WEL	A	W000	1911722240017	POLLICK, RICHARD	4101HEATHCOTE RD	DEEPHAVEN	55391	1	
909	909	00204501	WEL	A	W000	2111722240043	PAUL HOST	15302SKYVIEW CIR	MINNETONKA	55345	1	
910	910	00127478	WEL	A	W000	1911722230030	MCNAMARA	18761HEATHCOTE DR	DEEPHAVEN	55391	1	
911	911	00204447	WEL	A	W000	1911722140006	HUGHES BROS.	4116CO RD NO 101	MINNETONKA	55345	1	
912	912	00204503	WEL	A	W000	2111722240044	PAUL HOST	15309SKYVIEW CIR	MINNETONKA	55345	1	
913	913	00204481	WEL	A	W000	2111722140024	JOHNSON	14617IDYLWOOD RD	MINNETONKA	55345	1	
914	914	00724560	WEL	A	W000	1911722130015	RASSIER, JOSEPH	4155HILLCREST LA	DEEPHAVEN	55391	1	
915	915	00204463	WEL	A	W000	2011722140037	BRUCE CONSTRUCTION	4106TONKAWOOD LA	MINNETONKA	55345	1	
916	916	00226841	WEL	A	W000	2011722240015	MINNETONKA EAST JR. H	34ADDRESS UNASSIGNED	MINNETONKA	55345	1	
917	917	00475720	WEL	A	W000	1911722230020	MITCHELLETTE, RON	19080CARSONWOOD AVE	DEEPHAVEN	55391	1	
918	918	00138744	WEL	A	W000	1911722130023	JANZEN	4186HILLCREST RD	DEEPHAVEN	55391	1	
919	919	00204448	WEL	A	W000	1911722140007	NORTON	4124CO RD NO 101	MINNETONKA	55345	1	
920	920	00204482	WEL	A	W000	2111722140028	JONES, MARK	4103RED OAK RIDGE	MINNETONKA	55345	1	
921	921	00136688	WEL	A	W000	2411723130020	GLUEK, JOHN	19800LAKEVIEW AVE	DEEPHAVEN	55331	1	
922	922	00204486	WEL	A	W000	2111722140073	JOHNSON, HAROLD	14406LENNELL DR	MINNETONKA	55345	1	
923	923	00127484	WEL	A	W000		DODGE, RICHARD			55331	1	
924	924	00551838	WEL	A	W000	2411723230005	KORDONOWY, TOM	20500LAKEVIEW AVE	DEEPHAVEN	55331	1	
925	925	00750695	WEL	A	W000	2411723130023	CORSON, DICK	19805LAKEVIEW AVE	DEEPHAVEN	55331	1	
926	926	00441128	WEL	A	W000	1911722230022		18972CARSONWOOD AVE	DEEPHAVEN	55391	1	
927	927	00424014	WEL	A	W000	2411723130018	ANDERSON, WILLIAM	19840LAKEVIEW AVE	DEEPHAVEN	55331	1	
928	928	00204452	WEL	A	W000	1911722130021	BETZ, TOM	4162HILLCREST RD	DEEPHAVEN	55391	1	
929	929	00758214	WEL	A	W000	2411723130017	HANING, PAT	19860LAKEVIEW AVE	DEEPHAVEN	55331	1	
930	930	00204528	WEL	A	W000	2211722140011	JOHNSON, AXEL	12825CASTLE VIEW CT	MINNETONKA	55305	1	

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MapID	PCSI_ID	PROGRAM_ID	PCS_C	STATUS_C	MAT_C	PIN	FAC_NAME	ADDRESS	CITY	ZIP5_CODE	TOTAL	Comment
931	931	00778742	WEL	A	W000	1911722230035	BELISLE, CHARLES & JUL	18693HEATHCOTE DR	DEEPHAVEN	55391	1	
932	932	00204506	WEL	A	W000	2111722240026	POLLACK, WAYNE	4117VICTORIA ST	MINNETONKA	55345	1	
933	933	00127464	WEL	A	W000	1911722230024		19085CARSONWOOD AVE	DEEPHAVEN	55391	1	
934	934	00111033	WEL	A	W000	2411723240003	KABRIS, PAT	20200LAKEVIEW AVE	DEEPHAVEN	55331	1	
935	935	00204483	WEL	A	W000	2111722140035	JONES, MARK	4118RED OAK RIDGE	MINNETONKA	55345	1	
936	936	00750622	WEL	A	W000	2411723230006	BEIM, BILL	20450LAKEVIEW AVE	DEEPHAVEN	55331	1	
937	937	00413721	WEL	A	W000	2411723240002	AHERN, JOHN	20240LAKEVIEW AVE	DEEPHAVEN	55331	1	
938	938	00776896	WEL	A	W000	2411723240001	MONSON, JON	20260LAKEVIEW AVE	DEEPHAVEN	55331	1	
939	939	00457125	WEL	A	W000	2411723240006	LINDSTROM, RICHARD &	20100LAKEVIEW AVE	DEEPHAVEN	55331	1	
940	940	00505063	WEL	A	W000	2411723240005		20140LAKEVIEW AVE	DEEPHAVEN	55331	1	
941	941	00111018	WEL	A	W000	2411723240013	HACKNEY, ROSS	19900LAKEVIEW AVE	DEEPHAVEN	55331	1	
942	942	00600231	WEL	A	W000	2411723230035	CARLSON, KENT	4200NORTH LA	DEEPHAVEN	55331	1	
943	943	00758207	WEL	A	W000	2411723140025		19090MINNETONKA BLVD	DEEPHAVEN	55391	1	
944	944	00726429	WEL	A	W000	2411723240008	KIM, JUDITH	20000LAKEVIEW AVE	DEEPHAVEN	55331	1	
945	945	00688958	WEL	A	W000	2411723240006	SCHROCK, CHRISTIAN	20100LAKEVIEW AVE	DEEPHAVEN	55331	1	
946	946	00513872	WEL	A	W000	1911722130030	GROTHE, JOHN	4159HILLCREST RD	DEEPHAVEN	55391	1	
947	947	00791977	WEL	A	W000	2411723240007	LINDSTROM, CHRISTINE	20050LAKEVIEW AVE	DEEPHAVEN	55331	1	
948	948	00400792	WEL	A	W000	2411723130035		19865LAKEVIEW AVE	DEEPHAVEN	55331	1	
949	949	00457087	WEL	A	W000	2411723240015	MIDDLETON, NANCY	20245LAKEVIEW AVE	DEEPHAVEN	55331	1	
950	950	00204484	WEL	A	W000	2111722140036	GREINER, PETER	4128RED OAK RIDGE	MINNETONKA	55345	1	
951	951	00686565	WEL	A	W000	2411723230033		20540SUMMERVILLE RD	DEEPHAVEN	55331	1	
952	952	00792024	WEL	A	W000	2411723240009		19980LAKEVIEW AVE	DEEPHAVEN	55331	1	
953	953	00705927	WEL	A	W000	2411723130027		19845COTTAGEWOOD AV	DEEPHAVEN	55331	1	
954	954	00400944	WEL	A	W000	2411723230023		4200MOUNT CUR	DEEPHAVEN	55331	1	
955	955	00596662	WEL	A	W000	2411723230010	FLANNIGAN, MIKE	20560SUMMERVILLE RD	DEEPHAVEN	55331	1	
956	956	00457098	WEL	A	W000	2411723240014	MACRAE, J.D.	4215NORTHERN RD	DEEPHAVEN	55331	1	
957	957	00621598	WEL	A	W000	2411723230009	CARLSON, BOB	20425LAKEVIEW AVE	DEEPHAVEN	55331	1	
958	958	00687266	WEL	A	W000	2411723230024	HURD, CECIL	20520SUMMERVILLE RD	DEEPHAVEN	55331	1	
959	959	00799007	WEL	A	W000	2411723240020		20225LAKEVIEW AVE	DEEPHAVEN	55331	1	
960	960	00485092	WEL	A	W000	2411723230027	HURD, CECIL	20580SUMMERVILLE RD	DEEPHAVEN	55331	1	
961	961	00810870	WEL	A	W000	2411723240011		19940LAKEVIEW AVE	DEEPHAVEN	55331	1	
962	962	00655043	WEL	A	W000	2411723230054		20395LAKEVIEW AVE	DEEPHAVEN	55331	1	
963	963	00457091	WEL	A	W000	2411723310044	GRAFF, H.A.	20155LAKEVIEW AVE	DEEPHAVEN	55331	1	
964	964	00510611	WEL	A	W000	2411723320053	BOWER, TOM	20415LAKEVIEW AVE	DEEPHAVEN	55331	1	
965	965	00513877	WEL	A	W000	2411723310046	OLSON, TIM	4210WATER ST	DEEPHAVEN	55331	1	
966	966	00204485	WEL	A	W000	2111722140033	JONES, MARK	4133RED OAK RIDGE	MINNETONKA	55345	1	
967	967	00111028	WEL	A	W000	2411723420008	SORENSEN, FRANDES G	19865COTTAGEWOOD AV	DEEPHAVEN	55331	1	
968	968	00508075	WEL	A	W000	2411723310033	HANSON, DONALD	4220JEFFERSON ST	DEEPHAVEN	55331	1	
969	969	00572694	WEL	A	W000	2411723310055	BETZ, JOHN	19965LAKEVIEW AVE	DEEPHAVEN	55331	1	
970	970	00400943	WEL	A	W000	2411723320075		4230MOUNT CUR	DEEPHAVEN	55331	1	
971	971	00164870	WEL	A	W000	2411723320003	COMER, KEN	20500SUMMERVILLE RD	DEEPHAVEN	55331	1	
972	972	00457117	WEL	A	W000	2411723310047	PETERSON, JANE	4220WATER ST	DEEPHAVEN	55331	1	
973	973	00446127	WEL	A	W000	1911722320004	DUERNER, R.W.	4205CIRCLE DR	DEEPHAVEN	55391	1	
974	974	00615201	WEL	A	W000	2411723410004	BACH, PETER	19100MINNETONKA BLVD	DEEPHAVEN	55391	1	
975	975	00713107	WEL	A	W000	2411723310056	MERRINAN, CHRIS	19960COTTAGEWOOD AV	DEEPHAVEN	55331	1	
976	976	00711494	WEL	A	W000	2411723310058	MORGAN, SHARON	19920COTTAGEWOOD AV	DEEPHAVEN	55331	1	
977	977	00719806	WEL	A	W000	1911722310011	HAAS, MAMIE	4236HEATHCOTE RD	DEEPHAVEN	55391	1	
978	978	00204533	WEL	A	W000	2211722230039	JOHNSON, HAROLD	14211LENNELL DR	MINNETONKA	55345	1	
979	979	00633596	WEL	A	W000	2411723410005	HUNT, KYLE	4300CHIMO EAST	DEEPHAVEN	55391	1	
980	980	00791984	WEL	A	W000	2411723320085		20575SUMMERVILLE RD	DEEPHAVEN	55331	1	
981	981	00204488	WEL	A	W000	2111722140053	JOHNSON, HAROLD	14427LENNELL DR	MINNETONKA	55345	1	
982	982	00434261	WEL	A	W000	2411723310048	HLAVACEK, DENNIS	4230WATER ST	DEEPHAVEN	55331	1	
983	983	00204465	WEL	A	W000	2011722140049	HABERHAM, BOB	16160LAKE ST EXTENSIO	MINNETONKA	55345	1	
984	984	00100136	WEL	A	W000	2411723410005	ELANDER	4300CHIMO EAST	DEEPHAVEN	55391	1	
985	985	00204487	WEL	A	W000	2111722140034		4139RED OAK RIDGE	MINNETONKA	55345	1	
986	986	00204497	WEL	A	W000	2111722230012	JENSON, HARRY	15820LAKE ST EXTENSIO	MINNETONKA	55345	1	
987	987	00204454	WEL	A	W000	1911722320004	DUERNER, R. W.	4205CIRCLE DR	DEEPHAVEN	55391	1	
988	988	00111037	WEL	A	W000	2411723310057	SMITH, WILLIAM A.	19970COTTAGEWOOD AV	DEEPHAVEN	55331	1	
989	989	00750655	WEL	A	W000	2411723310050	LAURENT, TIM	4245WATER ST	DEEPHAVEN	55331	1	
990	990	00760634	WEL	A	W000	2411723310053		19980COTTAGEWOOD AV	DEEPHAVEN	55331	1	
991	991	00434260	WEL	A	W000	2411723310060	DUKATZ, JOHN	4250WATER ST	DEEPHAVEN	55331	1	
992	992	00551821	WEL	A	W000	2411723320067	SCHAEFER, SUSAN	20400SUMMERVILLE RD	DEEPHAVEN	55331	1	
993	993	00205645	WEL	A	W000	2411723310076	PERRY	4235NORTHERN RD	DEEPHAVEN	55331	1	
994	994	00464517	WEL	A	W000	2411723310071	DANBURY, JEFF	4260KEEWAYDIN ST	DEEPHAVEN	55331	1	
995	995	00572727	WEL	A	W000	2411723310075	SCHMIDT, JOHN	4255JEFFERSON ST	DEEPHAVEN	55331	1	
996	996	00687258	WEL	A	W000	2411723320068	ZINN, CARL	20390SUMMERVILLE RD	DEEPHAVEN	55331	1	
997	997	00170277	WEL	A	W000	2411723320063	DEARDORFF, ANN	20495SUMMERVILLE RD	DEEPHAVEN	55331	1	
998	998	00434265	WEL	A	W000	2411723320069	MCGANNON, BARB	20350SUMMERVILLE RD	DEEPHAVEN	55331	1	
999	999	00579151	WEL	A	W000	2411723310029	SCHECHTMAN, STEVE	4245NORTHERN RD	DEEPHAVEN	55331	1	

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MapID	PCSI_ID	PROGRAM_ID	PCS_C	STATUS_C	MAT_C	PIN	FAC_NAME	ADDRESS	CITY	ZIP5_CODE	TOTAL	Comment
1000	1000	00170263	WEL	A	W000	2411723310035	MORGAN	4240JEFFERSON ST	DEEPHAVEN	55331	1	
1001	1001	00788231	WEL	A	W000	2411723310041	JOHNSON, AMY	4265JEFFERSON ST	DEEPHAVEN	55331	1	
1002	1002	00597216	WEL	A	W000	2411723420011		19895COTTAGEWOOD AV	DEEPHAVEN	55331	1	
1003	1003	00272586	WEL	A	W000	2111722320014	SLOBY, E C	4209TONKAWOOD RD	MINNETONKA	55345	1	
1004	1004	00410392	WEL	A	W000	2411723310061	LARSON, ROBERT	4260WATER ST	DEEPHAVEN	55331	1	
1005	1005	00804556	WEL	A	W000	2411723320070	HAUGSLAND, JOE	4240NORTHERN RD	DEEPHAVEN	55331	1	
1006	1006	00624923	WEL	A	W000	2411723310018	STILLMAN, RALPH & FAYE	19955COTTAGEWOOD AV	DEEPHAVEN	55331	1	
1007	1007	00573585	WEL	A	W000	2411723310040	WOELFFER, JOHN	4275JEFFERSON ST	DEEPHAVEN	55331	1	
1008	1008	00530160	WEL	A	W000	2411723320074	SATHER, DOUGLAS	20455SUMMERVILLE RD	DEEPHAVEN	55331	1	
1009	1009	00122945	WEL	A	W000	2411723310062	NIELSON, CLAYTON	4270WATER ST	DEEPHAVEN	55331	1	
1010	1010	00477421	WEL	A	W000	2411723310020	BOLIN, T	19995COTTAGEWOOD AV	DEEPHAVEN	55331	1	
1011	1011	00475701	WEL	A	W000	2411723320066	MUELLER, RICHARD	20425SUMMERVILLE RD	DEEPHAVEN	55331	1	
1012	1012	00788232	WEL	A	W000	2411723320011		20570PARK PL	DEEPHAVEN	55331	1	
1013	1013	00266906	WEL	A	W000	2411723320057	LAKE MINNETONKA HEALTH	20395SUMMERVILLE RD	DEEPHAVEN	55331	1	
1014	1014	00451370	WEL	A	W000	2411723320039	HANSON, ERNEST	20480WESTERN RD	DEEPHAVEN	55331	1	
1015	1015	00439779	WEL	A	W000	2411723310021		20005COTTAGEWOOD AV	DEEPHAVEN	55331	1	
1016	1016	00508076	WEL	A	W000	2411723310028	MAHN, SANDRA	4265NORTHERN RD	DEEPHAVEN	55331	1	
1017	1017	00750640	WEL	A	W000	2411723320057	RUTLEDGE, RANDY	20395SUMMERVILLE RD	DEEPHAVEN	55331	1	
1018	1018	00127459	WEL	A	W000	1911722310016	KLONER, STUART	4247HEATHCOTE RD	DEEPHAVEN	55391	1	
1019	1019	00410393	WEL	A	W000	2411723310063	NIELSON, CLAYTON	4280WATER ST	DEEPHAVEN	55331	1	
1020	1020	00204455	WEL	A	W000	1911722320011	DEAN, PERRY	4240CIRCLE DR	DEEPHAVEN	55391	1	
1021	1021	00208013	WEL	U	W000	2211722320004	MINNETONKA 8	34ADDRESS UNASSIGNED	MINNETONKA	55345	1	
1022	1022	00415461	WEL	A	W000	2411723310065	EGAR, WILLIAM	4285JEFFERSON ST	DEEPHAVEN	55331	1	
1023	1023	00705911	WEL	A	W000	2411723320082	JEWETT, SKIP-TERRY	4290COTTONWOOD LA	DEEPHAVEN	55331	1	
1024	1024	00522173	WEL	A	W000	2411723310038	BUDD, JOHN	4270JEFFERSON ST	DEEPHAVEN	55331	1	
1025	1025	00479341	WEL	A	W000	2411723320042	STRICKER, ALLEN	20420WESTERN RD	DEEPHAVEN	55331	1	
1026	1026	00621561	WEL	A	W000	2411723320060	GRANNES, DOROTHY	20335SUMMERVILLE RD	DEEPHAVEN	55331	1	
1027	1027	00100137	WEL	A	W000	2411723410007	HUFF, JOHN	4280CHIMO EAST	DEEPHAVEN	55391	1	
1028	1028	00513885	WEL	A	W000	2411723320059	SPENCER, S.	20355SUMMERVILLE RD	DEEPHAVEN	55331	1	
1029	1029	00415494	WEL	A	W000	2411723320043	FILKINS, DAVE	20400WESTERN RD	DEEPHAVEN	55331	1	
1030	1030	00618557	WEL	A	W000	2411723310027	SHOWERS, ED	4275NORTHERN RD	DEEPHAVEN	55331	1	
1031	1031	00204516	WEL	A	W000	2111722410025	SEIGEL, BILL	4215WILLISTON RD	MINNETONKA	55345	1	
1032	1032	00799001	WEL	A	W000	2411723310023		20085COTTAGEWOOD AV	DEEPHAVEN	55331	1	
1033	1033	00804551	WEL	A	W000	2411723320036		20525PARK PL	DEEPHAVEN	55331	1	
1034	1034	00485071	WEL	A	W000	1911722320010	RODGERS, NELSON	4262CIRCLE DR	DEEPHAVEN	55391	1	
1035	1035	00519711	WEL	A	W000	2411723310025	LEIN, LINDSEY	4285NORTHERN RD	DEEPHAVEN	55331	1	
1036	1036	00536274	WEL	A	W000	2411723310001		20105COTTAGEWOOD AV	DEEPHAVEN	55331	1	
1037	1037	00799048	WEL	A	W000	2411723320035		20495PARK PL	DEEPHAVEN	55331	1	
1038	1038	00615229	WEL	A	W000	2411723310039	JAEGER, HUGH	4280JEFFERSON ST	DEEPHAVEN	55331	1	
1039	1039	00525246	WEL	A	W000	2411723310026	BEAN, THOMAS	4295NORTHERN RD	DEEPHAVEN	55331	1	
1040	1040	00405098	WEL	A	W000	2411723320014	MURPHY, TODD	4305COTTONWOOD LA	DEEPHAVEN	55331	1	
1041	1041	00100133	WEL	A	W000	2411723410008	KELLY	4270CHIMO EAST	DEEPHAVEN	55391	1	
1042	1042	00750644	WEL	A	W000	2411723320051		20450PARK PL	DEEPHAVEN	55331	1	
1043	1043	00127325	WEL	A	W000	1911722320016	WEBSTER, GEORGE	4253HEATHCOTE RD	DEEPHAVEN	55391	1	
1044	1044	00624919	WEL	A	W000	2311723410004		20630LINWOOD RD	DEEPHAVEN	55331	1	
1045	1045	00272562	WEL	A	W000	2411723410011	ROCKWELL, ANTHONY	4335CHIMO EAST	DEEPHAVEN	55391	1	
1046	1046	00475719	WEL	A	W000	2411723320072		20330WESTERN RD	DEEPHAVEN	55331	1	
1047	1047	00770011	WEL	A	W000	1911722320007		4285CIRCLE DR	DEEPHAVEN	55391	1	
1048	1048	00561318	WEL	A	W000	2411723410013	BRANSON, LINDLEY	4265CHIMO EAST	DEEPHAVEN	55391	1	
1049	1049	00770042	WEL	A	W000	1911722320008	CHAPPELLE, MIKE & AMY	4282CIRCLE DR	DEEPHAVEN	55391	1	
1050	1050	00479334	WEL	A	W000	2311723410018	COSENTINO, LOU & JUDI	20640LINWOOD RD	DEEPHAVEN	55331	1	
1051	1051	00272365	WEL	A	W000	2311723410010	GABBERT, W. D.	20660LINWOOD RD	DEEPHAVEN	55331	1	
1052	1052	00530158	WEL	A	W000	2411723320050	DICK, ROB	20280COTTAGEWOOD AV	DEEPHAVEN	55331	1	
1053	1053	00750648	WEL	A	W000	2311723410010		20660LINWOOD RD	DEEPHAVEN	55331	1	
1054	1054	00776898	WEL	A	W000	2411723320033		20445PARK PL	DEEPHAVEN	55331	1	
1055	1055	00204507	WEL	A	W000	2111722310011	LAY, CHESTER	4233VICTORIA ST	MINNETONKA	55345	1	
1056	1056	00400865	WEL	A	W000	2411723310005	STODOLA, BOB	20185COTTAGEWOOD AV	DEEPHAVEN	55331	1	
1057	1057	00100128	WEL	A	W000	2411723410023	VALENE, J.	19685CHIMO WEST	DEEPHAVEN	55391	1	
1058	1058	00420519	WEL	A	W000	2411723310006	WALSTROM, LES	20205COTTAGEWOOD AV	DEEPHAVEN	55331	1	
1059	1059	00173223	WEL	A	W000	2411723320080	BOVEY, ROGER	4325COTTONWOOD LA	DEEPHAVEN	55331	1	
1060	1060	00204552	WEL	A	W000	2311722320027	BYLAND, DICK	4335BRIARWOOD DR	MINNETONKA	55343	1	
1061	1061	00223772	WEL	A	W000	2111722410005		14711RICHARDS DR	MINNETONKA	55345	1	
1062	1062	00161482	WEL	A	W000	2411723310068	HEIDKAMP, JAMES	20225COTTAGEWOOD AV	DEEPHAVEN	55331	1	
1063	1063	00586462	WEL	A	W000	1911722420001	ZIMMERMAN, MARIE	18116RIDGWOOD RD	MINNETONKA	55345	1	
1064	1064	00100139	WEL	A	W000	2411723410014	CHRISTENSON	4235CHIMO EAST	DEEPHAVEN	55391	1	
1065	1065	00204511	WEL	A	W000	2111722320005	PAUL HOST	4232WILSON ST	MINNETONKA	55345	1	
1066	1066	00100132	WEL	A	W000	2411723420004	BRIEN, J. O.	19625CHIMO WEST	DEEPHAVEN	55391	1	
1067	1067	00112246	WEL	A	W000	2311723410002	WALSTAD, PETER	20680LINWOOD RD	DEEPHAVEN	55331	1	
1068	1068	00677857	WEL	A	W000	2311723410007	WILSON, MIKE & CHRISTI	20634LINWOOD RD	DEEPHAVEN	55331	1	

