

m1 DEPARTMENT
OF HEALTH

April 4, 2019



Mr. Bruce Westby, Engineer
City of Ramsey
7550 Sunwood Drive Northwest
Ramsey, Minnesota 55303

Subject: Scoping 2 Decision Notice and Meeting Summary – City of Ramsey – PWSID 1020035

Dear Mr. Westby,

This letter provides notice of the results of a scoping meeting held with you, Leonard Linton, Grant Riemer and John Nelson (city of Ramsey) and me on March 28, 2019, at Ramsey City Hall regarding wellhead protection (WHP) planning. During the meeting, we discussed the 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 discussed at the meeting. We also discussed a summary of planning issues and recommendations that were identified during the Part 1 WHP Plan development process that should be considered for inclusion in your Part 2 WHP Plan.

The city of Ramsey has 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 Ramsey will have until October 6, 2019, to complete its WHP plan.

MDH understands a consultant has not been determined yet to work 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 2 of your plan. Technical assistance documents and a glossary is available upon request. 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, appearing to read "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: Brian Noma, MDH Engineer, Metro District Office
Luke Stuewe, Minnesota Department of Agriculture

SCOPING 2 DECISION NOTICE – MODERATE VULNERABILITY DWSMA

Date: April 4, 2019

Name of Public Water Supply: City of Ramsey

PWSID: 1020035

Name of the Wellhead Protection Manager: Mr. Bruce Westby, Engineer

Address: 755 Sunwood Drive Northwest

City: Ramsey

Zip: 55303

Phone: 763-433-9825

Primary Unique Well Numbers: 161441 (Well #1), 416183 (Well #2), 580303 (Well #3)
580313 (Well #4), 593672 (Well #6), 743832 (Well #7), 743833 (Well #8)

DWSMA Vulnerability: Low Moderate

The purpose for the second scoping meeting, as required by Minnesota Rules, part 4720.5340, is to discuss the information necessary for preparing Part 2 of a Wellhead Protection Plan. The Part 1 Plan identifies the area that provides the source of drinking water for the public water supply (PWS) and assesses how vulnerable that area is to contamination. The PWS can utilize that information to develop land use and management practices that protects their groundwater resource from contamination.

The wellhead rule (Minnesota Rules, part 4720.5340) refers to the information required for wellhead planning as data elements. This notice lists the data elements that are stated in Minnesota Rules, part 4750.5400 and are selected for the PWS because of the vulnerability of the drinking water supply management area (DWSMA) as determined in Part 1.

Scoping 2 Data Elements Needed for the Part 2

Data Elements are pieces of information in the form of a map, a list, records, tables and inventories. Where appropriate, they should be reviewed and assessed in terms of their present and/or future implications on the 1) use of the well(s), 2) quality and quantity of water supplying the public water supply wells(s), and 3) land and groundwater uses in the DWSMA. It is important to discuss the relevance of the data elements to management of the DWSMA. Check the technical assistance comments for guidance on reviewing the data elements and conducting these assessments. Clearly identify in the plan which data elements are associated with which tables/figures. If a data element does not exist, state that in the narrative.

Submit –

The following information **MUST** be submitted in the Part 2 by including it in the plan narrative and/or appendix. **An asterisk* with red text** indicates information that **MUST** be contained in the Part 2.

- *A map that indicates the vulnerability and includes the DWSMA, WHP Area, and Emergency Response Area must be included in the Part 2.** This map with vulnerability is a product of the Part 1 and provides a basis for planning activities in Part 2. SWP Planner can provide the DWSMA figure.

DATA ELEMENTS ABOUT THE LAND USE –

Land Use

- *An existing map of political boundaries.**
- *An existing map of public land surveys including township, range, and section.**

Technical Assistance Comments: A map or maps showing updated political boundaries and township, range, section with labels is required for determining land use authorities for the land within the DWSMA. DWSMA figure map provided by SWP Planner will also contain political boundaries with township, range, and section. Determine and discuss how the various land use authorities may affect the management of the DWSMA.

- A map and an inventory of the current and historical agricultural, residential, commercial, industrial, recreational, and institutional land uses and potential contaminant sources.
 - *The Potential Contaminant Source Inventory (PCSI) data in both a table and map format must be created and included in the Part 2. Include potential contaminant sources as listed on the PCSI attachment provided for each existing vulnerability within the DWSMA.**
 - If DWSMA contains moderate vulnerability inventory all wells.
 - The inventory should include your community wells but not include any wells that are known to have been sealed according to the Minnesota Well Code (MN Rules 4725).
 - *A land use/land cover map and table.** SWP Planner can provide a land cover map and data/table from federal sources. This data set should be used unless an alternative electronic data set that is more current and detailed is available. Assess and discuss changes in land use that could impact management of the DWSMA.