Appendix D
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MapID	PCSI_ID	PROGRAM_ID	PCS_C	STATUS_C	MAT_C	PIN	FAC_NAME	ADDRESS	CITY	ZIP5_CODE	TOTAL	Comment
1069	1069	00100138	WEL	A	W000	2411723410017	THOMPSON	4230CHIMO EAST	DEEPHAVEN	55391	1	
1070	1070	00205642	WEL	A	W000	2311723410002	WALSTAD, PETER	20680LINWOOD RD	DEEPHAVEN	55331	1	
1071	1071	00406000	WEL	A	W000	2411723320030	UNDERWOOD	20365PARK PL	DEEPHAVEN	55331	1	
1072	1072	00204553	WEL	A	W000	2311722320028	GAMBILL, ROBERT	4353BRIARWOOD DR	MINNETONKA	55343	1	
1073	1073	00204508	WEL	A	W000	2111722310019	DELANEY, LEROY	4241VICTORIA ST	MINNETONKA	55345	1	
1074	1074	00204520	WEL	A	W000	2111722420004	BLAINES CONSTRUCTION	15008EVELYN LA	MINNETONKA	55345	1	
1075	1075	00204521	WEL	A	W000	2111722420003	OTTESON, DENNIS	15020EVELYN LA	MINNETONKA	55345	1	
1076	1076	00791981	WEL	A	W000	2411723320029		20345PARK PL	DEEPHAVEN	55331	1	
1077	1077	00595181	WEL	A	W000	2411723320081	HUNT, KYLE	4345COTTONWOOD LA	DEEPHAVEN	55331	1	
1078	1078	00783520	WEL	A	W000	2411723310010	JOHNSON, SHIRLEY	20285COTTAGEWOOD AV	DEEPHAVEN	55331	1	
1079	1079	00204453	WEL	A	W000	1911722310018	JOHNSON, ROGER	4300RIDGE CT	MINNETONKA	55391	1	
1080	1080	00100130	WEL	A	W000	2411723410009	YOEHL, LARRY	4395CHIMO EAST	DEEPHAVEN	55391	1	
1081	1081	00615241	WEL	A	W000	2311723410015	EATON, DAVE & DIANE	20690LINWOOD RD	DEEPHAVEN	55331	1	
1082	1082	00100134	WEL	A	W000	2411723410019	ARNDT, DOUG	19705CHIMO WEST	DEEPHAVEN	55391	1	
1083	1083	00624998	WEL	A	W000	2411723320083		4320COTTONWOOD LA	DEEPHAVEN	55331	1	
1084	1084	00100129	WEL	A	W000	2411723410022	DURR, KEN	19650CHIMO WEST	DEEPHAVEN	55391	1	
1085	1085	00655016	WEL	A	W000	2411723410022	KUSTER, DONALD & CAROL	19650CHIMO WEST	DEEPHAVEN	55391	1	
1086	1086	00579198	WEL	A	W000	2411723310011	JOHNSON, ALLAN E.	20290COTTAGEWOOD RD	DEEPHAVEN	55331	1	
1087	1087	00205647	WEL	A	W000	2411723420001	JONES, MARK II	19600CHIMO WEST	DEEPHAVEN	55391	1	
1088	1088	00205648	WEL	A	W000	2411723420001	ANDERSON, MARTIN	19600CHIMO WEST	DEEPHAVEN	55391	1	
1089	1089	00434299	WEL	A	W000	2411723320027	HASTREITER, J.R.	20275COTTAGEWOOD RD	DEEPHAVEN	55331	1	
1090	1090	00100135	WEL	A	W000	2411723410016	THOMPSON	4210CHIMO EAST	DEEPHAVEN	55391	1	
1091	1091	00204522	WEL	A	W000	2111722420027	DEARSTYNE	15017EVELYN LA	MINNETONKA	55345	1	
1092	1092	00505207	WEL	A	W000		P-2 CITY OF MINNETONKA			55343	1	
1093	1093	00133380	WEL	A	W000	1911722310020	BELL, ARTHUR	4309RIDGE CT	MINNETONKA	55391	1	
1094	1094	00204537	WEL	U	W000	2211722420005	MINNETONKA 14	4312BAKER RD	MINNETONKA	55343	1	
1095	1095	00204554	WEL	A	W000	2311722320023	CHAS, ALEXANDER	12451BRIARWOOD CT	MINNETONKA	55343	1	
1096	1096	00735739	WEL	A	W000	2411723320019		20430LINWOOD RD	DEEPHAVEN	55331	1	
1097	1097	00580434	WEL	A	W000	2411723320020	KITCHNER, JOHN	20500LINWOOD RD	DEEPHAVEN	55331	1	
1098	1098	00773396	WEL	A	W000	2411723410021	KAUFMANN, RAY	19700CHIMO WEST	DEEPHAVEN	55391	1	
1099	1099	00548558	WEL	A	W000	2411723310016		20270COTTAGEWOOD RD	DEEPHAVEN	55331	1	
1100	1100	00435406	WEL	A	W000	2311723410014		20625LINWOOD RD	DEEPHAVEN	55331	1	
1101	1101	00615210	WEL	A	W000	2411723320021	AFRICANO, DAVID	20390LINWOOD RD	DEEPHAVEN	55331	1	
1102	1102	00464920	WEL	A	W000	2411723320022	THOMPSON, MARK	20590LINWOOD RD	DEEPHAVEN	55331	1	
1103	1103	00526447	WEL	A	W000	1911722320043	GARBER, DAVE	18880RIDGWOOD RD	DEEPHAVEN	55391	1	
1104	1104	00170246	WEL	A	W000	2411723320077	TURNER, JOE	20265COTTAGEWOOD RD	DEEPHAVEN	55331	1	
1105	1105	00160021	WEL	A	W000	2211722430023	MINNETONKA 14A	4400BAKER RD	MINNETONKA	55343	1	
1106	1106	W0000123	WEL	A	W000	2111722310031	SJADIN, CARL	4328MANOR COURT RD	MINNETONKA	55345	1	
1107	1107	00750700	WEL	A	W000	2411723310072		20260COTTAGEWOOD RD	DEEPHAVEN	55331	1	
1108	1108	00204551	WEL	A	W000	2311722330006	OLSON, DON	4340BRIARWOOD DR	MINNETONKA	55343	1	
1109	1109	00204509	WEL	A	W000	2111722310032	POWERS REALTY CO.	15404COURT RD	MINNETONKA	55345	1	
1110	1110	00204512	WEL	A	W000	2111722320008	FOX, JOHN	4328WILSON ST	MINNETONKA	55345	1	
1111	1111	00447104	WEL	A	W000	2411723330011	MOE, DALE	20465LINWOOD RD	DEEPHAVEN	55331	1	
1112	1112	00194929	WEL	A	W000					55331	1	
1113	1113	00204518	WEL	A	W000	2111722410038	HAMEL	14418WILDCREST RD	MINNETONKA	55345	1	
1114	1114	00168956	WEL	A	W000	2411723330020	GEHSHL, ED	20355LINWOOD RD	DEEPHAVEN	55331	1	
1115	1115	00591539	WEL	A	W000	2411723330020	SEARLES, MARK	20355LINWOOD RD	DEEPHAVEN	55331	1	
1116	1116	00475703	WEL	A	W000	2411723330013	HATCH, LOUIE	20445LINWOOD RD	DEEPHAVEN	55331	1	
1117	1117	00204558	WEL	A	W000	2311722330007	OLSON, DON	4400BRIARWOOD DR	MINNETONKA	55343	1	
1118	1118	00655030	WEL	A	W000	2411723330001	PRICE, JIM & FAITH	20600CARSON RD	DEEPHAVEN	55331	1	
1119	1119	00688963	WEL	A	W000	2411723330005	SMITH, JACK	20545LINWOOD RD	DEEPHAVEN	55331	1	
1120	1120	00204556	WEL	A	W000	2311722330013	OLSON, DON	12508BRIARWOOD TER	MINNETONKA	55343	1	
1121	1121	00624910	WEL	A	W000	2411723330014		20425LINWOOD RD	DEEPHAVEN	55331	1	
1122	1122	00205649	WEL	A	W000	2411723440002	DEEPHAVEN SCHOOL	4452VINE HILL RD	DEEPHAVEN	55391	1	
1123	1123	00204510	WEL	A	W000	2111722310026	JOHNSON, MILTON	15401COURT RD	MINNETONKA	55345	1	
1124	1124	00505048	WEL	A	W000	2411723340040	MICHAEL, PAUL	20240COTTAGEWOOD RD	DEEPHAVEN	55331	1	
1125	1125	00591512	WEL	A	W000	1911722330025	SNYDER, TOM	18900RIDGWOOD RD	DEEPHAVEN	55391	1	
1126	1126	00611760	WEL	A	W000	2411723340003	BOYD, RANDY	19960MINNETONKA BLVD	DEEPHAVEN	55331	1	
1127	1127	00204523	WEL	A	W000	2111722430053	JERGENS	4405HIGHLAND RD	MINNETONKA	55345	1	
1128	1128	00747667	WEL	A	W000	1911722330026		19000RIDGWOOD RD	DEEPHAVEN	55391	1	
1129	1129	00204557	WEL	A	W000	2311722330008		4408BRIARWOOD DR	MINNETONKA	55343	1	
1130	1130	00405082	WEL	A	W000	2411723340041	JORDON, JIM	20236COTTAGEWOOD RD	DEEPHAVEN	55331	1	
1131	1131	00204517	WEL	A	W000	2111722440018	OSTERBERG	14518KARYL DR	MINNETONKA	55345	1	
1132	1132	00776863	WEL	A	W000	2411723330003	MOOS, DAN	20560CARSON RD	DEEPHAVEN	55331	1	
1133	1133	00204519	WEL	A	W000	2111722440024	STILLMAN	14720KARYL DR	MINNETONKA	55345	1	
1134	1134	00536169	WEL	A	W000	2411723330008	HARRISON, KATHERINE	20520CARSON RD	DEEPHAVEN	55331	1	
1135	1135	00204555	WEL	A	W000	2311722330018	OLSON, DON	12509BRIARWOOD TER	MINNETONKA	55343	1	
1136	1136	00438109	WEL	A	W000	2411723330016		20390CARSON RD	DEEPHAVEN	55331	1	
1137	1137	00739140	WEL	A	W000	2411723330012		20450CARSON RD	DEEPHAVEN	55331	1	

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MapID	PCSI_ID	PROGRAM_ID	PCS_C	STATUS_C	MAT_C	PIN	FAC_NAME	ADDRESS	CITY	ZIP5_CODE	TOTAL	Comment
1138	1138	00782482	WEL	A	W000	2411723340019	WRIGHT, JEFFERY	20220COTTAGEWOOD RD	DEEPHAVEN	55331	1	
1139	1139	00204561	WEL	A	W000	2311722340034	UNDESTAD	12601JAMES RD	MINNETONKA	55343	1	
1140	1140	00178988	WEL	A	W000	2411723330006	VON ESCHEN, FERRIS	20540CARSON RD	DEEPHAVEN	55331	1	
1141	1141	00471317	WEL	A	W000	2411723330015	MAAS, GUSTAV	20420CARSON RD	DEEPHAVEN	55331	1	
1142	1142	00205644	WEL	A	W000		DAVIDSON, ROBERT J.			55331	1	
1143	1143	00464395	WEL	A	W000	2411723330010	FRONIUS, JEFF	20480CARSON RD	DEEPHAVEN	55331	1	
1144	1144	00591524	WEL	A	W000	1911722330020	FRIEDE, THOMAS	18955RIDGWOOD RD	DEEPHAVEN	55391	1	
1145	1145	00127356	WEL	A	W000	1911722330004	JACOBS, JOHN	19055RIDGWOOD RD	DEEPHAVEN	55391	1	
1146	1146	00272598	WEL	A	W000	2111722440017	SMITH, HOWARD	14721KARYL DR	MINNETONKA	55345	1	
1147	1147	00505208	WEL	A	W000		P-3 CITY OF MINNETONKA			55343	1	
1148	1148	00799013	WEL	A	W000	1911722330007	DOROSCHAK, ANDY	4490EASTWOOD RD	DEEPHAVEN	55345	1	
1149	1149	00204560	WEL	A	W000	2311722340043	UNDESTAD	12604JAMES RD	MINNETONKA	55343	1	
1150	1150	00481904	WEL	A	W000	2411723330047	ARNOLD, PAT	20245CARSON RD	DEEPHAVEN	55331	1	
1151	1151	00508108	WEL	A	W000	2411723330030		20585CARSON RD	DEEPHAVEN	55331	1	
1152	1152	00127458	WEL	A	W000	2411723330021	LEAF, ROBERT	20485CARSON RD	DEEPHAVEN	55331	1	
1153	1153	00501299	WEL	A	W000	2411723330032	HERBST, MIKE	20545CARSON RD	DEEPHAVEN	55331	1	
1154	1154	00226559	WEL	A	W000	2411723340004	DEEPHAVEN VILLAGE HA	20225COTTAGEWOOD RD	DEEPHAVEN	55331	1	
1155	1155	00204562	WEL	A	W000	2311722340035	UNDESTAD	12605JAMES RD	MINNETONKA	55343	1	
1156	1156	00687257	WEL	A	W000	2411723330041	THORP, DAVE	20285LINDEN RD	DEEPHAVEN	55331	1	
1157	1157	00572680	WEL	A	W000	2411723330025	WHEATON, JOHN	20445CARSON RD	DEEPHAVEN	55331	1	
1158	1158	00205646	WEL	A	W000	2411723340004	DEEPHAVEN VILLAGE HA	20225COTTAGEWOOD RD	DEEPHAVEN	55331	1	
1159	1159	00204539	WEL	A	W000	2211722440005	BETZ, MAURICE	13108SHADY DALE RD	MINNETONKA	55343	1	
1160	1160	00692542	WEL	A	W000	2411723340004	CITY OF DEEPHAVEN	20225COTTAGEWOOD RD	DEEPHAVEN	55331	1	
1161	1161	00462145	WEL	A	W000	1911722330005	EVENSON, E.A.	4501VINE HILL RD	DEEPHAVEN	55391	1	
1162	1162	00204538	WEL	A	W000	2211722430023	CITY OF MINNETONKA	4400BAKER RD	MINNETONKA	55343	1	
1163	1163	00204514	WEL	A	W000	2111722340039	HOPPE	4428HIGHLAND RD	MINNETONKA	55345	1	
1164	1164	00204456	WEL	A	W000	1911722340008	STARK, TOM	4508SPARROW RD	MINNETONKA	55345	1	
1165	1165	00724553	WEL	A	W000	2411723330039	RIDDICK, KEN	20325LINDEN RD	DEEPHAVEN	55331	1	
1166	1166	00160035	WEL	A	W000		GARDENEER LIVING CONCEPT			55343	1	
1167	1167	00508082	WEL	A	W000	2411723330024	JOHNSON, D.E.	20500LINDEN RD	DEEPHAVEN	55331	1	
1168	1168	00109916	WEL	A	W000	2411723330023	JOHNSON, HOWARD	20560LINDEN RD	DEEPHAVEN	55331	1	
1169	1169	00204513	WEL	A	W000	2111722340040	HOPPE, FRED	15224HIGHWOOD DR	MINNETONKA	55345	1	
1170	1170	00449435	WEL	A	W000	2411723330023	DARNELL, DENNIS	20560LINDEN RD	DEEPHAVEN	55331	1	
1171	1171	00420473	WEL	A	W000	2411723430011	HUBER, GEORGE	19940COTTAGEWOOD RD	DEEPHAVEN	55331	1	
1172	1172	00505090	WEL	A	W000	2411723330033	GOSEN, TIM	20565LINDEN RD	DEEPHAVEN	55331	1	
1173	1173	00719837	WEL	A	W000	2411723330033	LAUER, BOBBI	20565LINDEN RD	DEEPHAVEN	55331	1	
1174	1174	00204566	WEL	A	W000	2311722340040	DONEFF, JACK	12616JAMES RD	MINNETONKA	55343	1	
1175	1175	00100119	WEL	A	W000	2411723330038	LARSON, CRAIG	20345LINDEN RD	DEEPHAVEN	55331	1	
1176	1176	00658635	WEL	A	W000	2411723330054	STREETER, STEVEN	20545LINDEN RD	DEEPHAVEN	55331	1	
1177	1177	00561386	WEL	A	W000	2011722440047		4530TONKAWOOD RD	MINNETONKA	55345	1	
1178	1178	00715618	WEL	A	W000	1911722330013	CHANEY, BLAINE	19055MAPLE LA	DEEPHAVEN	55331	1	
1179	1179	00457109	WEL	A	W000	2411723330037	BALTON, M.	20365LINDEN RD	DEEPHAVEN	55331	1	
1180	1180	00204563	WEL	A	W000	2311722340038	UNDESTAD	12617JAMES RD	MINNETONKA	55343	1	
1181	1181	00530189	WEL	A	W000	2411723330051	SANDERS, S & J	20495LINDEN RD	DEEPHAVEN	55331	1	
1182	1182	00658631	WEL	A	W000	1911722330015		18900MAPLE LA	DEEPHAVEN	55331	1	
1183	1183	00415476	WEL	A	W000	2411723330050	STREETER, DON	20455LINDEN RD	DEEPHAVEN	55331	1	
1184	1184	00204565	WEL	A	W000	2311722340039	UNDESTAD, N.	12620JAMES RD	MINNETONKA	55343	1	
1185	1185	00591036	WEL	A	W000	2411723330052	HUNT, KYLE	20395LINDEN RD	DEEPHAVEN	55331	1	
1186	1186	00705715	WEL	A	W000	2411723430026	GORR, TODD	19640COTTAGEWOOD RD	DEEPHAVEN	55331	1	
1187	1187	00208011	WEL	A	W000	2211722340030	MINNETONKA 1	4468ELLERDALE RD	MINNETONKA	55345	1	
1188	1188	00687282	WEL	A	W000	2411723330056	STREETER, KEVIN	20505LINDEN RD	DEEPHAVEN	55331	1	
1189	1189	00272428	WEL	A	W000	2211722330005	JOHNSON, DON B.	14300QUIGLEY RD	MINNETONKA	55345	1	
1190	1190	00608349	WEL	A	W000		MW-9			55343	1	
1191	1191	00658625	WEL	A	W000	1911722330021	HILGERS, AL	19080EASTWOOD DR	DEEPHAVEN	55331	1	
1192	1192	00426536	WEL	A	W000	2411723330034	EASTLING, DAVE	20625WOODHAVEN PL	DEEPHAVEN	55331	1	
1193	1193	00649238	WEL	A	W000	2411723430015	MILLER, TOM	19780COTTAGEWOOD RD	DEEPHAVEN	55331	1	
1194	1194	00735702	WEL	A	W000	1911722330010	ARMITAGE, SCOTT	4580EASTWOOD RD	DEEPHAVEN	55345	1	
1195	1195	00204540	WEL	A	W000	2211722440019	OLSEN, DON	12916GREENWOOD RD	MINNETONKA	55343	1	
1196	1196	00224078	WEL	A	W000	2111722340061	MCDONALDS	15450STATE HWY NO 7	MINNETONKA	55345	1	
1197	1197	00441088	WEL	A	W000	1911722330009	FABER, DAN	18850EASTWOOD DR	DEEPHAVEN	55331	1	
1198	1198	00441092	WEL	A	W000	1911722330011	OLSON, W.R.	18840EASTWOOD DR	DEEPHAVEN	55331	1	
1199	1199	00223748	WEL	A	W000	2011722440019		16401CANTERBURY DR	MINNETONKA	55345	1	
1200	1200	00204471	WEL	A	W000		BETZ, TOM			55343	1	
1201	1201	00180235	WEL	A	W000	1911722330024	THOELKE, DEL	18900EASTWOOD DR	DEEPHAVEN	55331	1	
1202	1202	00204473	WEL	A	W000	2011722440018	HEDLIN, G.	16409CANTERBURY DR	MINNETONKA	55345	1	
1203	1203	00127328	WEL	A	W000	2511723120003	LUSH, WINONA	19635COTTAGEWOOD RD	DEEPHAVEN	55331	1	
1204	1204	00488211	WEL	A	W000	3011722220023	MCKINNEY, JILL	18995EASTWOOD DR	DEEPHAVEN	55331	1	
1205	1205	00447091	WEL	A	W000	3011722220009	REISTER, MYRON	18955EASTWOOD DR	DEEPHAVEN	55331	1	
1206	1206	00204472	WEL	A	W000	2911722120024	MURPHY	4616OXFORD PL	MINNETONKA	55345	1	

Appendix D
 Minnetonka Wellhead Protection Plan
 Potential Contaminant Source Inventory



MapID	PCSI_ID	PROGRAM_ID	PCS_C	STATUS_C	MAT_C	PIN	FAC_NAME	ADDRESS	CITY	ZIP5_CODE	TOTAL	Comment
1207	1207	00204474	WEL	A	W000	2011722440024	FRITZ OERTEL	16151HIGHWOOD DR	MINNETONKA	55345	1	
1208	1208	00477412	WEL	A	W000	2511723120004	GARNER, RAYMOND	19605COTTAGEWOOD RD	DEEPHAVEN	55331	1	
1209	1209	00510602	WEL	A	W000	3011722220010	STOOL, MARK	19055EASTWOOD DR	DEEPHAVEN	55331	1	
1210	1210	00204524	WEL	A	W000	2111722440035	BERG, EMIL	4525WILLISTON RD	MINNETONKA	55345	1	
1211	1211	00205084	WEL	A	W000	3011722120001		4575SPARROW RD	MINNETONKA	55345	1	
1212	1212	00426522	WEL	A	W000	2511723120024	STOLTZ, DONNIE	19755COTTAGEWOOD RD	DEEPHAVEN	55331	1	
1213	1213	00241022	WEL	A	W000	2511723110035	TOWEY, EDWARD	4635MAPLE HILL DR	DEEPHAVEN	55331	1	
1214	1214	00573565	WEL	A	W000	2511722110011	WILLIAMS, MARGARET	19550MANOR RD	DEEPHAVEN	55331	1	
1215	1215	00586499	WEL	A	W000	2511723120020	ANDERSON, MARK	19725COTTAGEWOOD RD	DEEPHAVEN	55331	1	
1216	1216	00205012	WEL	A	W000	2811722110060	KROLL	14504MOONLIGHT HILL R	MINNETONKA	55345	1	
1217	1217	00205014	WEL	A	W000	2811722110059	KROLL	14512MOONLIGHT HILL R	MINNETONKA	55345	1	
1218	1218	00205013	WEL	A	W000	2811722110058	KROLL	14520MOONLIGHT HILL R	MINNETONKA	55345	1	
1219	1219	00420467	WEL	A	W000	3011722220027		4660SPRING CREEK DR	DEEPHAVEN	55331	1	
1220	1220	00272646	WEL	A	W000	2811722110057	WHELAN, MEL	14528MOONLIGHT HILL R	MINNETONKA	55345	1	
1221	1221	00242896	WEL	A	W000	2811722110063	KROLL	14400MOONLIGHT HILL R	MINNETONKA	55345	1	
1222	1222	00205073	WEL	A	W000	2911722119003	FERGASTAD	0		55343	1	
1223	1223	00419409	WEL	A	W000	2511723110043	BURKHOLDER, PAUL	19435COTTAGEWOOD RD	DEEPHAVEN	55331	1	
1224	1224	00241021	WEL	A	W000	2511723110036		4645MAPLE HILL DR	DEEPHAVEN	55331	1	
1225	1225	W0020048	WEL	U	W000	2511723110043		19435COTTAGEWOOD RD	DEEPHAVEN	55331	1	
1226	1226	W0020047	WEL	U	W000	2511723110029		4640MAPLE HILL DR	DEEPHAVEN	55331	1	
1227	1227	00242418	WEL	A	W000	3011722220012	JORGENSON, JACK	4645SPRING CREEK DR	DEEPHAVEN	55331	1	
1228	1228	00205010	WEL	A	W000	2811722110052	KROLL	14417MOONLIGHT HILL R	MINNETONKA	55345	1	
1229	1229	00205015	WEL	A	W000	2811722110055	KROLL	14521MOONLIGHT HILL R	MINNETONKA	55345	1	
1230	1230	00137374	WEL	A	W000	2511723110012	HENKE, GERALD S.	19585MANOR RD	DEEPHAVEN	55331	1	
1231	1231	00205011	WEL	A	W000	2811722110050	KROLL	14401MOONLIGHT HILL R	MINNETONKA	55345	1	
1232	1232	00205029	WEL	A	W000	2811722210010	OLSEN, MAURICE	4620HIGHLAND RD	MINNETONKA	55345	1	
1233	1233	00434251	WEL	A	W000	2511723120006	BELL, ED	19615MANOR RD	DEEPHAVEN	55331	1	
1234	1234	00180204	WEL	A	W000	2511723120034	KASK, KEITH	19750MANOR RD	DEEPHAVEN	55331	1	
1235	1235	00204596	WEL	A	W000	2711722210009	MANNING	4639ELLERDALE RD	MINNETONKA	55345	1	
1236	1236	00159646	WEL	A	W000	2511723110042	REDMOND, MIKE	4660MAPLE HILL DR	DEEPHAVEN	55331	1	
1237	1237	00677886	WEL	A	W000	2511723110012	FAUST, ERIC	19585MANOR RD	DEEPHAVEN	55331	1	
1238	1238	00204597	WEL	A	W000	2711722210016	ROUZER, L. G.	4640MOUNTHALL TER	MINNETONKA	55345	1	
1239	1239	00204582	WEL	A	W000	2611722220006	SANDON, ROY F.	12425PIONEER RD	MINNETONKA	55343	1	
1240	1240	00481895	WEL	A	W000	2511723120037	MARTINEZ	19655MANOR RD	DEEPHAVEN	55331	1	
1241	1241	00205018	WEL	A	W000	2811722120009	BASSET, ROSS	15000HIGHLAND LA	MINNETONKA	55345	1	
1242	1242	00165574	WEL	A	W000	2511723110037	CONROY, RICHARD	4685MAPLE HILL DR	DEEPHAVEN	55331	1	
1243	1243	00481894	WEL	A	W000	2511723120036	CAMERON,	19645MANOR RD	DEEPHAVEN	55331	1	
1244	1244	00250111	WEL	U	W000	2811722110003	4639 WILLISTON RD.	14715HIGH TOWER	MINNETONKA	55345	1	
1245	1245	00205083	WEL	A	W000	3011722120026	LOFGREN & SONS	18103PRIORY LA	MINNETONKA	55345	1	
1246	1246	00204583	WEL	A	W000	2611722220009	MARK Z. JONES CO.	4725VALLEY RD	MINNETONKA	55343	1	
1247	1247	00205650	WEL	A	W000	2511723110004	GRAYDEN, EDWARD	4693VINE HILL RD	DEEPHAVEN	55331	1	
1248	1248	00505034	WEL	A	W000	2511723210036		19900MANOR RD	DEEPHAVEN	55331	1	
1249	1249	00205017	WEL	A	W000	2811722120017	MCLOUTH, BRUCE F.	14816HIGHLAND LA	MINNETONKA	55345	1	
1250	1250	00149764	WEL	A	W000	2511723110039	FASTER	4717MAPLE HILL DR	DEEPHAVEN	55331	1	
1251	1251	00400840	WEL	A	W000	2811722210049		4701HIGHLAND RD	MINNETONKA	55345	1	
1252	1252	00458118	WEL	A	W000	2511723210036	WOODHEAD, JOHN	19900MANOR RD	DEEPHAVEN	55331	1	
1253	1253	00205019	WEL	A	W000	2811722120038	LOFGREN, WM.	4706SEMRUD CIR	MINNETONKA	55345	1	
1254	1254	00205093	WEL	A	W000	3011722210010		4709EASTWOOD CIR	MINNETONKA	55345	1	
1255	1255	00758206	WEL	A	W000	2511723120032	OWENS, HOWELL	19705MANOR RD	DEEPHAVEN	55331	1	
1256	1256	00204584	WEL	A	W000	2611722220034	MILLER	4737MERILEE DR	MINNETONKA	55343	1	
1257	1257	00435419	WEL	A	W000	3011722220031	BOLIN	4727SPRING CREEK DR	DEEPHAVEN	55331	1	
1258	1258	00551832	WEL	A	W000	2511723110016	JOHNSON, JULIE	4748VINE HILL RD	DEEPHAVEN	55331	1	
1259	1259	00180222	WEL	A	W000	2511723110033	BEUSGENS, BOB	4760MAPLE CHASE	DEEPHAVEN	55331	1	
1260	1260	00477424	WEL	A	W000	2511723110045	STEPHAN, SCOTT	19150WILLOW HAVEN	DEEPHAVEN	55331	1	
1261	1261	00696485	WEL	A	W000	2511723120038		19845MANOR RD	DEEPHAVEN	55331	1	
1262	1262	00205020	WEL	A	W000	2811722120033		14952WILLISTON LA	MINNETONKA	55345	1	
1263	1263	00168976	WEL	A	W000	2511723110015	MILLARD, RUTH	4760VINE HILL RD	DEEPHAVEN	55331	1	
1264	1264	00168982	WEL	A	W000	2511723110015	MILLARD, RUTH	4760VINE HILL RD	DEEPHAVEN	55331	1	
1265	1265	00205095	WEL	A	W000	3011722210028	OSTROM, C.	4731TIMBER RIDGE PL	MINNETONKA	55345	1	
1266	1266	00205031	WEL	A	W000	2811722220008	KALKES, J. W.	4717FAIRHILLS RD E	MINNETONKA	55345	1	
1267	1267	00205094	WEL	A	W000	3011722210025	OSTROM, C.	18700WOOLMAN DR	MINNETONKA	55345	1	
1268	1268	00435431	WEL	A	W000	2511723110048		19450WILLOW HAVEN	DEEPHAVEN	55331	1	
1269	1269	00204581	WEL	A	W000	2611722210018	ALASBIR	4754WINTERSET DR	MINNETONKA	55343	1	
1270	1270	00415484	WEL	A	W000	2511723110046	NEAL, WAYNE	19250WILLOW HAVEN	DEEPHAVEN	55331	1	
1271	1271	00505021	WEL	A	W000	2811722210030		34ADDRESS UNASSIGNED	MINNETONKA	55343	1	
1272	1272	00247996	WEL	A	W000	3011722210029		4730TIMBER RIDGE PL	MINNETONKA	55345	1	
1273	1273	00205097	WEL	A	W000	3011722210030	ROELOFS, C.	4720TIMBER RIDGE PL	MINNETONKA	55345	1	
1274	1274	00420465	WEL	A	W000	3011722220032	WEBSTER, SKIP	4735SPRING CREEK DR	DEEPHAVEN	55331	1	
1275	1275	00688993	WEL	A	W000	2511723210001		19915MANOR RD	DEEPHAVEN	55331	1	

Appendix D
 Minnetonka Wellhead Protection Plan
 Potential Contaminant Source Inventory



MapID	PCSI_ID	PROGRAM_ID	PCS_C	STATUS_C	MAT_C	PIN	FAC_NAME	ADDRESS	CITY	ZIP5_CODE	TOTAL	Comment
1552	1552	00205152	WEL	A	W000	3311722410008	BOISE, DWIGHT	5916EDEN PRAIRIE RD	MINNETONKA	55345	1	
1553	1553	00205166	WEL	A	W000	3511722410008	ELONET & SIDLA INC.	11462OLD BREN RD	MINNETONKA	55343	1	
1554	1554	00114305	WEL	A	W000	3411722430005	CULLIGAN	6030CULLIGAN WAY	MINNETONKA	55345	1	
1555	1555	00203136	WEL	A	W000	0211622420003	HOLASEK, ALVIN	6400ROWLAND RD	EDEN PRAIRIE	55344	1	
1556	1556	00810251	WEL	A	W000	0211622230007	HAUG, JESSE	6521BEACH RD	EDEN PRAIRIE	55344	1	
1557	1557	00426524	WEL	A	W000	0211622230008	BAUER, MICHAEL	6541BEACH RD	EDEN PRAIRIE	55344	1	
1558	1558	00127332	WEL	A	W000	0211622230009		6561BEACH RD	EDEN PRAIRIE	55344	1	
1559	1559	00420518	WEL	A	W000	0211622230010		6581BEACH RD	EDEN PRAIRIE	55344	1	



Minnesota Department of Health

Environmental Health in Minnesota

MDH Public Water Supply Sources Report

PWSID: **1270031**
PWS Name: **Minnetonka**
PWS Type: **Community**
PWS Status: **Active**

Public Water Supply Sources: Information from MNDWIS and CWI (sorted by Sample Point ID)

Source Type Codes: **GW** = Ground water; **SW** = Surface water; **GUI** = Ground water under influence

Location Source: **MGS** = digitized by the MN Geological Survey; * indicates incomplete records

MNDWIS PWS SOURCES IN FLOW														
Source Info					MNDWIS Data					CWI Data				
Sample Point ID	Name	Type	Availability	Status	Well No. (link to Well Log (s))	Location Info (link to Map)	Drill Year	Depth (in feet)	Case Depth (in feet)	Case Diam. (in inches)	Drill Date	Depth Completed (in feet)	Case Depth (in feet)	Case Diam. (in inches)
S01	Well #3	GW	Primary	Active	204470	10/19/1999 (T. Bovee)	1963	465	393	16	10-02-1963	465.00	393.00	16.00
S02	Well #6	GW	Primary	Active	204054	10/19/1999 (T. Bovee)	1967	488	394	16	06-00-1967	488.00	394.00	16.00
S03	Well #6A	GW	Primary	Active	208012	10/19/1999 (T. Bovee)	1967	486	397	24	07-00-1967	486.00	397.00	12.00
S04	Well #10	GW	Primary	Active	204140	10/19/1999 (T. Bovee)	1969	505	305	16	10-08-1969	505.00	305.00	16.00
S05	Well #11	GW	Primary	Active	208014	10/20/1999 (T. Bovee)	1970	498	282	16	00-00-1970	498.00	282.00	16.00
S06	Well #12	GW	Primary	Active	203717	10/19/1999 (T. Bovee)	1971	535	332	16	06-02-1971	535.00	332.00	16.00
S07	Well #13	GW	Primary	Active	205165	07/09/2002 (S. Robertson)	1972	475	292	16	04-04-1972	475.00	292.00	16.00
S08	Well #14	GW	Primary	Active	204537	10/20/1999 (T. Bovee)	1972	555	367	16	07-31-1972	555.00	367.00	16.00
S09	Well #15	GW	Primary	Active	208016	10/19/1999 (T. Bovee)	1974	450	235	16	02-25-1974	450.00	235.00	16.00
S10	Well #13A	GW	Primary	Active	132263	10/20/1999 (T. Bovee)	1978	464	274	16	06-05-1978	464.00	274.00	16.00
S11	Well #14A	GW	Primary	Active	160021	10/20/1999 (T. Bovee)	1978	575	395	16	05-24-1978	575.00	395.00	16.00
S12	Well #15A	GW	Primary	Active	150351	10/19/1999 (T. Bovee)	1978	444	238	16	04-14-1978	444.00	238.00	16.00
S13	Well #3A	GW	Primary	Active	171021	10/19/1999 (T. Bovee)	1981	468	254	16	03-00-1981	468.00	254.00	16.00
S14	Well #10A	GW	Primary	Active	150356	10/19/1999 (T. Bovee)	1981	486	302	16	03-10-1981	486.00	302.00	16.00
S15	Well #12A	GW	Primary	Active	191939	10/19/1999 (T. Bovee)	1985	506	340	18	03-14-1985	506.00	340.00	18.00
S16	Well #11A	GW	Primary	Active	439797	10/20/1999 (T. Bovee)	1988	492	291	16	11-08-1988	492.00	291.00	18.00
S17	Well #16A	GW	Primary	Active	661401	11/22/2004 (S. Robertson)	2001	530	322	18	12-10-2001	530.00	322.00	18.00

S18	Well #16B	GW	Primary	Active	661402	11/18/2004 (S. Robertson)	2002	519	303	18	09-20-2002	519.00	303.00	18.00
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MNDWIS and CWI data value discrepancies in preceding tables are shown in **RED** (0 or null values excepted).

Old Municipal Wells

The following tables show information on wells whose existence (or previous existence) has not yet been confirmed.

OLD MUNICIPAL Well Data													
Well Search Reference	Name(s)	Unique Well Number	Drilled Depth (ft.)	Completed Depth (ft.)	Depth Cased (ft.)	Casing Diameter (in.)	Year Constructed	Construction Type	Year Out of Service	Sealing Record?	Year Sealed	Location Info	Comments
A	Well No. 1; Forest Hills Addn Community Well No. 1	208011	513.0	513.0	420.0	6.0	Before 1963	Cable Tool/Bored				Lots A & B, Forest Hills Addn. Ellerdale Rd.	Ref.: 1963 MDH San. Rpt. 8" x 6" csg.
B	Well No. 2; H92937	208010	619.0	619.0	545.0	10.0	1962	Cable Tool/Bored		Y	1982	Outlot 1, Forest Hills Addn. 4650 Ellerdale Rd.	Ref.: 1963 MDH San. Rpt. 16" x 10" csg. H92937.
D	Well No. 4	205082	530.0	530.0	346.0	10.0	1957	Cable Tool/Bored				117-22-29 DAAAAA. Holiday & Woodland Rd.	Ref.: 1969 MDH San. Rpt. Fmr. Woodland Hills Addn. well.
E	Well No. 5; Woodland Hills Well No. 2	205133	581.0	581.0	338.0	10.0	1956	Cable Tool/Bored				CR 3 & Holiday Rd.	Ref.: 1969 & 1973 MDH San. Rpt. 12" to 244'.
H	Well No. 8	208013	564.0	564.0	378.0	6.0	Before 1958	Cable Tool/Bored				4230 Duke Dr., Lot 2 Blk 1, Royal Hills Addn.	Ref.: 1958 & 1973 MDH San. Rpt. Fmr. Royal Hills Addn. well. 8" csg. to 170'.
I	Well No. 9	204008	395.0	395.0	312.0	10.0	1968	Cable Tool/Bored				2002 Indian Rd. W.	Ref.:
K	Village of Minnetonka Well	204139	164.0	164.0	157.0	4.0	1957	Cable Tool/Bored				117-22-16 ACDDCA	Ref.: CWI. Small diam. well for city. Is this actually a city well?
Databases Searched					Remarks								
County Well Index (1-mile radius); MDH DWP Microfiche; MDH 1988-2002 Muni Well Inventory (1Suite); Lakesnwoods.com; Biennial Report of the MN State Dairy and Food Commissioner-1907; Minnesota Geological Survey City Well File Folders; MGS Bulletin (22, 27, 31, or 32); MN Historical Society-Collections Online and/or Minnesota Reflections online; MNBrew.com or oldbreweries.com; MDH DWP MNDWIS; Past and Present MN Railroad Stations; MDH WELLS					This Unverified Municipal Well Inventory is as complete and thorough as possible, given available documentation. However, MDH Planners and Hydrologists, as well as City representatives, should feel free to add or subtract from this report as necessary. In 1898, the Minneapolis & St. Louis Railway station was reportedly on the south side of the mill pond which was on Minnehaha Ck. This was in the Minnetonka Mill Company Subdivision. According to resources found, it is unclear whether or not there was Great Northern Railway station in the town. It is possible that wells were associated with the RR stations. According to available references, there were no breweries in the town. There were no reported creameries in Minnetonka, in 1907. No pertinent historical photos were found on the Minnesota Historical Society's Collections Online. There was no reference to the town's history on Lakesnwoods.com. The 1944 MGS Bulletin 31 had no mention of City of Minnetonka wells. MGS City Well files stated that there were no inter-connections between the city supply and private wells. One pertinent well sealing record (Well No. 2) was found in the MDH WELLS database. It appears that Wells 1, 3, 4, 5, 8, & 9 need to be sealed appropriately.								
Old Municipal Well Data Compiled By: Geoffery Nash Compiled Date: 5/21/2014 11:39:53 AM													

OLD MUNICIPAL Well Data - the following data are from RAW HYDRO spreadsheets, and need to be processed accordingly.													
Well Search Reference	Name(s)	Unique Well Number	Drilled Depth (ft.)	Completed Depth (ft.)	Depth Cased (ft.)	Casing Diameter (in.)	Year Constructed	Construction Type	Year Out of Service	Sealing Record?	Year Sealed	Location Info	Comments
1	Well Number (No.)1 [Formerly Well No. 1 of the Forest Hills Addition]	208011	513 feet		0-420 feet	8 inch	Circa 1955	Drilled	1973: Abandoned and Sealed			*On Lots A and B of Forest Hills Addition	

2	Well No. 2	208010	619 feet		0-545 feet	16 inch	1962	Drilled	1982: Abandoned and Sealed			*Outlot 1 of the Forest Hills 3rd Addition *4650 Elerdale Road
4	Well No. 4 [Formerly Well No. 1 of the Woodlawn Hills Addition]	205082	530 feet		0-347 feet	12 inch	1956	Drilled	1979: Abandoned			*Holiday and Woodland Road
5	Well No. 5 [Formerly Well No. 2 of the Woodlawn Hills Addition]	205133	581 feet		0-320 feet	12 inch	1957	Drilled	1975: Abandoned and Sealed			* County Road 3 and Holiday Road
8	Well No. 9	204008	395 feet		0-316 feet	12 inch	1968	Drilled	1979: Abandoned and Sealed			*2002 Indian Road West
9	Well No. 8 [Formerly a well for the Royal Hills Addition]	208013	564 feet		0-378 feet	8 inch	1958?	Drilled	1973: Abandoned and Sealed			* Woodhill and Lake Street Extension *4230 Duke Drive *Lot 2, Block 1 of Royal Hills Addition
Databases Searched					Remarks							
Old Municipal Well Data Compiled By: Steve Robertson Compiled Date: 4/15/2005												

Source: MN Dep't. of Health - 6/14/2016

Restart

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
 POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270031	COMMUNITY
NAME	Minnetonka	
ADDRESS	Minnetonka Water Superintendent, 11522 Minnetonka Boulevard, Minnetonka, MN 55305	

FACILITY (WELL) INFORMATION

NAME	Well #16B	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? <input type="checkbox"/> YES (Please attach a copy) <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED
FACILITY ID	S18	
UNIQUE WELL NO.	661402	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270031 S18	UNIQUE WELL NO.	661402
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well ² (Class V well - illegal ³)	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well) ²	50/300/150 ⁴	50/300/150 ⁴	100/600/300 ⁴	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal) ²	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal) ²	illegal	illegal		N		

PWS ID / FACILITY ID	1270031 S18	UNIQUE WELL NO.	661402
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		N		
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		N		
SWI	Storm water drainage well ² (Class V well - illegal ³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		Y	150	N
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well) ²	illegal ³	illegal ³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50 ⁵	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		

Additional Sources (If there is more than one source listed above, please indicate here).