- *An inventory of the Inner Wellhead Management Zone (IWMZ).** A recent IWMZ inventory (within six years) for each primary well with management recommendations on the MDH form, or a table that summarizes the number and type of contaminant sources with the management recommendations must be included. Incorporate or reference the recommendation(s) from the IWMZ into the Part 2. IWMZ will be completed by the SWP Planner with assistance from the PWS staff. A copy will be provided to the PWS.

Technical Assistance Comments: This section encompasses the Potential Contaminant Source Inventory known as the PCSI. See the Scoping 2 Decision Notice Potential Contaminant Source Inventory Requirement Attachment(s) and endorsement procedures/fact sheets for further information. Utilize the PCSI geodatabase attribute template provided by SWP Planner. Management strategies must be developed for potential sources of contamination that pose a risk to the drinking water supply.

- *An existing comprehensive land-use map.**
- *An existing zoning map.**

Technical Assistance Comments: This information can indicate areas in the DWSMA where growth or the addition of potential contaminant sources is likely to occur. Furthermore, the review of local zoning and comprehensive land-use maps facilitates the evaluation of the degree of compatibility current and future land uses have with the PWS goals of protecting the drinking water wells and aquifer.

Public Utility Services

- *An existing map of transportation routes or corridors.**

Technical Assistance Comments: Highway and railroad corridors can be used to move hazardous materials. These corridors should be evaluated to determine the level of risk they pose for spills in the DWSMA, considering their proximity to the wells, the local topography, and geologic conditions.

- *An existing map of storm sewers, sanitary sewers, and public water supply systems.**

Technical Assistance Comments: Storm sewer systems and sanitary systems can be sources of contamination. Storm sewers are generally considered a public utility element designed to convey storm water runoff and use constructed features such as pipes and ponds. Evaluate the integrity and condition (age, type of material, any investigative work, etc.) of these systems in the DWSMA, noting the location of the water supply system and public water supply wells in relation to these potential contaminant sources. It is not necessary to include a map of your public water supply system in the Part 2 if you believe it would pose a threat to the security of your system.

SCOPING 2 DECISION NOTICE – MODERATE VULNERABILITY DWSMA

- *An existing map of the gas and oil pipelines used by gas and oil suppliers.

Technical Assistance Comments: Petroleum pipelines can be sources of contamination (excluding liquefied natural gas pipelines). If possible, describe what is generally known about the condition of these pipelines in the DWSMA, and the readiness of the PWS to respond to an emergency. It is not necessary to include a map in the Part 2 if you believe it would pose a security threat.

Required to be discussed in plan-

The following information (if existing) MUST be reviewed and discussed in the development of the Part 2. The Part 2 narrative must contain a description identifying whether/how the information may influence the management of the DWSMA. The data element may be located in the public domain. While the map or document reviewed is not required to be included in the Part 2, the source of the data element must be provided in the plan narrative by indicating a web address or reference to its location.

DATA ELEMENTS ABOUT THE PHYSICAL ENVIRONMENT –

Water Resources

- An existing map of the boundaries and flow directions of major watershed units and minor watershed units.

Technical Assistance Comments: Identify/list the major and minor watershed(s) in the Part 2 in order to become aware of local water planning efforts such as One Watershed One Plan (1W1P), Watershed Restoration and Protection Strategies (WRAPS), and/or Groundwater Restoration and Protection Strategies (GRAPS).

- An existing map showing those areas delineated as floodplain by existing local ordinances.

Technical Assistance Comments: Assess and describe any issues and management needed due to proximity to floodplain. Public water supply wells located in the floodplain should be evaluated to determine if they are meeting the flood protection requirements of the MN Well Code 4725.5850. Consider utilizing the sanitary survey report to identify potential issues with public water supply wells in floodplains.

DATA ELEMENTS ABOUT THE LAND USE –

Land Use

- An existing map of parcel boundaries.

Technical Assistance Comments: Parcel boundaries may have been used for delineation of the DWSMA in Part 1. In Part 2, parcel identification information must be included or linked and must be used for education or targeting activities or practices in addressing potential contaminants. In the narrative indicate if parcel data is available from the public domain (i.e. county GIS or associated website such as Beacon).