Potential Contamination Sources and Codes Based on Previous Versions of this Form

	none found within 200' of this well.						
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* New potential contaminant source.

¹ A sensitive well has less than 50 feet of watertight casing, and which is not cased below a confining layer or confining materials of at least 10' in thickness.

² These sources, known as Class V underground injection wells, are regulated by the federal U.S. Environmental Protection Agency.

³ These sources are classified as illegal by Minnesota Rules, Chapter 4725.

⁴ Isolation distance is determined by average flow per day or if a facility handles infectious or pathological wastes.

⁵ A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

This form is based on the new isolation distances in Minnesota Rules, Chapter 4725, related to wells and borings adopted August 4, 2008, and Minnesota Rules, Chapter 4720, related to wellhead protection.

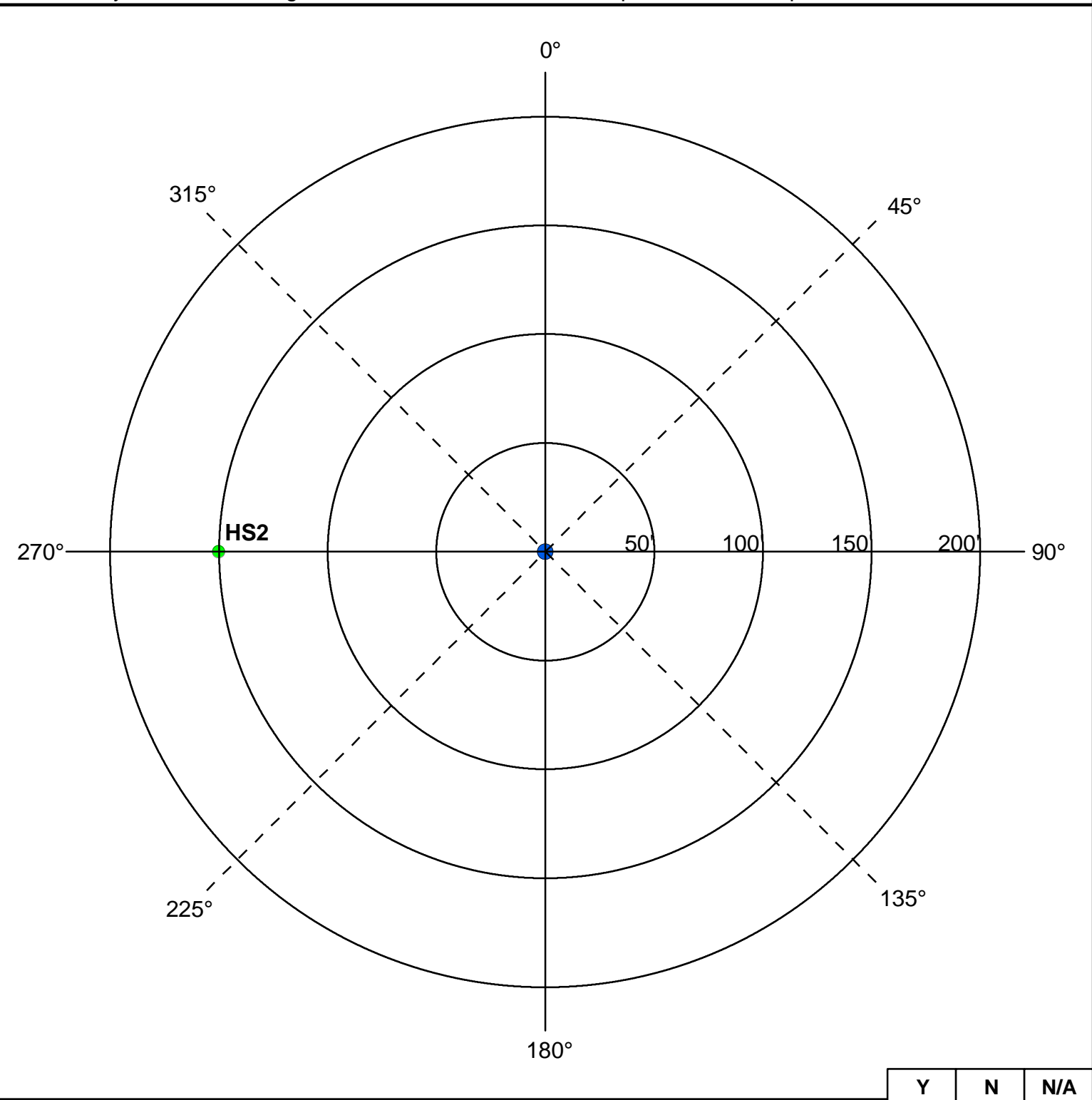
PWS ID / FACILITY ID 1270031 S18

UNIQUE WELL NO. 661402

SETBACK DISTANCES

All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



	Y	N	N/A
Were the isolation distances maintained for the new sources of contamination?			
Is the system monitoring existing nonconforming sources of contamination?			

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR Neiman, Dave

DATE 6 - 21 - 2016

RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

HS2= 150 gal. Firefighting foam.

For further information, please contact:

**Minnesota Department of Health
 Drinking Water Protection Section
 Source Water Protection Unit
 P.O. Box 64975
 St. Paul, Minnesota 55164-0975**

**Section Receptionist: 651-201-4700
 Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000**

**INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
 POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT**

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270031	COMMUNITY
NAME	Minnetonka	
ADDRESS	Minnetonka Water Superintendent, 11522 Minnetonka Boulevard, Minnetonka, MN 55305	

FACILITY (WELL) INFORMATION

NAME	Well #16A	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? <input type="checkbox"/> YES (Please attach a copy) <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED
FACILITY ID	S17	
UNIQUE WELL NO.	661401	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270031 S17	UNIQUE WELL NO.	661401
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)			LOCATION		
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well ² (Class V well - illegal ³)	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well) ²	50/300/150 ⁴	50/300/150 ⁴	100/600/300 ⁴	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal) ²	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal) ²	illegal	illegal		N		

PWS ID / FACILITY ID	1270031 S17	UNIQUE WELL NO.	661401
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		N		
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		N		
SWI	Storm water drainage well ² (Class V well - illegal ³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well) ²	illegal ³	illegal ³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50 ⁵	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		

Additional Sources (If there is more than one source listed above, please indicate here).

Potential Contamination Sources and Codes Based on Previous Versions of this Form

none found within 200' of this well.							
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* New potential contaminant source.

¹ A sensitive well has less than 50 feet of watertight casing, and which is not cased below a confining layer or confining materials of at least 10' in thickness.

² These sources, known as Class V underground injection wells, are regulated by the federal U.S. Environmental Protection Agency.

³ These sources are classified as illegal by Minnesota Rules, Chapter 4725.

⁴ Isolation distance is determined by average flow per day or if a facility handles infectious or pathological wastes.

⁵ A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

This form is based on the new isolation distances in Minnesota Rules, Chapter 4725, related to wells and borings adopted August 4, 2008, and Minnesota Rules, Chapter 4720, related to wellhead protection.

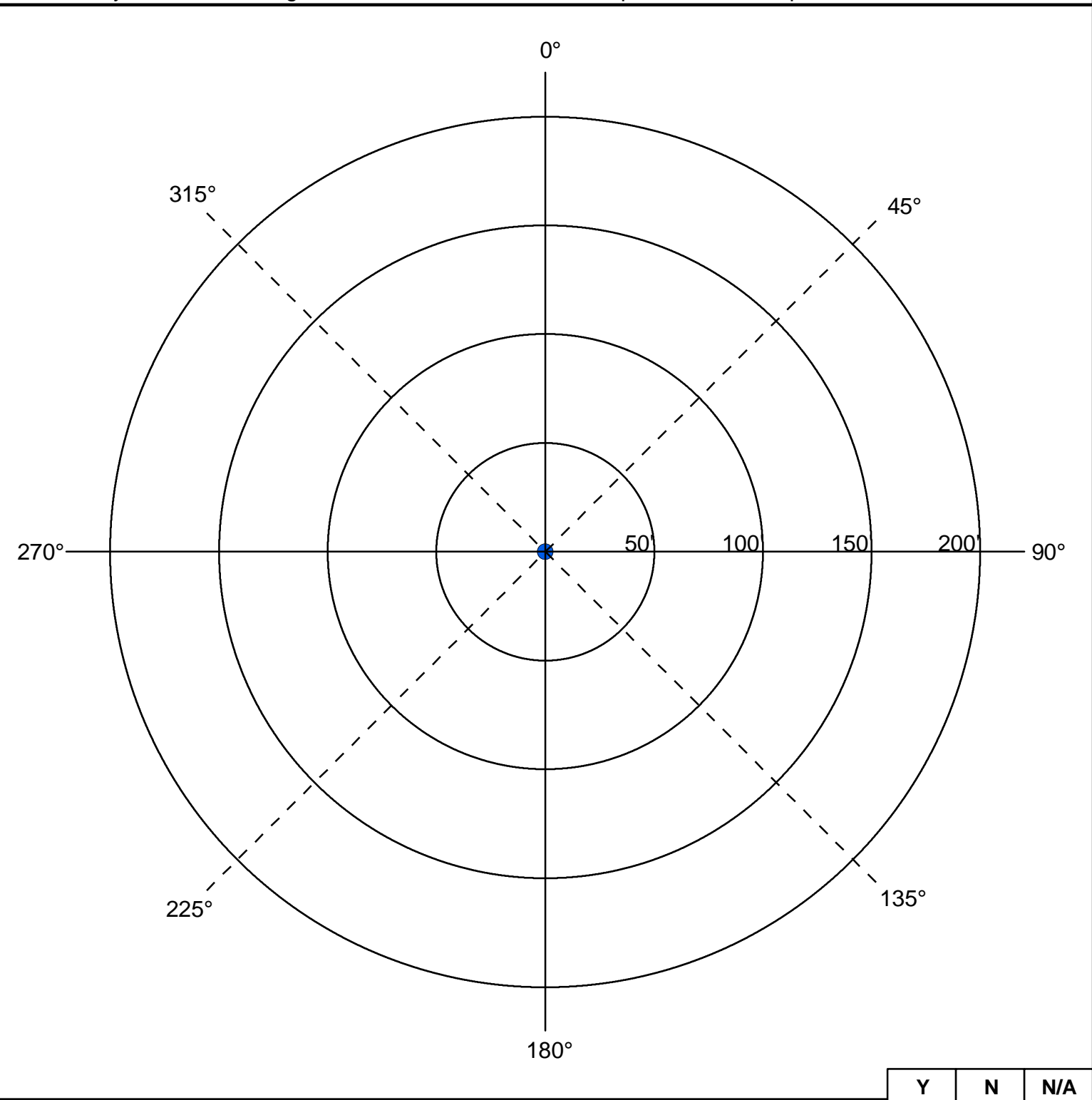
PWS ID / FACILITY ID 1270031 S17

UNIQUE WELL NO. 661401

SETBACK DISTANCES

All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



Y	N	N/A

Were the isolation distances maintained for the new sources of contamination?

Is the system monitoring existing nonconforming sources of contamination?

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR Neiman, Dave

DATE 6 - 21 - 2016

RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

For further information, please contact:

**Minnesota Department of Health
 Drinking Water Protection Section
 Source Water Protection Unit
 P.O. Box 64975
 St. Paul, Minnesota 55164-0975**

**Section Receptionist: 651-201-4700
 Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000**

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
 POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270031	COMMUNITY
NAME	Minnetonka	
ADDRESS	Minnetonka Water Superintendent, 11522 Minnetonka Boulevard, Minnetonka, MN 55305	

FACILITY (WELL) INFORMATION

NAME	Well #15A	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? <input type="checkbox"/> YES (Please attach a copy) <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED
FACILITY ID	S12	
UNIQUE WELL NO.	150351	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270031 S12	UNIQUE WELL NO.	150351
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)			LOCATION		
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well ² (Class V well - illegal ³)	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well) ²	50/300/150 ⁴	50/300/150 ⁴	100/600/300 ⁴	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal) ²	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal) ²	illegal	illegal		N		

PWS ID / FACILITY ID	1270031	S12	UNIQUE WELL NO.	150351
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	50	N
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	100	N
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	40	N
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	75	N
SWI	Storm water drainage well ² (Class V well - illegal ³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well) ²	illegal ³	illegal ³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50 ⁵	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		

Additional Sources (If there is more than one source listed above, please indicate here).

Potential Contamination Sources and Codes Based on Previous Versions of this Form

WAT	Stream, river, pond, lake, wetland	50	50		Y	100	N
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* New potential contaminant source.

¹ A sensitive well has less than 50 feet of watertight casing, and which is not cased below a confining layer or confining materials of at least 10' in thickness.

² These sources, known as Class V underground injection wells, are regulated by the federal U.S. Environmental Protection Agency.

³ These sources are classified as illegal by Minnesota Rules, Chapter 4725.

⁴ Isolation distance is determined by average flow per day or if a facility handles infectious or pathological wastes.

⁵ A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

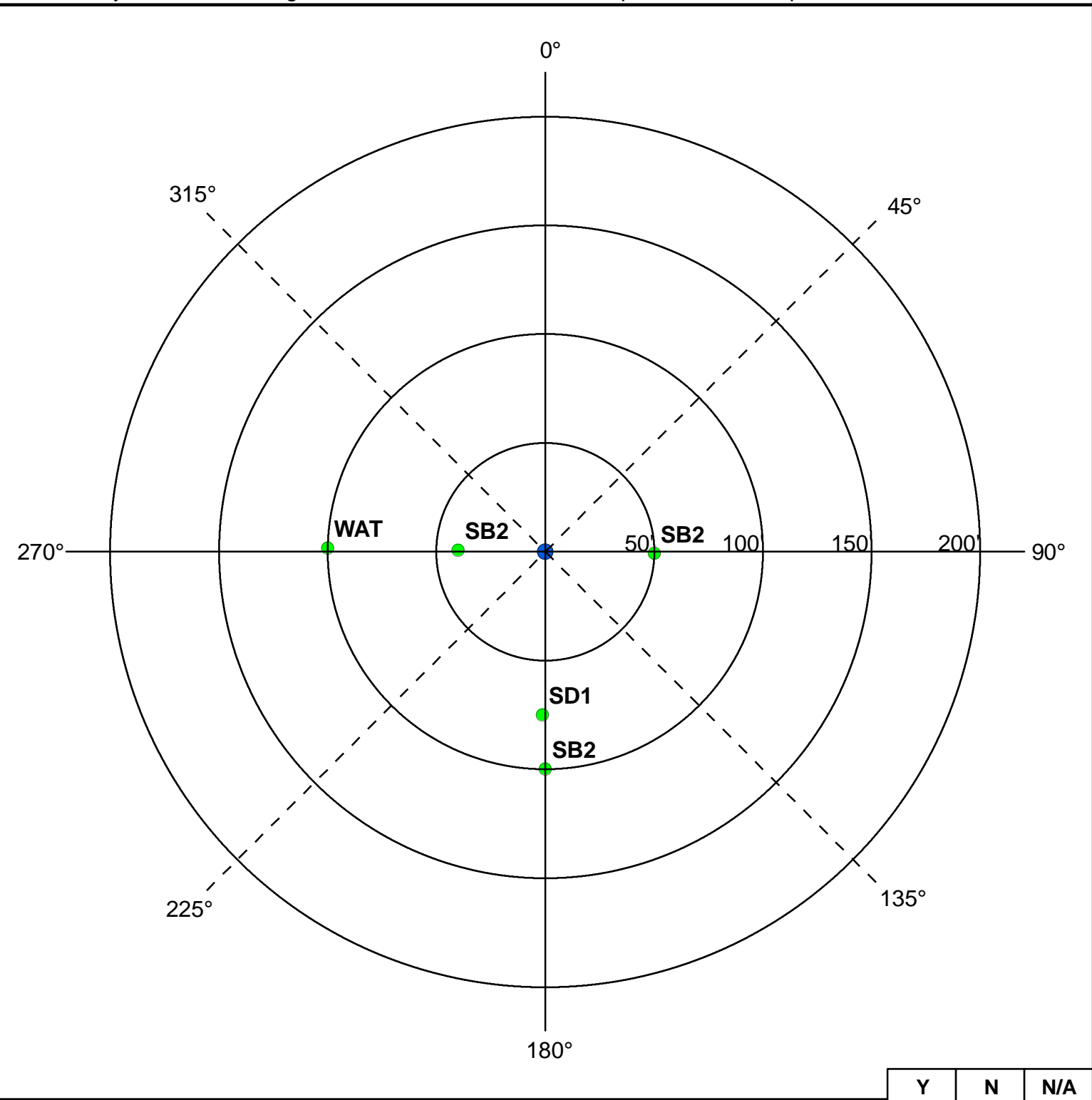
This form is based on the new isolation distances in Minnesota Rules, Chapter 4725, related to wells and borings adopted August 4, 2008, and Minnesota Rules, Chapter 4720, related to wellhead protection.

PWS ID / FACILITY ID 1270031 S12

UNIQUE WELL NO. 150351

SETBACK DISTANCES All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



	Y	N	N/A
Were the isolation distances maintained for the new sources of contamination?			
Is the system monitoring existing nonconforming sources of contamination?			

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR Neiman, Dave DATE 6 - 21 - 2016

RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

9/7/2003 - Location for PCSI Type SBP (bearing = 0, distance = 0 , inventory date: 5/4/1999) could not be determined.
 9/7/2003 - Location for PCSI Type SBM (bearing = 0, distance = 0 , inventory date: 5/4/1999) could not be determined.

For further information, please contact:

**Minnesota Department of Health
 Drinking Water Protection Section
 Source Water Protection Unit
 P.O. Box 64975
 St. Paul, Minnesota 55164-0975**

**Section Receptionist: 651-201-4700
 Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000**

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
 POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270031	COMMUNITY
NAME	Minnetonka	
ADDRESS	Minnetonka Water Superintendent, 11522 Minnetonka Boulevard, Minnetonka, MN 55305	

FACILITY (WELL) INFORMATION

NAME	Well #15	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? <input type="checkbox"/> YES (Please attach a copy) <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED
FACILITY ID	S09	
UNIQUE WELL NO.	208016	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270031 S09	UNIQUE WELL NO.	208016
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)			LOCATION		
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well ² (Class V well - illegal ³)	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well) ²	50/300/150 ⁴	50/300/150 ⁴	100/600/300 ⁴	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal) ²	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal) ²	illegal	illegal		N		

PWS ID / FACILITY ID	1270031 S09	UNIQUE WELL NO.	208016
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	75	N
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	160	N
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	75	N
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	60	N
SWI	Storm water drainage well ² (Class V well - illegal ³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well) ²	illegal ³	illegal ³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50 ⁵	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		

Additional Sources (If there is more than one source listed above, please indicate here).

Potential Contamination Sources and Codes Based on Previous Versions of this Form

none found within 200' of this well.			
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* New potential contaminant source.

¹ A sensitive well has less than 50 feet of watertight casing, and which is not cased below a confining layer or confining materials of at least 10' in thickness.

² These sources, known as Class V underground injection wells, are regulated by the federal U.S. Environmental Protection Agency.

³ These sources are classified as illegal by Minnesota Rules, Chapter 4725.

⁴ Isolation distance is determined by average flow per day or if a facility handles infectious or pathological wastes.

⁵ A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

This form is based on the new isolation distances in Minnesota Rules, Chapter 4725, related to wells and borings adopted August 4, 2008, and Minnesota Rules, Chapter 4720, related to wellhead protection.

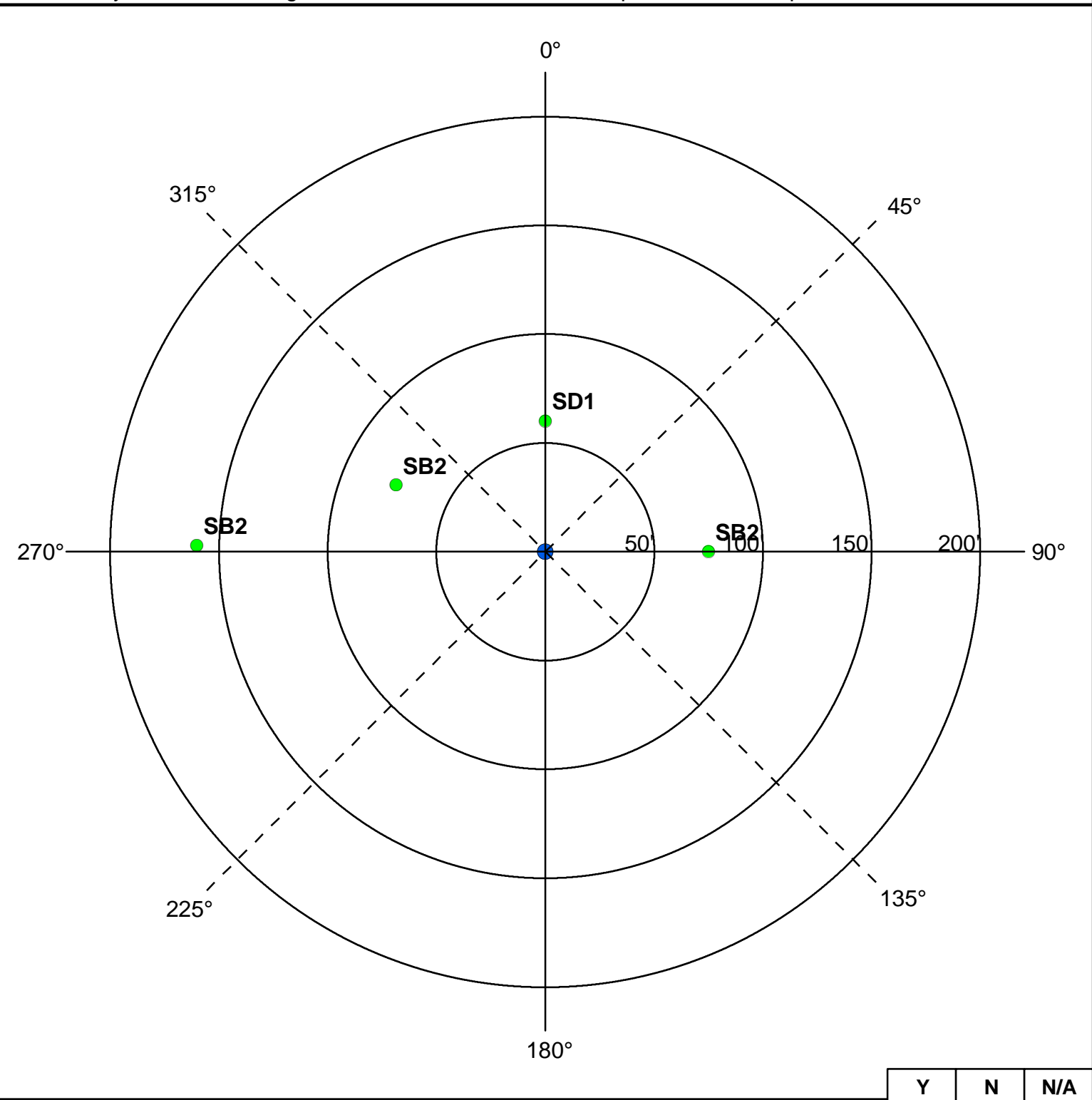
PWS ID / FACILITY ID 1270031 S09

UNIQUE WELL NO. 208016

SETBACK DISTANCES

All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



	Y	N	N/A
Were the isolation distances maintained for the new sources of contamination?			
Is the system monitoring existing nonconforming sources of contamination?			

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR Neiman, Dave

DATE 6 - 21 - 2016

RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

9/7/2003 - Location for PCSI Type OHW (bearing = 270, distance = 0 , inventory date: 5/4/1999) could not be determined.
 9/7/2003 - Location for PCSI Type SBP (bearing = 0, distance = 0 , inventory date: 5/4/1999) could not be determined.
 9/7/2003 - Location for PCSI Type GPR (bearing = 0, distance = 0 , inventory date: 5/4/1999) could not be determined.

For further information, please contact:

**Minnesota Department of Health
 Drinking Water Protection Section
 Source Water Protection Unit
 P.O. Box 64975
 St. Paul, Minnesota 55164-0975**

**Section Receptionist: 651-201-4700
 Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000**

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
 POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270031	COMMUNITY
NAME	Minnetonka	
ADDRESS	Minnetonka Water Superintendent, 11522 Minnetonka Boulevard, Minnetonka, MN 55305	

FACILITY (WELL) INFORMATION

NAME	Well #14A	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? <input type="checkbox"/> YES (Please attach a copy) <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED
FACILITY ID	S11	
UNIQUE WELL NO.	160021	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270031 S11	UNIQUE WELL NO.	160021
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)			LOCATION		
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well ² (Class V well - illegal ³)	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well) ²	50/300/150 ⁴	50/300/150 ⁴	100/600/300 ⁴	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal) ²	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal) ²	illegal	illegal		N		

PWS ID / FACILITY ID	1270031 S11	UNIQUE WELL NO.	160021
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		N		
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	175	N
SWI	Storm water drainage well ² (Class V well - illegal ³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		Y	150	N
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well) ²	illegal ³	illegal ³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50 ⁵	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		

Additional Sources (If there is more than one source listed above, please indicate here).

Potential Contamination Sources and Codes Based on Previous Versions of this Form

none found within 200' of this well.							
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* New potential contaminant source.

¹ A sensitive well has less than 50 feet of watertight casing, and which is not cased below a confining layer or confining materials of at least 10' in thickness.

² These sources, known as Class V underground injection wells, are regulated by the federal U.S. Environmental Protection Agency.

³ These sources are classified as illegal by Minnesota Rules, Chapter 4725.

⁴ Isolation distance is determined by average flow per day or if a facility handles infectious or pathological wastes.

⁵ A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

This form is based on the new isolation distances in Minnesota Rules, Chapter 4725, related to wells and borings adopted August 4, 2008, and Minnesota Rules, Chapter 4720, related to wellhead protection.

PWS ID / FACILITY ID

1270031 S11

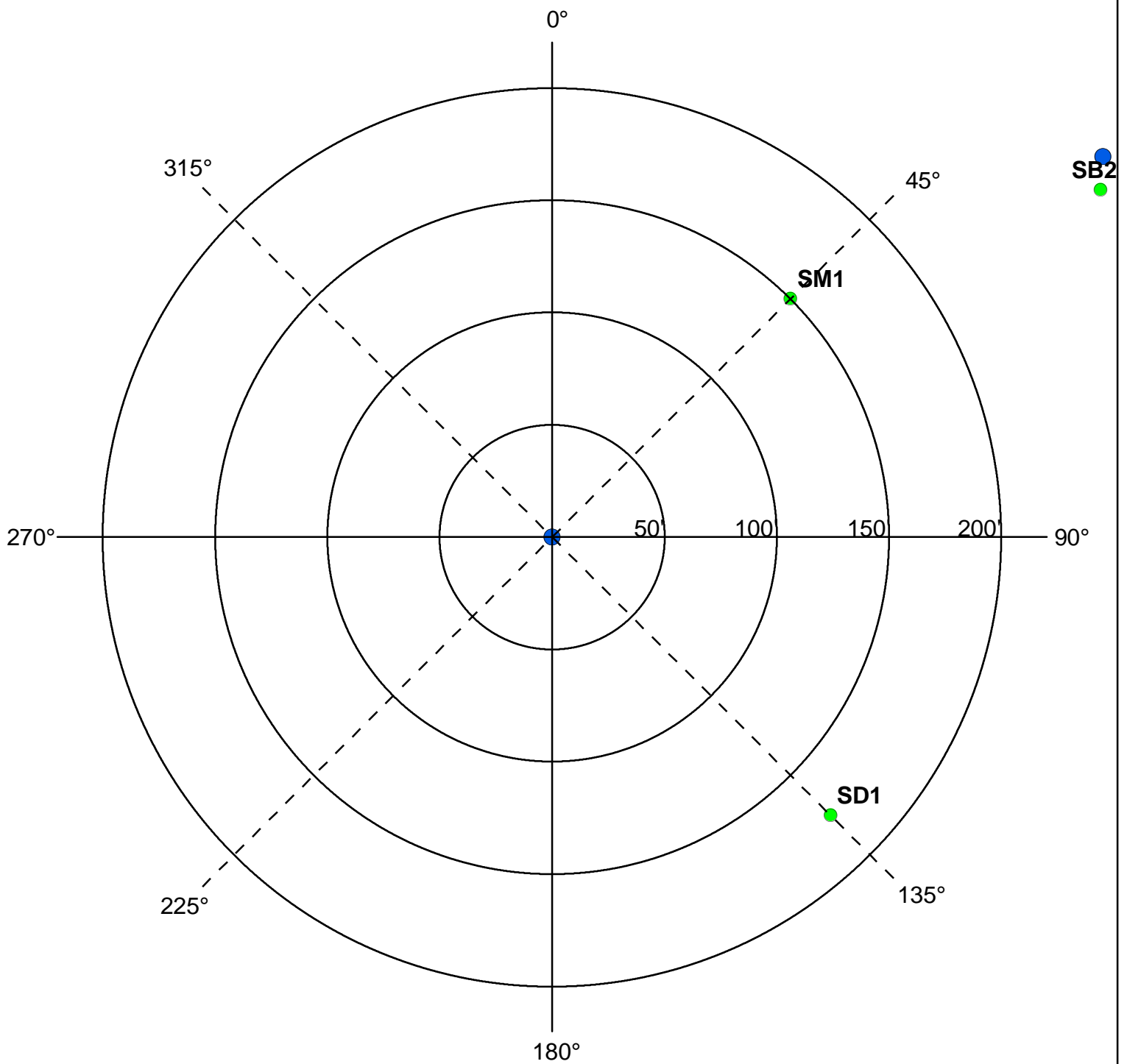
UNIQUE WELL NO.

160021

SETBACK DISTANCES

All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



	Y	N	N/A
Were the isolation distances maintained for the new sources of contamination?			
Is the system monitoring existing nonconforming sources of contamination?			

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR

Neiman, Dave

DATE

6 - 21 - 2016

RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

9/7/2003 - Location for PCSI Type PCH (bearing = 225, distance = 0 , inventory date: 5/4/1999) could not be determined.

For further information, please contact:

**Minnesota Department of Health
 Drinking Water Protection Section
 Source Water Protection Unit
 P.O. Box 64975
 St. Paul, Minnesota 55164-0975**

**Section Receptionist: 651-201-4700
 Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000**

**INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
 POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT**

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270031	COMMUNITY
NAME	Minnetonka	
ADDRESS	Minnetonka Water Superintendent, 11522 Minnetonka Boulevard, Minnetonka, MN 55305	

FACILITY (WELL) INFORMATION

NAME	Well #14	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? <input type="checkbox"/> YES (Please attach a copy) <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED
FACILITY ID	S08	
UNIQUE WELL NO.	204537	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270031 S08	UNIQUE WELL NO.	204537
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well ² (Class V well - illegal ³)	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well) ²	50/300/150 ⁴	50/300/150 ⁴	100/600/300 ⁴	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal) ²	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal) ²	illegal	illegal		N		

PWS ID / FACILITY ID	1270031	S08	UNIQUE WELL NO.	204537
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	15	N
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	105	N
SWI	Storm water drainage well ² (Class V well - illegal ³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		Y	153	N**
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well) ²	illegal ³	illegal ³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50 ⁵	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		

Additional Sources (If there is more than one source listed above, please indicate here).

Potential Contamination Sources and Codes Based on Previous Versions of this Form

none found within 200' of this well.							
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* New potential contaminant source.

** This number is the estimated distance that this potential source is from this well even though it was identified during an inventory for an adjacent well.

¹ A sensitive well has less than 50 feet of watertight casing, and which is not cased below a confining layer or confining materials of at least 10' in thickness.

² These sources, known as Class V underground injection wells, are regulated by the federal U.S. Environmental Protection Agency.

³ These sources are classified as illegal by Minnesota Rules, Chapter 4725.

⁴ Isolation distance is determined by average flow per day or if a facility handles infectious or pathological wastes.

⁵ A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

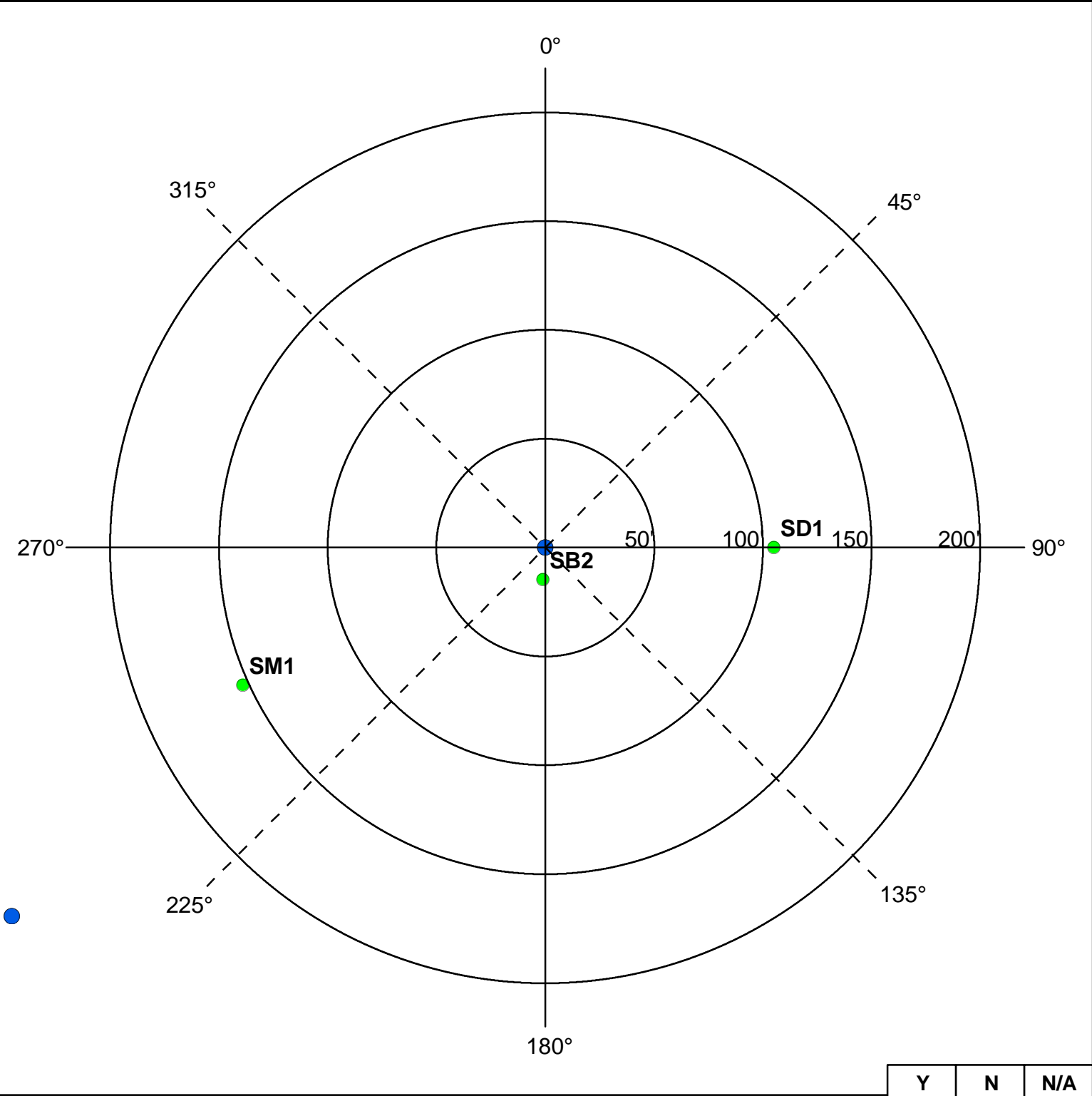
This form is based on the new isolation distances in Minnesota Rules, Chapter 4725, related to wells and borings adopted August 4, 2008, and Minnesota Rules, Chapter 4720, related to wellhead protection.

PWS ID / FACILITY ID 1270031 S08

UNIQUE WELL NO. 204537

SETBACK DISTANCES All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



	Y	N	N/A
Were the isolation distances maintained for the new sources of contamination?			
Is the system monitoring existing nonconforming sources of contamination?			

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR Neiman, Dave DATE 6 - 21 - 2016

RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

9/7/2003 - Location for PCSI Type DWT (bearing = 240, distance = 0 , inventory date: 5/4/1999) could not be determined.

For further information, please contact:

**Minnesota Department of Health
 Drinking Water Protection Section
 Source Water Protection Unit
 P.O. Box 64975
 St. Paul, Minnesota 55164-0975**

**Section Receptionist: 651-201-4700
 Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000**

**INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
 POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT**

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270031	COMMUNITY
NAME	Minnetonka	
ADDRESS	Minnetonka Water Superintendent, 11522 Minnetonka Boulevard, Minnetonka, MN 55305	

FACILITY (WELL) INFORMATION

NAME	Well #13A	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? <input type="checkbox"/> YES (Please attach a copy) <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED
FACILITY ID	S10	
UNIQUE WELL NO.	132263	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270031 S10	UNIQUE WELL NO.	132263
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well ² (Class V well - illegal ³)	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well) ²	50/300/150 ⁴	50/300/150 ⁴	100/600/300 ⁴	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal) ²	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal) ²	illegal	illegal		N		

PWS ID / FACILITY ID	1270031 S10	UNIQUE WELL NO.	132263
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	25	N
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	175	N
SWI	Storm water drainage well ² (Class V well - illegal ³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well) ²	illegal ³	illegal ³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50 ⁵	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		

Additional Sources (If there is more than one source listed above, please indicate here).

Potential Contamination Sources and Codes Based on Previous Versions of this Form

none found within 200' of this well.							
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* New potential contaminant source.

¹ A sensitive well has less than 50 feet of watertight casing, and which is not cased below a confining layer or confining materials of at least 10' in thickness.

² These sources, known as Class V underground injection wells, are regulated by the federal U.S. Environmental Protection Agency.

³ These sources are classified as illegal by Minnesota Rules, Chapter 4725.

⁴ Isolation distance is determined by average flow per day or if a facility handles infectious or pathological wastes.

⁵ A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

This form is based on the new isolation distances in Minnesota Rules, Chapter 4725, related to wells and borings adopted August 4, 2008, and Minnesota Rules, Chapter 4720, related to wellhead protection.

PWS ID / FACILITY ID

1270031 S10

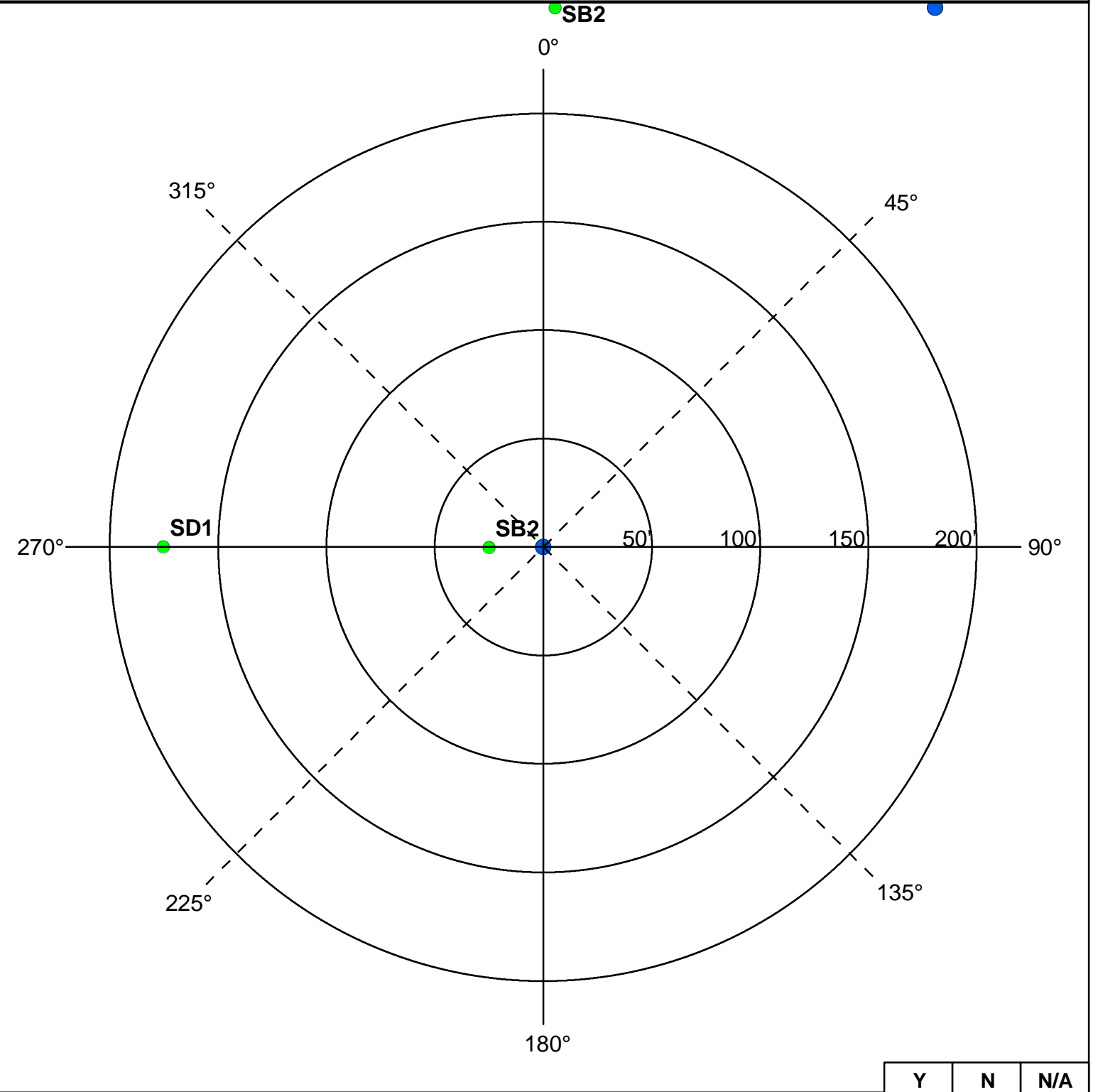
UNIQUE WELL NO.

132263

SETBACK DISTANCES

All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



Y	N	N/A

Were the isolation distances maintained for the new sources of contamination?

Is the system monitoring existing nonconforming sources of contamination?

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR

Neiman, Dave

DATE

6 - 21 - 2016

RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

9/7/2003 - Location for PCSI Type HWF (bearing = 210, distance = 0 , inventory date: 5/4/1999) could not be determined.

For further information, please contact:

**Minnesota Department of Health
 Drinking Water Protection Section
 Source Water Protection Unit
 P.O. Box 64975
 St. Paul, Minnesota 55164-0975**

**Section Receptionist: 651-201-4700
 Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000**

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
 POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270031	COMMUNITY
NAME	Minnetonka	
ADDRESS	Minnetonka Water Superintendent, 11522 Minnetonka Boulevard, Minnetonka, MN 55305	

FACILITY (WELL) INFORMATION

NAME	Well #13	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? <input type="checkbox"/> YES (Please attach a copy) <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED
FACILITY ID	S07	
UNIQUE WELL NO.	205165	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270031 S07	UNIQUE WELL NO.	205165
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)			LOCATION		
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well ² (Class V well - illegal ³)	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well) ²	50/300/150 ⁴	50/300/150 ⁴	100/600/300 ⁴	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal) ²	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal) ²	illegal	illegal		N		

PWS ID / FACILITY ID	1270031 S07	UNIQUE WELL NO.	205165
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	85	N
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	175	N
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		N		
SWI	Storm water drainage well ² (Class V well - illegal ³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well) ²	illegal ³	illegal ³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50 ⁵	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		

Additional Sources (If there is more than one source listed above, please indicate here).

Potential Contamination Sources and Codes Based on Previous Versions of this Form

	none found within 200' of this well.						
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* New potential contaminant source.

¹ A sensitive well has less than 50 feet of watertight casing, and which is not cased below a confining layer or confining materials of at least 10' in thickness.

² These sources, known as Class V underground injection wells, are regulated by the federal U.S. Environmental Protection Agency.

³ These sources are classified as illegal by Minnesota Rules, Chapter 4725.

⁴ Isolation distance is determined by average flow per day or if a facility handles infectious or pathological wastes.

⁵ A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

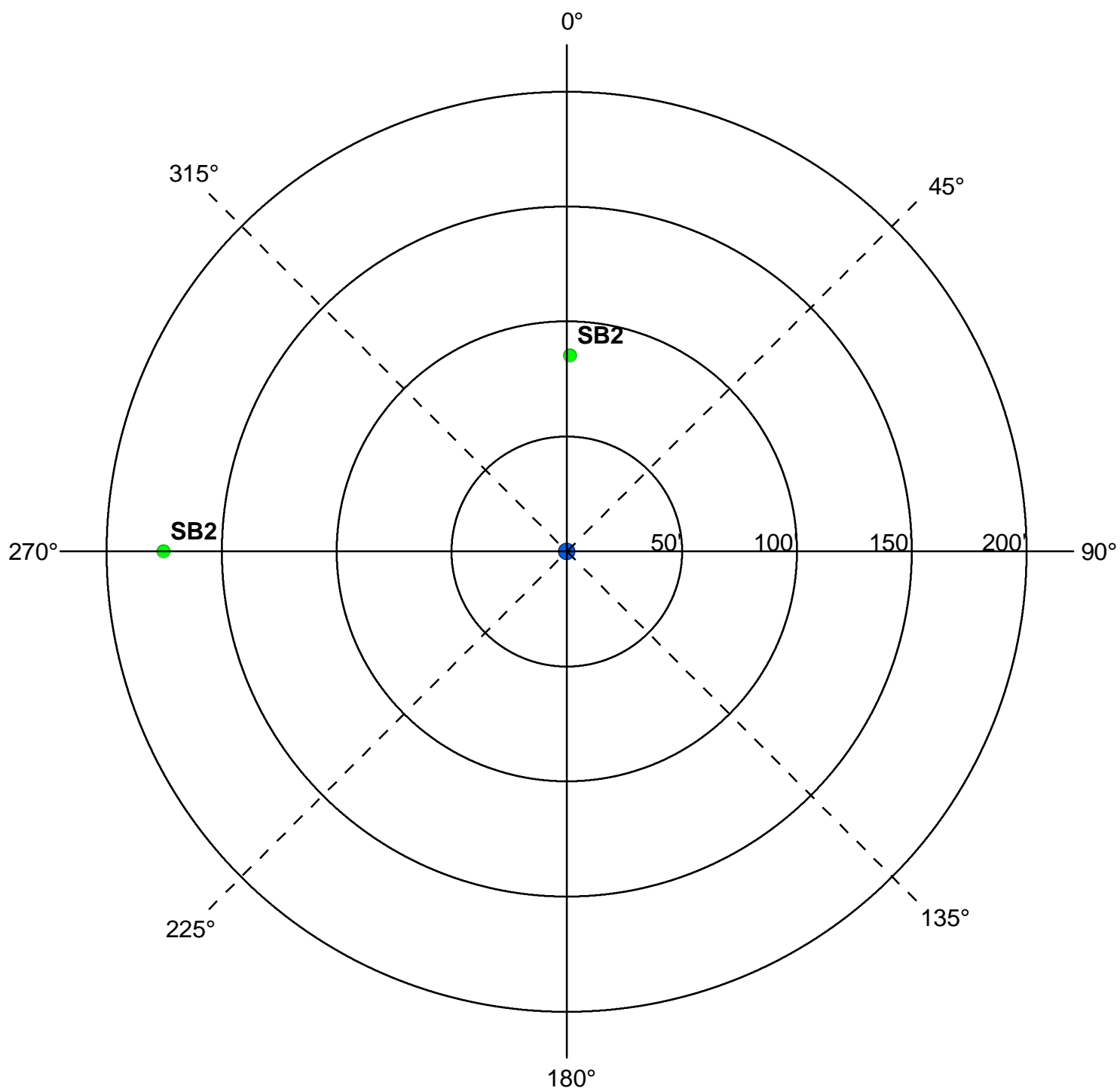
This form is based on the new isolation distances in Minnesota Rules, Chapter 4725, related to wells and borings adopted August 4, 2008, and Minnesota Rules, Chapter 4720, related to wellhead protection.

PWS ID / FACILITY ID 1270031 S07

UNIQUE WELL NO. 205165

SETBACK DISTANCES All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



SB2

Y	N	N/A

Were the isolation distances maintained for the new sources of contamination?

Is the system monitoring existing nonconforming sources of contamination?

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR Neiman, Dave

DATE 6 - 21 - 2016

RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

9/7/2003 - Location for PCSI Type DWT (bearing = 0, distance = 0 , inventory date: 5/4/1999) could not be determined.
 9/7/2003 - Location for PCSI Type SBM (bearing = 0, distance = 60 , inventory date: 5/4/1999) could not be determined.

For further information, please contact:

**Minnesota Department of Health
 Drinking Water Protection Section
 Source Water Protection Unit
 P.O. Box 64975
 St. Paul, Minnesota 55164-0975**

**Section Receptionist: 651-201-4700
 Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000**

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
 POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270031	COMMUNITY
NAME	Minnetonka	
ADDRESS	Minnetonka Water Superintendent, 11522 Minnetonka Boulevard, Minnetonka, MN 55305	

FACILITY (WELL) INFORMATION

NAME	Well #12A	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? <input type="checkbox"/> YES (Please attach a copy) <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED
FACILITY ID	S15	
UNIQUE WELL NO.	191939	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270031 S15	UNIQUE WELL NO.	191939
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)			LOCATION		
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well ² (Class V well - illegal ³)	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well) ²	50/300/150 ⁴	50/300/150 ⁴	100/600/300 ⁴	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal) ²	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal) ²	illegal	illegal		N		

PWS ID / FACILITY ID	1270031	S15	UNIQUE WELL NO.	191939
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	185	N
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	160	N
SWI	Storm water drainage well ² (Class V well - illegal ³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well) ²	illegal ³	illegal ³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50 ⁵	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		

Additional Sources (If there is more than one source listed above, please indicate here).

Potential Contamination Sources and Codes Based on Previous Versions of this Form

none found within 200' of this well.							
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* New potential contaminant source.

¹ A sensitive well has less than 50 feet of watertight casing, and which is not cased below a confining layer or confining materials of at least 10' in thickness.

² These sources, known as Class V underground injection wells, are regulated by the federal U.S. Environmental Protection Agency.

³ These sources are classified as illegal by Minnesota Rules, Chapter 4725.

⁴ Isolation distance is determined by average flow per day or if a facility handles infectious or pathological wastes.

⁵ A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

This form is based on the new isolation distances in Minnesota Rules, Chapter 4725, related to wells and borings adopted August 4, 2008, and Minnesota Rules, Chapter 4720, related to wellhead protection.

PWS ID / FACILITY ID

1270031 S15

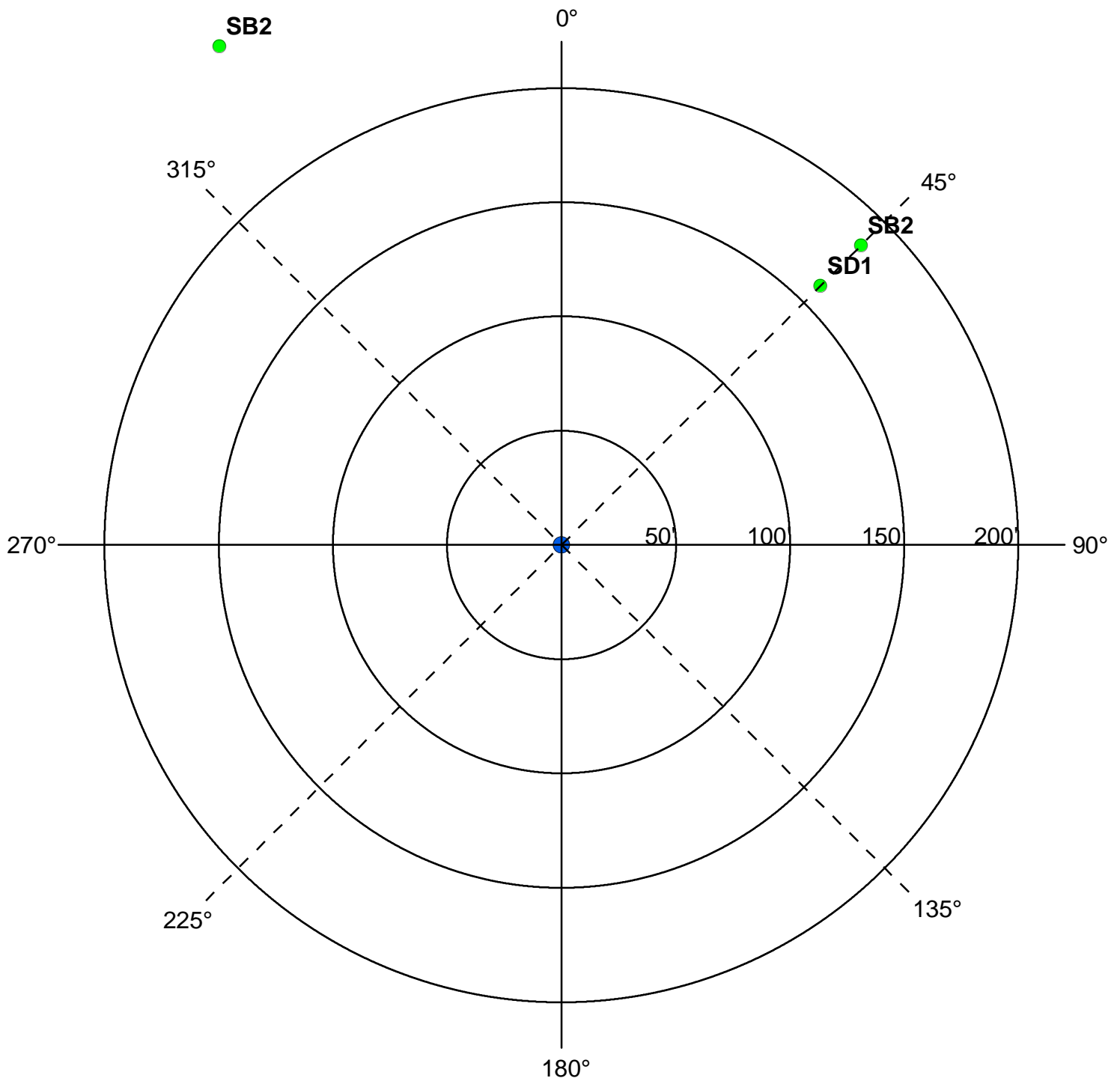
UNIQUE WELL NO.

191939

SETBACK DISTANCES

All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



	Y	N	N/A
Were the isolation distances maintained for the new sources of contamination?			
Is the system monitoring existing nonconforming sources of contamination?			

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR

Neiman, Dave

DATE

6 - 21 - 2016

RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

9/7/2003 - Location for PCSI Type SBM (bearing = 315, distance = 0 , inventory date: 5/4/1999) could not be determined.

For further information, please contact:

**Minnesota Department of Health
 Drinking Water Protection Section
 Source Water Protection Unit
 P.O. Box 64975
 St. Paul, Minnesota 55164-0975**

**Section Receptionist: 651-201-4700
 Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000**

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
 POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270031	COMMUNITY
NAME	Minnetonka	
ADDRESS	Minnetonka Water Superintendent, 11522 Minnetonka Boulevard, Minnetonka, MN 55305	

FACILITY (WELL) INFORMATION

NAME	Well #12	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? <input type="checkbox"/> YES (Please attach a copy) <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED
FACILITY ID	S06	
UNIQUE WELL NO.	203717	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270031 S06	UNIQUE WELL NO.	203717
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)			LOCATION		
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well ² (Class V well - illegal ³)	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well) ²	50/300/150 ⁴	50/300/150 ⁴	100/600/300 ⁴	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal) ²	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal) ²	illegal	illegal		N		

PWS ID / FACILITY ID	1270031 S06	UNIQUE WELL NO.	203717
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	25	N
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	125	N
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		

Land Application

SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
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Solid Waste Related

COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		

Storm Water Related

SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		N		
SWI	Storm water drainage well ² (Class V well - illegal ³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		

Wells and Borings

*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		Y	180	
UUW	Unused, unsealed well or boring	50	50		N		

General

*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well) ²	illegal ³	illegal ³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		

PWS ID / FACILITY ID	1270031 S06	UNIQUE WELL NO.	203717
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50 ⁵	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		

Additional Sources (If there is more than one source listed above, please indicate here).

Potential Contamination Sources and Codes Based on Previous Versions of this Form

	none found within 200' of this well.						
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* New potential contaminant source.

¹ A sensitive well has less than 50 feet of watertight casing, and which is not cased below a confining layer or confining materials of at least 10' in thickness.

² These sources, known as Class V underground injection wells, are regulated by the federal U.S. Environmental Protection Agency.

³ These sources are classified as illegal by Minnesota Rules, Chapter 4725.

⁴ Isolation distance is determined by average flow per day or if a facility handles infectious or pathological wastes.

⁵ A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

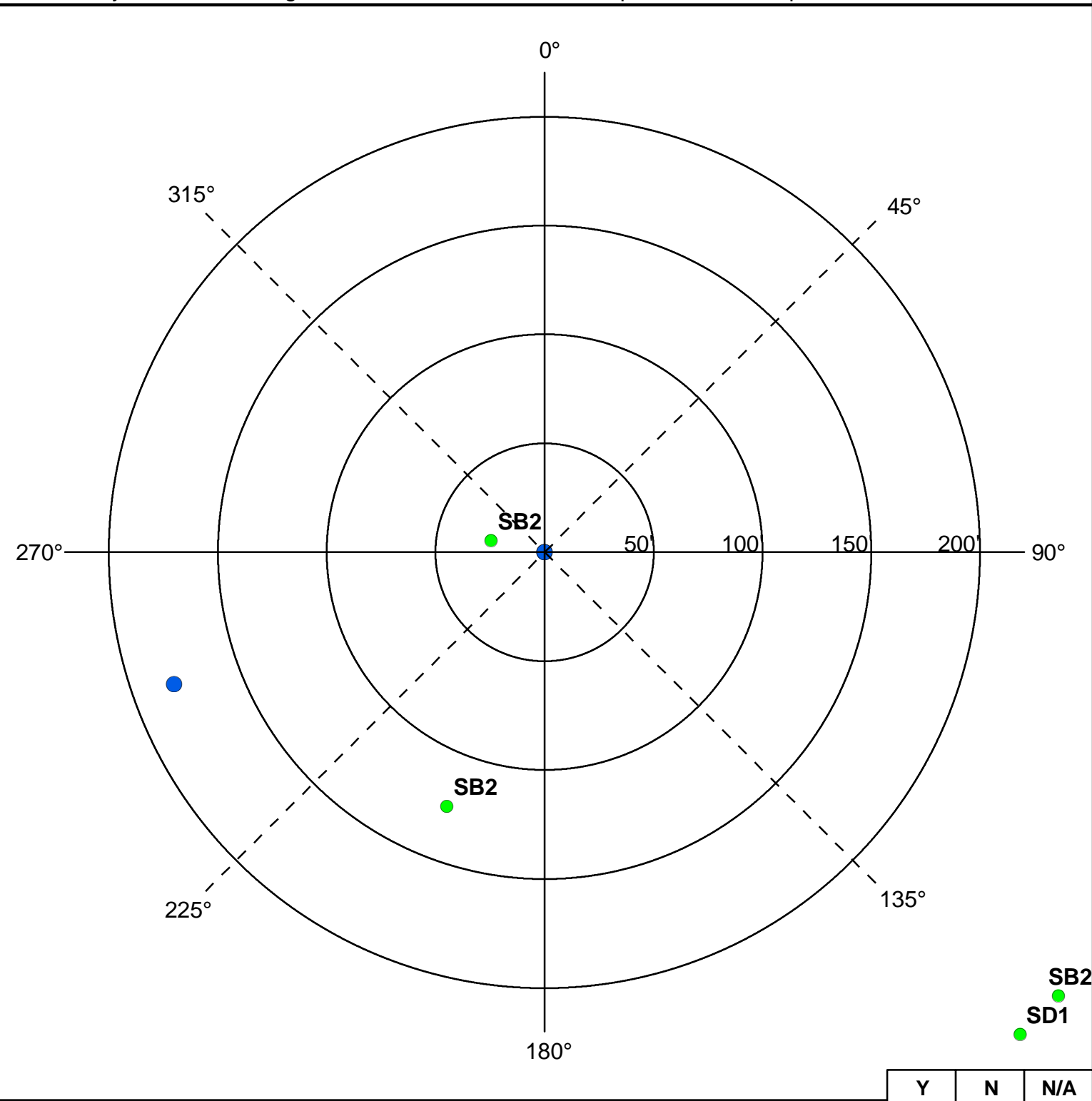
This form is based on the new isolation distances in Minnesota Rules, Chapter 4725, related to wells and borings adopted August 4, 2008, and Minnesota Rules, Chapter 4720, related to wellhead protection.

PWS ID / FACILITY ID 1270031 S06

UNIQUE WELL NO. 203717

SETBACK DISTANCES All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



	Y	N	N/A
Were the isolation distances maintained for the new sources of contamination?			
Is the system monitoring existing nonconforming sources of contamination?			

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR Neiman, Dave

DATE 6 - 21 - 2016

RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

9/7/2003 - Location for PCSI Type SBP (bearing = 270, distance = 0 , inventory date: 5/4/1999) could not be determined.

For further information, please contact:

**Minnesota Department of Health
 Drinking Water Protection Section
 Source Water Protection Unit
 P.O. Box 64975
 St. Paul, Minnesota 55164-0975**

**Section Receptionist: 651-201-4700
 Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000**

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
 POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270031	COMMUNITY
NAME	Minnetonka	
ADDRESS	Minnetonka Water Superintendent, 11522 Minnetonka Boulevard, Minnetonka, MN 55305	

FACILITY (WELL) INFORMATION

NAME	Well #11A	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? <input type="checkbox"/> YES (Please attach a copy) <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED
FACILITY ID	S16	
UNIQUE WELL NO.	439797	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270031 S16	UNIQUE WELL NO.	439797
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well ² (Class V well - illegal ³)	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well) ²	50/300/150 ⁴	50/300/150 ⁴	100/600/300 ⁴	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal) ²	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal) ²	illegal	illegal		N		

PWS ID / FACILITY ID	1270031 S16	UNIQUE WELL NO.	439797
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		N		
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		N		
SWI	Storm water drainage well ² (Class V well - illegal ³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well) ²	illegal ³	illegal ³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50 ⁵	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		

Additional Sources (If there is more than one source listed above, please indicate here).

Potential Contamination Sources and Codes Based on Previous Versions of this Form

none found within 200' of this well.

* New potential contaminant source.

¹ A sensitive well has less than 50 feet of watertight casing, and which is not cased below a confining layer or confining materials of at least 10' in thickness.

² These sources, known as Class V underground injection wells, are regulated by the federal U.S. Environmental Protection Agency.

³ These sources are classified as illegal by Minnesota Rules, Chapter 4725.

⁴ Isolation distance is determined by average flow per day or if a facility handles infectious or pathological wastes.

⁵ A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

This form is based on the new isolation distances in Minnesota Rules, Chapter 4725, related to wells and borings adopted August 4, 2008, and Minnesota Rules, Chapter 4720, related to wellhead protection.

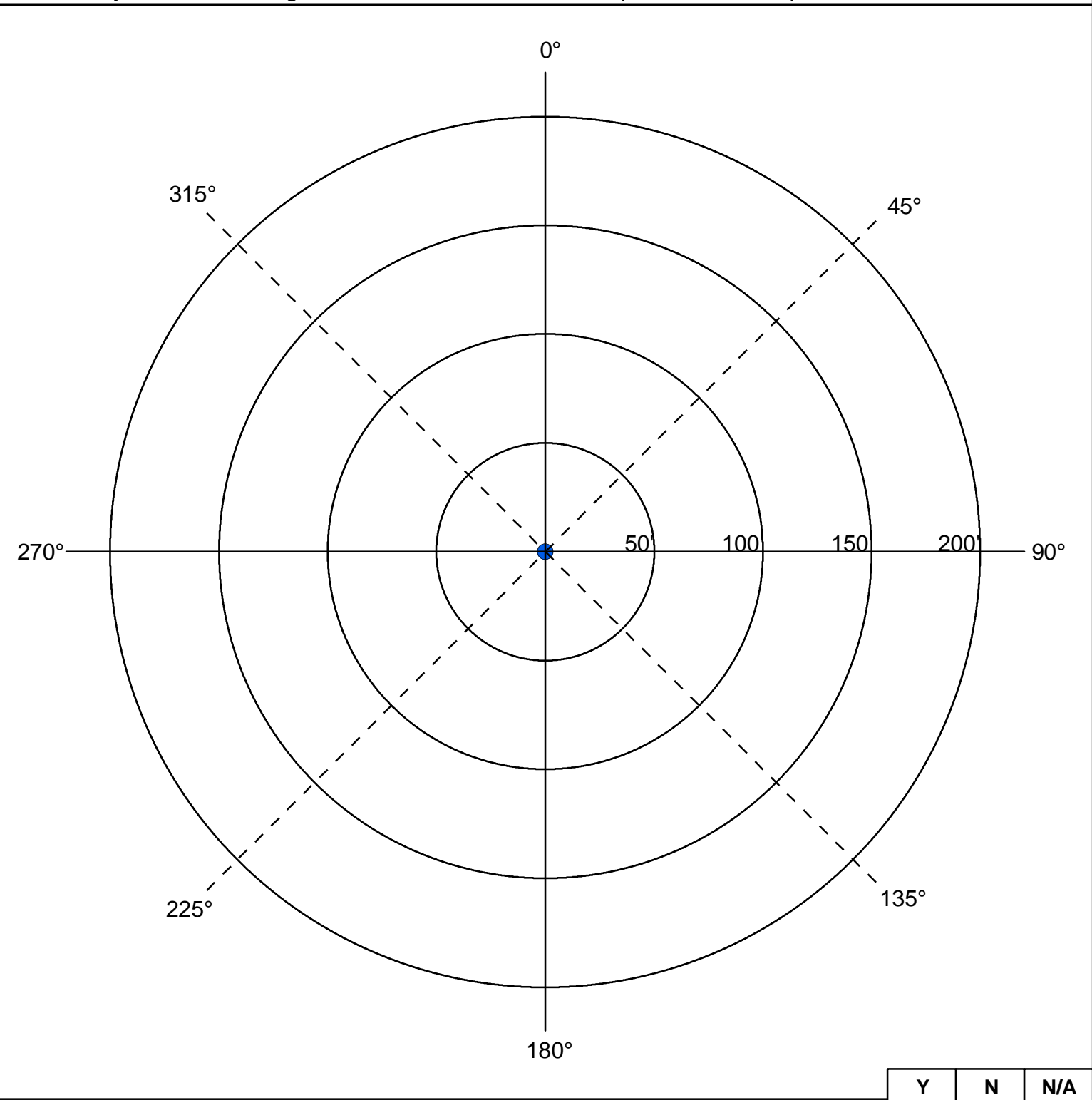
PWS ID / FACILITY ID 1270031 S16

UNIQUE WELL NO. 439797

SETBACK DISTANCES

All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



	Y	N	N/A
Were the isolation distances maintained for the new sources of contamination?			
Is the system monitoring existing nonconforming sources of contamination?			

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR Neiman, Dave

DATE 6 - 21 - 2016

RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

9/7/2003 - Location for PCSI Type SBP (bearing = 180, distance = 0 , inventory date: 5/4/1999) could not be determined.

For further information, please contact:

**Minnesota Department of Health
 Drinking Water Protection Section
 Source Water Protection Unit
 P.O. Box 64975
 St. Paul, Minnesota 55164-0975**

**Section Receptionist: 651-201-4700
 Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000**

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
 POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270031	COMMUNITY
NAME	Minnetonka	
ADDRESS	Minnetonka Water Superintendent, 11522 Minnetonka Boulevard, Minnetonka, MN 55305	

FACILITY (WELL) INFORMATION

NAME	Well #11	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? <input type="checkbox"/> YES (Please attach a copy) <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED
FACILITY ID	S05	
UNIQUE WELL NO.	208014	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270031 S05	UNIQUE WELL NO.	208014
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)			LOCATION		
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well ² (Class V well - illegal ³)	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well) ²	50/300/150 ⁴	50/300/150 ⁴	100/600/300 ⁴	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal) ²	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal) ²	illegal	illegal		N		

PWS ID / FACILITY ID	1270031 S05	UNIQUE WELL NO.	208014
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	70	N
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	85	N
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	90	N
SWI	Storm water drainage well ² (Class V well - illegal ³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well) ²	illegal ³	illegal ³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		

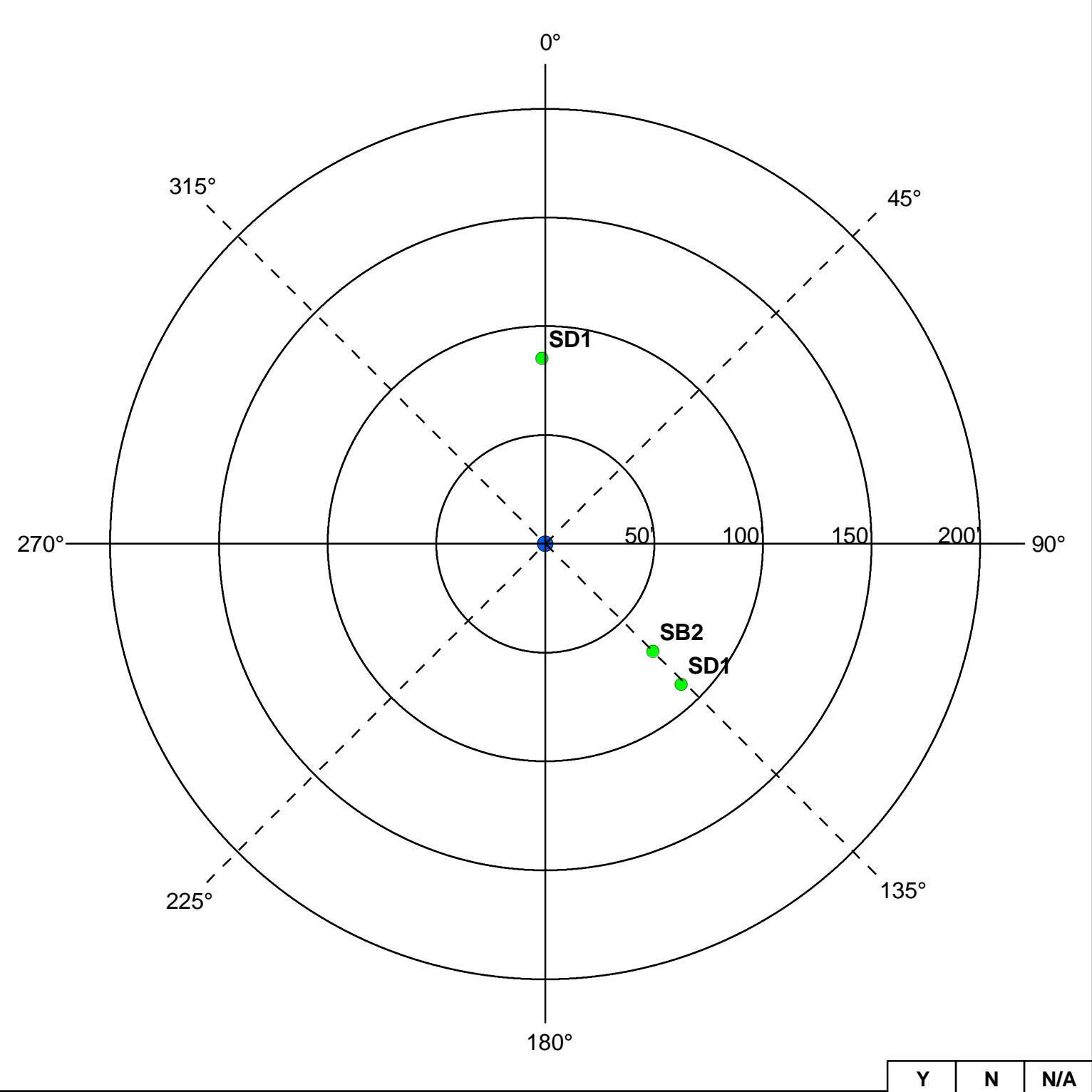
PWS ID / FACILITY ID 1270031 S05

UNIQUE WELL NO. 208014

SETBACK DISTANCES

All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



	Y	N	N/A
Were the isolation distances maintained for the new sources of contamination?			
Is the system monitoring existing nonconforming sources of contamination?			

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR Neiman, Dave

DATE 6 - 21 - 2016

RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

For further information, please contact:

**Minnesota Department of Health
 Drinking Water Protection Section
 Source Water Protection Unit
 P.O. Box 64975
 St. Paul, Minnesota 55164-0975**

**Section Receptionist: 651-201-4700
 Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000**

**INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
 POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT**

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270031	COMMUNITY
NAME	Minnetonka	
ADDRESS	Minnetonka Water Superintendent, 11522 Minnetonka Boulevard, Minnetonka, MN 55305	

FACILITY (WELL) INFORMATION

NAME	Well #10A	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? <input type="checkbox"/> YES (Please attach a copy) <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED
FACILITY ID	S14	
UNIQUE WELL NO.	150356	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270031 S14	UNIQUE WELL NO.	150356
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)			LOCATION		
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well ² (Class V well - illegal ³)	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well) ²	50/300/150 ⁴	50/300/150 ⁴	100/600/300 ⁴	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal) ²	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal) ²	illegal	illegal		N		

PWS ID / FACILITY ID	1270031 S14	UNIQUE WELL NO.	150356
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		N		
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		N		
SWI	Storm water drainage well ² (Class V well - illegal ³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well) ²	illegal ³	illegal ³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50 ⁵	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		

Additional Sources (If there is more than one source listed above, please indicate here).

Potential Contamination Sources and Codes Based on Previous Versions of this Form

none found within 200' of this well.							
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* New potential contaminant source.

¹ A sensitive well has less than 50 feet of watertight casing, and which is not cased below a confining layer or confining materials of at least 10' in thickness.

² These sources, known as Class V underground injection wells, are regulated by the federal U.S. Environmental Protection Agency.

³ These sources are classified as illegal by Minnesota Rules, Chapter 4725.

⁴ Isolation distance is determined by average flow per day or if a facility handles infectious or pathological wastes.

⁵ A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

This form is based on the new isolation distances in Minnesota Rules, Chapter 4725, related to wells and borings adopted August 4, 2008, and Minnesota Rules, Chapter 4720, related to wellhead protection.

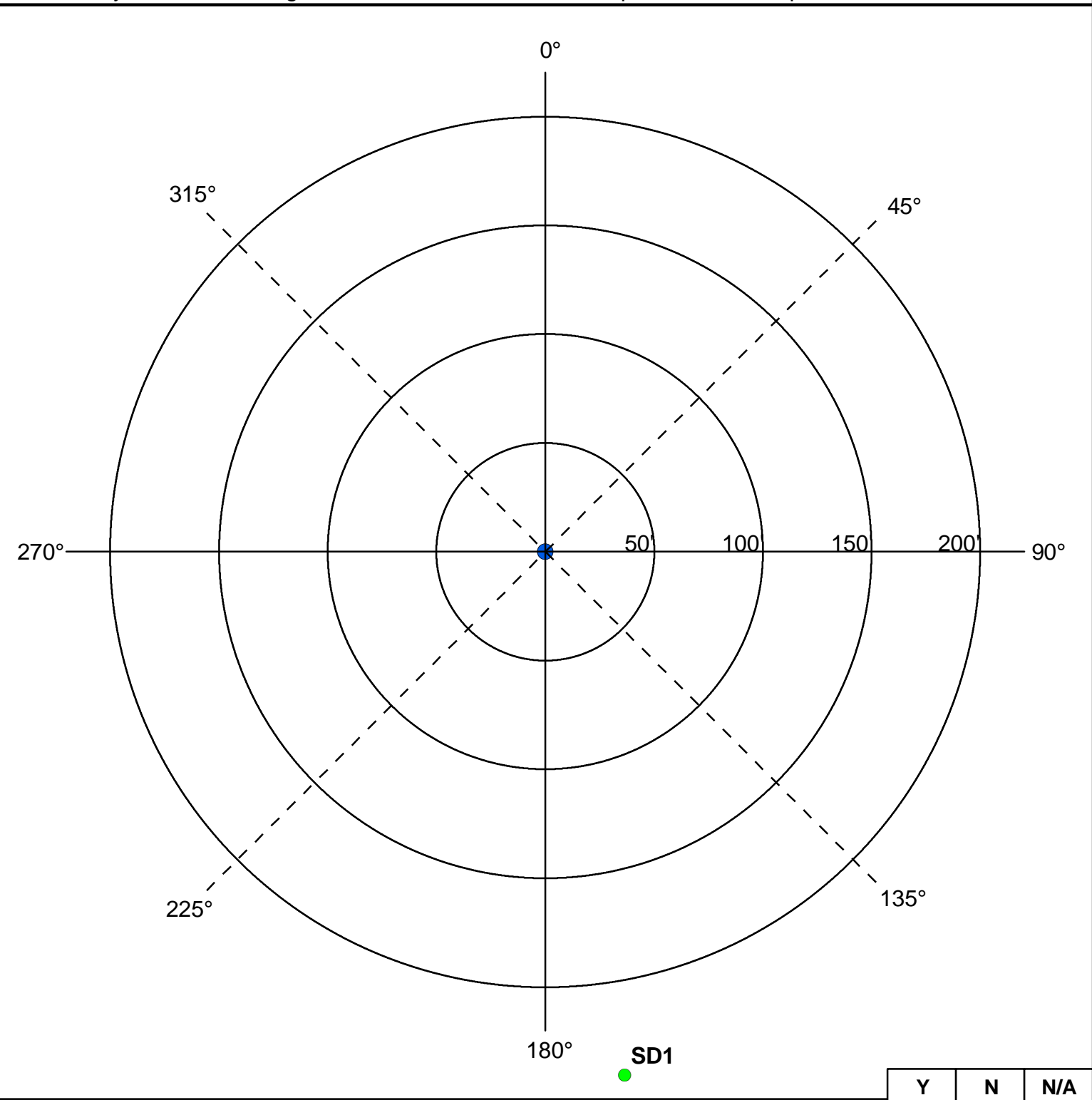
PWS ID / FACILITY ID 1270031 S14

UNIQUE WELL NO. 150356

SETBACK DISTANCES

All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



Y	N	N/A

Were the isolation distances maintained for the new sources of contamination?

Is the system monitoring existing nonconforming sources of contamination?

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR Neiman, Dave

DATE 6 - 21 - 2016

RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

9/7/2003 - Location for PCSI Type SBM (bearing = 90, distance = 0 , inventory date: 5/4/1999) could not be determined.
 9/7/2003 - Location for PCSI Type OHW (bearing = 0, distance = 0 , inventory date: 5/4/1999) could not be determined.

For further information, please contact:

**Minnesota Department of Health
 Drinking Water Protection Section
 Source Water Protection Unit
 P.O. Box 64975
 St. Paul, Minnesota 55164-0975**

**Section Receptionist: 651-201-4700
 Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000**

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
 POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270031	COMMUNITY
NAME	Minnetonka	
ADDRESS	Minnetonka Water Superintendent, 11522 Minnetonka Boulevard, Minnetonka, MN 55305	

FACILITY (WELL) INFORMATION

NAME	Well #10	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? <input type="checkbox"/> YES (Please attach a copy) <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED
FACILITY ID	S04	
UNIQUE WELL NO.	204140	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270031 S04	UNIQUE WELL NO.	204140
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well ² (Class V well - illegal ³)	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well) ²	50/300/150 ⁴	50/300/150 ⁴	100/600/300 ⁴	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal) ²	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal) ²	illegal	illegal		N		

PWS ID / FACILITY ID	1270031 S04	UNIQUE WELL NO.	204140
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	150	N
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	65	N
SWI	Storm water drainage well ² (Class V well - illegal ³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		Y	150	N
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well) ²	illegal ³	illegal ³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		

PWS ID / FACILITY ID	1270031 S04	UNIQUE WELL NO.	204140
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		Y	115	N
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50 ⁵	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		

Additional Sources (If there is more than one source listed above, please indicate here).

Potential Contamination Sources and Codes Based on Previous Versions of this Form

	none found within 200' of this well.						
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* New potential contaminant source.

¹ A sensitive well has less than 50 feet of watertight casing, and which is not cased below a confining layer or confining materials of at least 10' in thickness.

² These sources, known as Class V underground injection wells, are regulated by the federal U.S. Environmental Protection Agency.

³ These sources are classified as illegal by Minnesota Rules, Chapter 4725.

⁴ Isolation distance is determined by average flow per day or if a facility handles infectious or pathological wastes.

⁵ A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

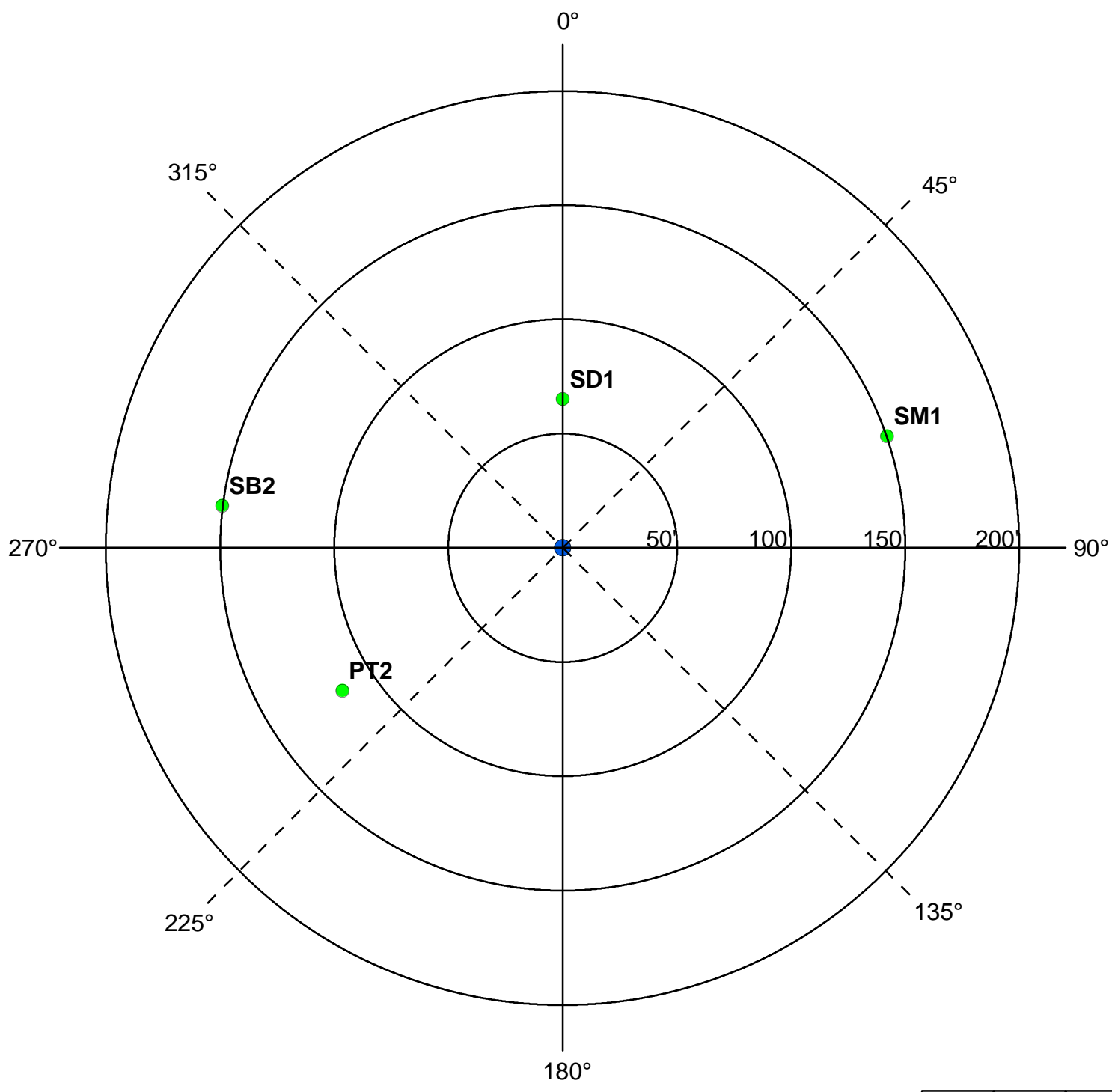
This form is based on the new isolation distances in Minnesota Rules, Chapter 4725, related to wells and borings adopted August 4, 2008, and Minnesota Rules, Chapter 4720, related to wellhead protection.

PWS ID / FACILITY ID 1270031 S04

UNIQUE WELL NO. 204140

SETBACK DISTANCES All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



	Y	N	N/A
Were the isolation distances maintained for the new sources of contamination?			
Is the system monitoring existing nonconforming sources of contamination?			

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR Neiman, Dave

DATE 6 - 21 - 2016

RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

9/7/2003 - Location for PCSI Type OHW (bearing = 0, distance = 0 , inventory date: 5/4/1999) could not be determined.

PT2= 2400 gal. diesel fuel tank under generator.

For further information, please contact:

**Minnesota Department of Health
 Drinking Water Protection Section
 Source Water Protection Unit
 P.O. Box 64975
 St. Paul, Minnesota 55164-0975**

**Section Receptionist: 651-201-4700
 Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000**

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
 POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270031	COMMUNITY
NAME	Minnetonka	
ADDRESS	Minnetonka Water Superintendent, 11522 Minnetonka Boulevard, Minnetonka, MN 55305	

FACILITY (WELL) INFORMATION

NAME	Well #6A	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? <input type="checkbox"/> YES (Please attach a copy) <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED
FACILITY ID	S03	
UNIQUE WELL NO.	208012	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270031 S03	UNIQUE WELL NO.	208012
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)			LOCATION		
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well ² (Class V well - illegal ³)	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well) ²	50/300/150 ⁴	50/300/150 ⁴	100/600/300 ⁴	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal) ²	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal) ²	illegal	illegal		N		

PWS ID / FACILITY ID	1270031 S03	UNIQUE WELL NO.	208012
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	115	N
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		N		
SWI	Storm water drainage well ² (Class V well - illegal ³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		Y	191	
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well) ²	illegal ³	illegal ³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50 ⁵	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		

Additional Sources (If there is more than one source listed above, please indicate here).

Potential Contamination Sources and Codes Based on Previous Versions of this Form

none found within 200' of this well.							
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* New potential contaminant source.

¹ A sensitive well has less than 50 feet of watertight casing, and which is not cased below a confining layer or confining materials of at least 10' in thickness.

² These sources, known as Class V underground injection wells, are regulated by the federal U.S. Environmental Protection Agency.

³ These sources are classified as illegal by Minnesota Rules, Chapter 4725.

⁴ Isolation distance is determined by average flow per day or if a facility handles infectious or pathological wastes.

⁵ A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

This form is based on the new isolation distances in Minnesota Rules, Chapter 4725, related to wells and borings adopted August 4, 2008, and Minnesota Rules, Chapter 4720, related to wellhead protection.

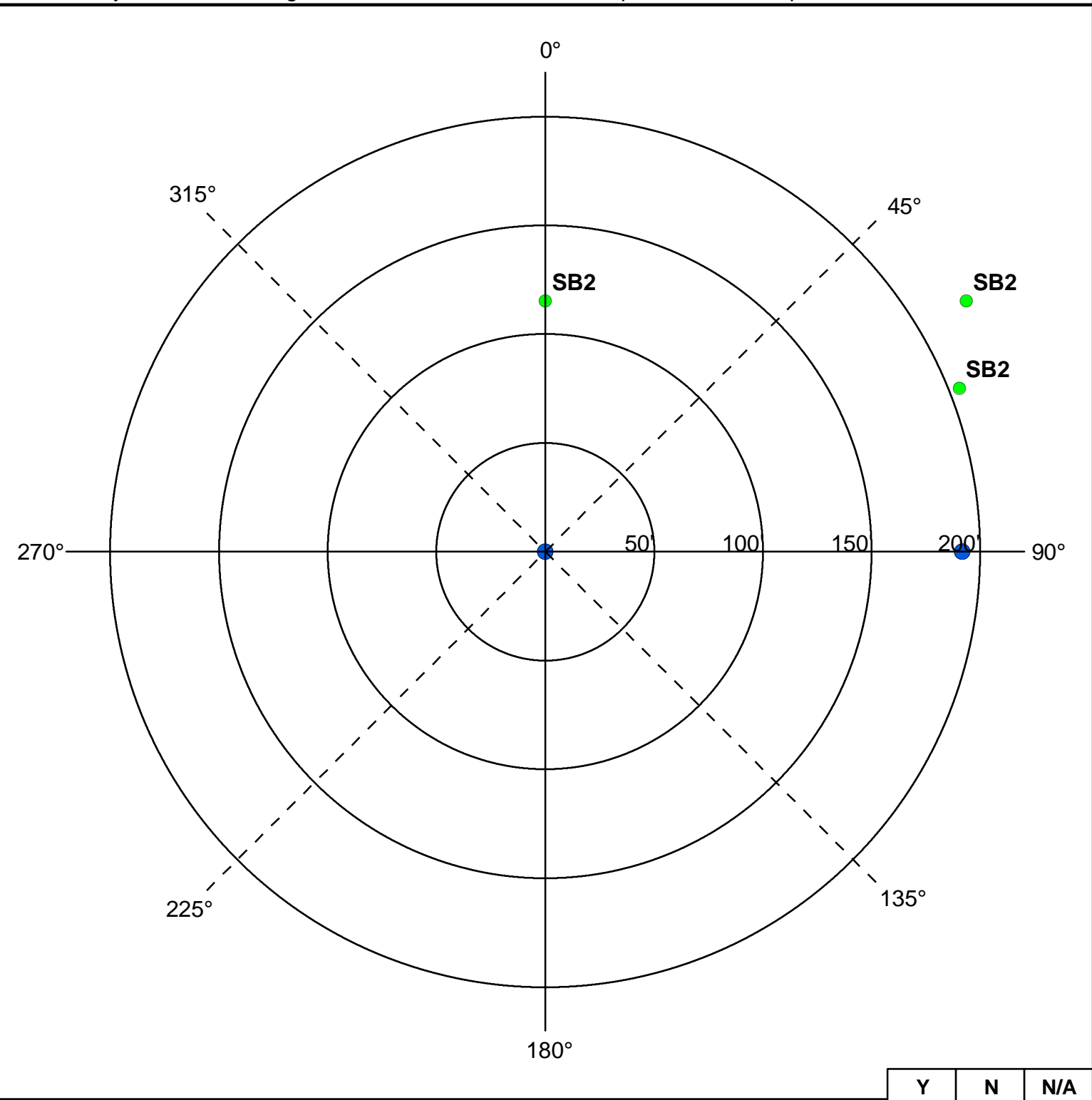
PWS ID / FACILITY ID 1270031 S03

UNIQUE WELL NO. 208012

SETBACK DISTANCES

All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



	Y	N	N/A
Were the isolation distances maintained for the new sources of contamination?			
Is the system monitoring existing nonconforming sources of contamination?			

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR Neiman, Dave

DATE 6 - 21 - 2016

RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

9/7/2003 - Location for PCSI Type SBM (bearing = 0, distance = 85 , inventory date: 5/4/1999) could not be determined.

For further information, please contact:

**Minnesota Department of Health
 Drinking Water Protection Section
 Source Water Protection Unit
 P.O. Box 64975
 St. Paul, Minnesota 55164-0975**

**Section Receptionist: 651-201-4700
 Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000**

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
 POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270031	COMMUNITY
NAME	Minnetonka	
ADDRESS	Minnetonka Water Superintendent, 11522 Minnetonka Boulevard, Minnetonka, MN 55305	

FACILITY (WELL) INFORMATION

NAME	Well #6	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? <input type="checkbox"/> YES (Please attach a copy) <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED
FACILITY ID	S02	
UNIQUE WELL NO.	204054	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270031 S02	UNIQUE WELL NO.	204054
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)			LOCATION		
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well ² (Class V well - illegal ³)	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well) ²	50/300/150 ⁴	50/300/150 ⁴	100/600/300 ⁴	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal) ²	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal) ²	illegal	illegal		N		

PWS ID / FACILITY ID	1270031 S02	UNIQUE WELL NO.	204054
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	115	N
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	75	N
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		N		
SWI	Storm water drainage well ² (Class V well - illegal ³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		Y	191	
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well) ²	illegal ³	illegal ³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50 ⁵	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		

Additional Sources (If there is more than one source listed above, please indicate here).							

Potential Contamination Sources and Codes Based on Previous Versions of this Form							
	none found within 200' of this well.						

* New potential contaminant source.

¹ A sensitive well has less than 50 feet of watertight casing, and which is not cased below a confining layer or confining materials of at least 10' in thickness.

² These sources, known as Class V underground injection wells, are regulated by the federal U.S. Environmental Protection Agency.

³ These sources are classified as illegal by Minnesota Rules, Chapter 4725.

⁴ Isolation distance is determined by average flow per day or if a facility handles infectious or pathological wastes.

⁵ A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

This form is based on the new isolation distances in Minnesota Rules, Chapter 4725, related to wells and borings adopted August 4, 2008, and Minnesota Rules, Chapter 4720, related to wellhead protection.

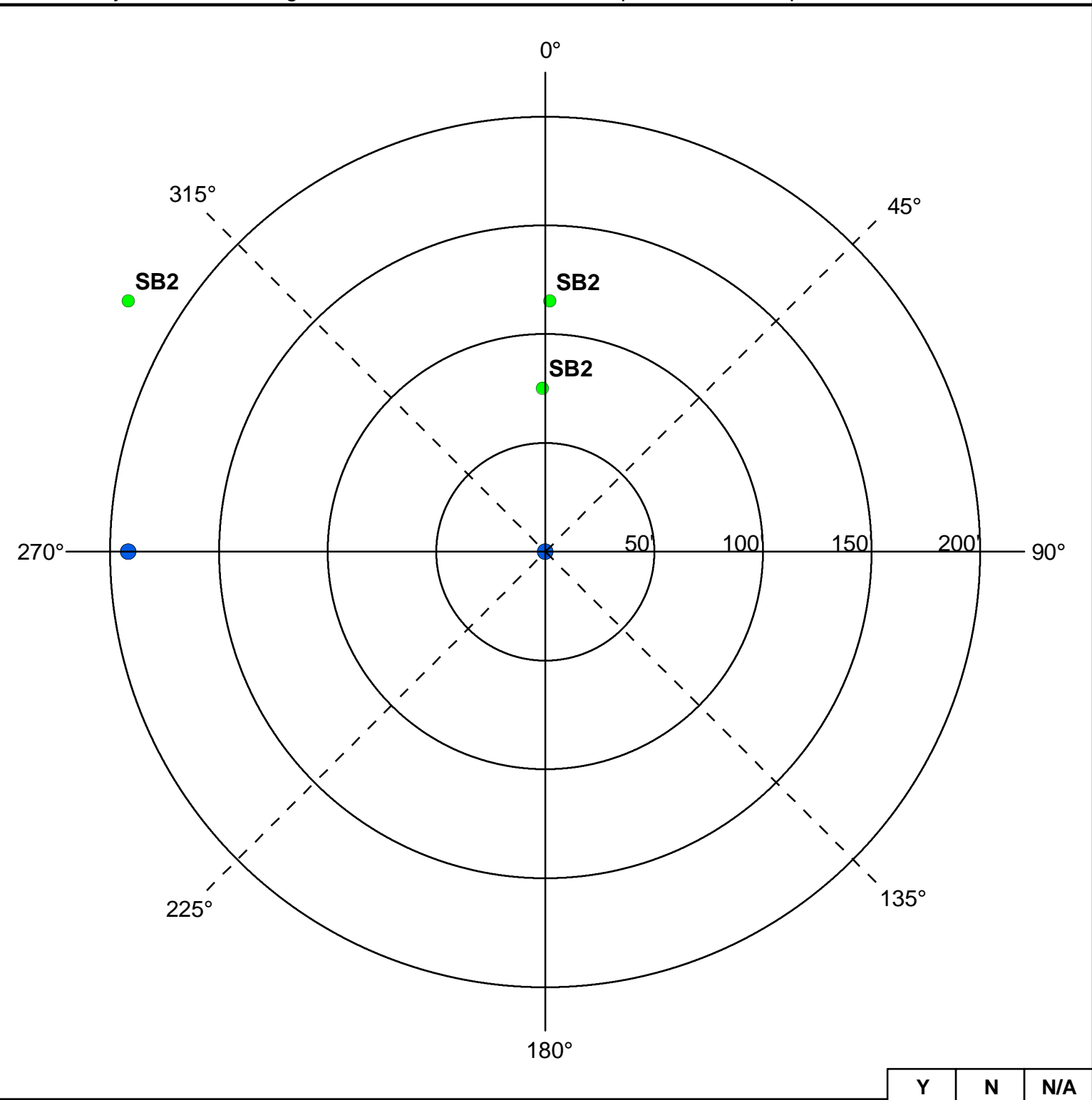
PWS ID / FACILITY ID 1270031 S02

UNIQUE WELL NO. 204054

SETBACK DISTANCES

All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



	Y	N	N/A
Were the isolation distances maintained for the new sources of contamination?			
Is the system monitoring existing nonconforming sources of contamination?			

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR Neiman, Dave

DATE 6 - 21 - 2016

RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

9/7/2003 - Location for PCSI Type SBM (bearing = 0, distance = 120 , inventory date: 5/4/1999) could not be determined.
 9/7/2003 - Location for PCSI Type SBP (bearing = 0, distance = 0 , inventory date: 5/4/1999) could not be determined.

For further information, please contact:

**Minnesota Department of Health
 Drinking Water Protection Section
 Source Water Protection Unit
 P.O. Box 64975
 St. Paul, Minnesota 55164-0975**

**Section Receptionist: 651-201-4700
 Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000**

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
 POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270031	COMMUNITY
NAME	Minnetonka	
ADDRESS	Minnetonka Water Superintendent, 11522 Minnetonka Boulevard, Minnetonka, MN 55305	

FACILITY (WELL) INFORMATION

NAME	Well #3A	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? <input type="checkbox"/> YES (Please attach a copy) <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED
FACILITY ID	S13	
UNIQUE WELL NO.	171021	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270031 S13	UNIQUE WELL NO.	171021
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)			LOCATION		
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well ² (Class V well - illegal ³)	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well) ²	50/300/150 ⁴	50/300/150 ⁴	100/600/300 ⁴	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal) ²	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal) ²	illegal	illegal		N		

PWS ID / FACILITY ID	1270031	S13	UNIQUE WELL NO.	171021
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	25	N
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	144	N**
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	147	N**
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	40	N
SWI	Storm water drainage well ² (Class V well - illegal ³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		Y	192	
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well) ²	illegal ³	illegal ³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50 ⁵	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		

Additional Sources (If there is more than one source listed above, please indicate here).

Potential Contamination Sources and Codes Based on Previous Versions of this Form

SBM	Sewer, buried collector, municipal, pressurized, open jointed, or unapproved materials	50	50		Y	141	N**
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* New potential contaminant source.
 ** This number is the estimated distance that this potential source is from this well even though it was identified during an inventory for an adjacent well.
¹ A sensitive well has less than 50 feet of watertight casing, and which is not cased below a confining layer or confining materials of at least 10' in thickness.
² These sources, known as Class V underground injection wells, are regulated by the federal U.S. Environmental Protection Agency.
³ These sources are classified as illegal by Minnesota Rules, Chapter 4725.
⁴ Isolation distance is determined by average flow per day or if a facility handles infectious or pathological wastes.
⁵ A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

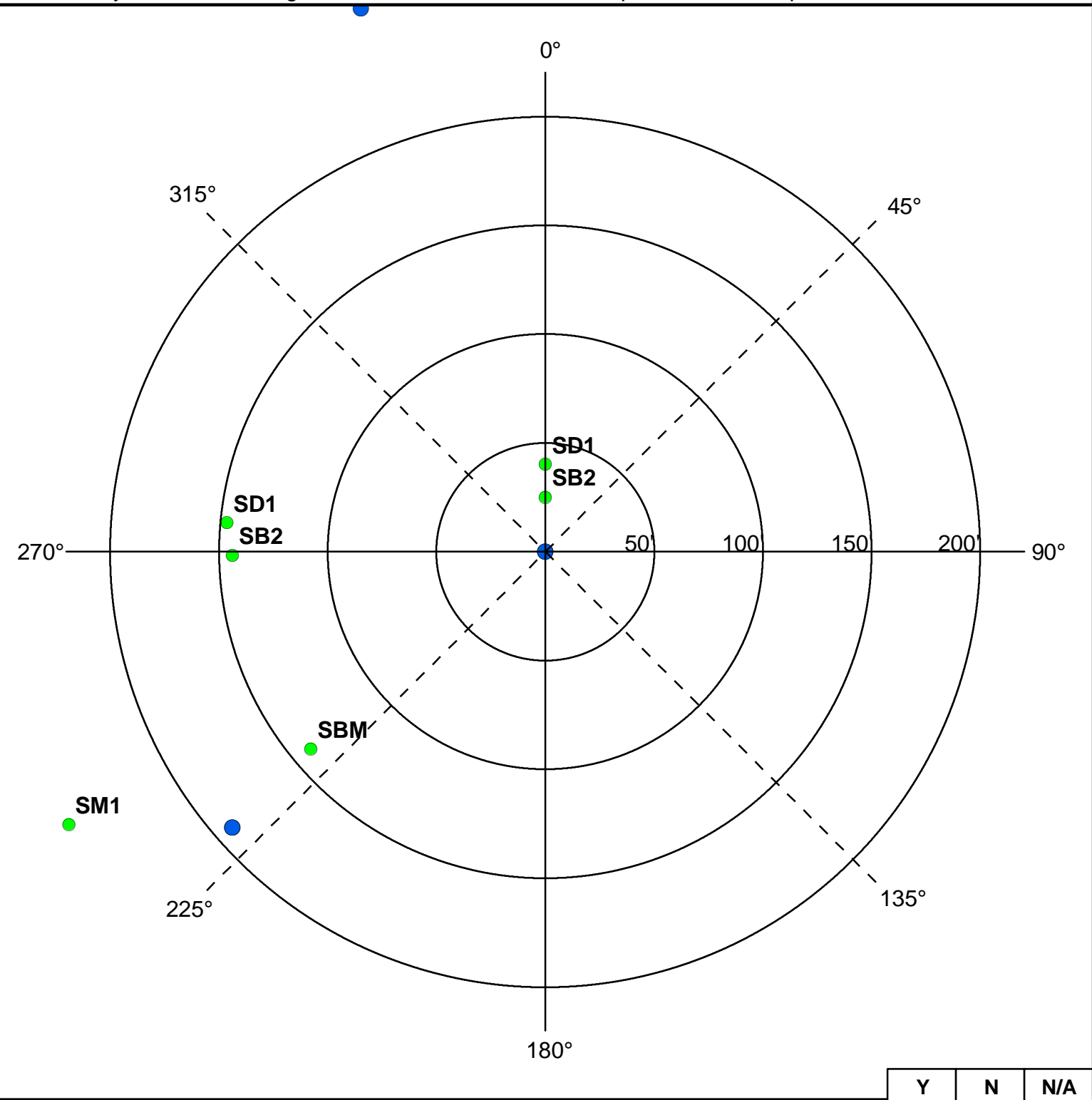
This form is based on the new isolation distances in Minnesota Rules, Chapter 4725, related to wells and borings adopted August 4, 2008, and Minnesota Rules, Chapter 4720, related to wellhead protection.

PWS ID / FACILITY ID 1270031 S13

UNIQUE WELL NO. 171021

SETBACK DISTANCES All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



	Y	N	N/A
Were the isolation distances maintained for the new sources of contamination?			
Is the system monitoring existing nonconforming sources of contamination?			

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR Neiman, Dave DATE 6 - 21 - 2016

RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

9/7/2003 - Location for PCSI Type HWF (bearing = 0, distance = 0 , inventory date: 5/4/1999) could not be determined.

For further information, please contact:

**Minnesota Department of Health
 Drinking Water Protection Section
 Source Water Protection Unit
 P.O. Box 64975
 St. Paul, Minnesota 55164-0975**

**Section Receptionist: 651-201-4700
 Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000**

**INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
 POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT**

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270031	COMMUNITY
NAME	Minnetonka	
ADDRESS	Minnetonka Water Superintendent, 11522 Minnetonka Boulevard, Minnetonka, MN 55305	

FACILITY (WELL) INFORMATION

NAME	Well #3	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? <input type="checkbox"/> YES (Please attach a copy) <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED
FACILITY ID	S01	
UNIQUE WELL NO.	204470	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270031 S01	UNIQUE WELL NO.	204470
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well ² (Class V well - illegal ³)	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well) ²	50/300/150 ⁴	50/300/150 ⁴	100/600/300 ⁴	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal) ²	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal) ²	illegal	illegal		N		

PWS ID / FACILITY ID	1270031 S01	UNIQUE WELL NO.	204470
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	125	N
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	140	N
SWI	Storm water drainage well ² (Class V well - illegal ³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		Y	75	N
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		Y	192	
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well) ²	illegal ³	illegal ³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50 ⁵	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		

Additional Sources (If there is more than one source listed above, please indicate here).

Potential Contamination Sources and Codes Based on Previous Versions of this Form

SBM	Sewer, buried collector, municipal, pressurized, open jointed, or unapproved materials	50	50		Y	50	N
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* New potential contaminant source.

¹ A sensitive well has less than 50 feet of watertight casing, and which is not cased below a confining layer or confining materials of at least 10' in thickness.
² These sources, known as Class V underground injection wells, are regulated by the federal U.S. Environmental Protection Agency.
³ These sources are classified as illegal by Minnesota Rules, Chapter 4725.
⁴ Isolation distance is determined by average flow per day or if a facility handles infectious or pathological wastes.
⁵ A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

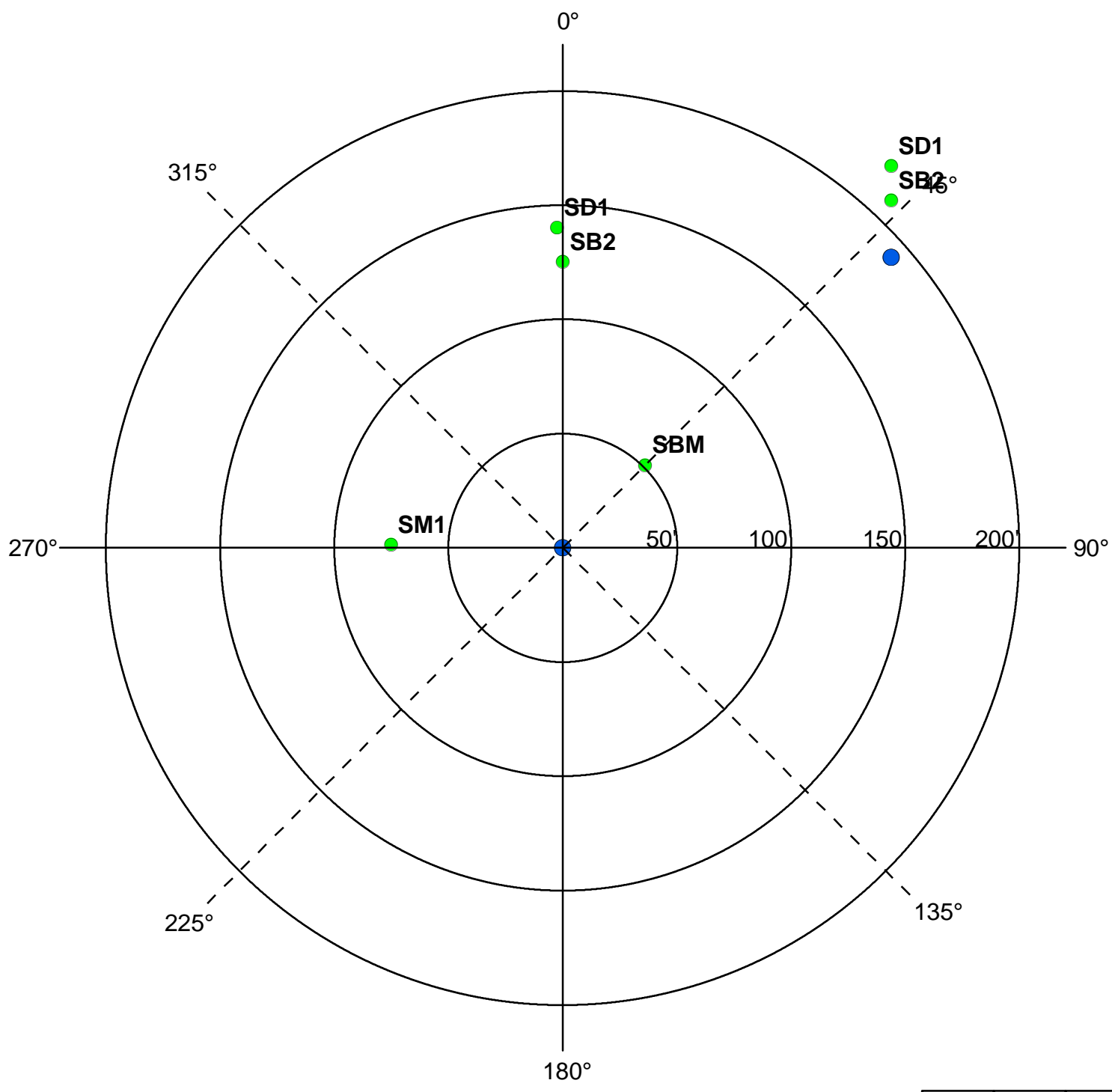
This form is based on the new isolation distances in Minnesota Rules, Chapter 4725, related to wells and borings adopted August 4, 2008, and Minnesota Rules, Chapter 4720, related to wellhead protection.

PWS ID / FACILITY ID 1270031 S01

UNIQUE WELL NO. 204470

SETBACK DISTANCES All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



	Y	N	N/A
Were the isolation distances maintained for the new sources of contamination?			
Is the system monitoring existing nonconforming sources of contamination?			

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR Neiman, Dave

DATE 6 - 21 - 2016

RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

For further information, please contact:

**Minnesota Department of Health
 Drinking Water Protection Section
 Source Water Protection Unit
 P.O. Box 64975
 St. Paul, Minnesota 55164-0975**

**Section Receptionist: 651-201-4700
 Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000**