Part 1 -

The following information was reviewed and assessed in Part 1. The Part 1 should be used as a data source for the Part 2. The technical assistance comments provide the requirements for how this information must be discussed and/or included in the Part 2. Include relevant excerpts or summaries from the Part 1 where indicated. Or, if the Part 1 is included in the appendix that can be referenced.

DATA ELEMENTS ABOUT THE PHYSICAL ENVIRONMENT –

- 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.
- Existing records of the geologic materials penetrated by wells, borings, exploration test holes, or excavations, including those submitted to the department.
- Existing borehole geophysical records from wells, borings, and exploration test holes.
- Existing surface geophysical studies.

Technical Assistance Comments: Provide a summary in the plan narrative (few sentences/paragraph) of the Description of the Hydrologic Setting from Part 1. Provide the conclusions regarding the Well and DWSMA Vulnerabilities related to the geologic conditions and how these conditions influence the management of the DWSMA.

DATA ELEMENTS ABOUT THE LAND USE –

Public Utility Services

- An existing record of construction, maintenance, and use of the public water supply well and other wells within the DWSMA.

Technical Assistance Comments: Well construction records indicate what is known about the well(s) and can indicate if the well(s) have structural integrity or groundwater protection issues. Briefly summarize in the plan narrative what is discussed about each well from the Assessment of Well Vulnerability in Part 1.

DATA ELEMENTS ABOUT WATER QUANTITY –

Groundwater Quantity

- An existing list of wells covered by state appropriation permits, including amounts of water appropriated, type of use, and aquifer source.
- An existing description of known well interference problems and water use conflicts.
- An existing list of state environmental bore holes, including unique well number, aquifer measured, years of record, and average monthly levels.

Technical Assistance Comments: This information, if known, was incorporated into the Part 1 and was used to assist in determining hydrologic boundary conditions and area static water levels. In Part 2, information about Department of Natural Resources appropriation permit holders and any known well interference problems or water use conflicts must be discussed, including how this information could affect the management of the DWSMA.

DATA ELEMENTS ABOUT WATER QUALITY –

Groundwater Quality

- An existing summary of water quality data, including: 1. bacteriological contamination indicators; 2. inorganic chemicals; and 3. organic chemicals.
- An existing list of water chemistry and isotopic data from wells, springs, or other groundwater sampling points.
- An existing report of groundwater tracer studies.

Technical Assistance Comments: This information, if known, was incorporated into the Part 1. Provide a summary of the assessment of well vulnerability and/or any relevant chemistry and isotopic composition data available from PWS wells and other wells/sources.

- An existing site study and well water analysis of known areas of groundwater contamination.
- An existing property audit identifying contamination.
- An existing report to the Minnesota Department of Agriculture and the Minnesota Pollution Control Agency of contaminant spills and releases.

Technical Assistance Comments: This information, if known, was incorporated into the Part 1. Discuss whether there are groundwater contamination areas that could pose a risk to the public water supply well(s) now or in the future. Include any relevant data and how this information may affect the management of the DWSMA.

City of Ramsey Scoping 2 Meeting
Wellhead Protection (WHP) Planning Issues Summary

NOTE: 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.

Drinking Water Protection Issues Identified to Date:

- None

Water Quality Detections and Implications:

- The detection of tritium indicates city wells capture 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:

Water Quality Monitoring: Nitrate and nitrite, ammonia, sulfate, chloride, bromide, and tritium be analyzed during year five at Wells 1, 3, 4, 6, and 7. MDH may provide sample bottles and cover analytical costs, contingent upon funding. The city may need to collect the samples and ship them to MDH.

Other: None

**Scoping 2 Decision Notice Attachment
Potential Contaminant Source Inventory Requirements**

Moderately Vulnerable DWSMA

The following current and historical potential contaminant sources and related codes, materials and related codes, and activity status and related codes are required to be included in the potential contaminant source inventory. In cases where a materials identification is required, a materials designation and code must be assigned. All potential contaminant sources must be assigned an activity status and related code using state program descriptors or local knowledge.

Potential Contaminant Sources (PCS)

PCS Codes

<u>Material</u>	<u>Material Codes</u>
Above-Ground Storage Tank - Greater than 1100 gallons	AST
Chemicals	C000
Fertilizers	A050
Fuels, gases, and oils	F000
Hazardous substances	C001
Solvents and coatings	S000
Waste	W000
Agricultural Drainage Well (potential Class V)	ADW
Disposal Well (potential Class V)	DISWLL
Industrial Drainage Well (potential Class V)	INDW
Large Capacity Cesspool (potential Class V)	CVLCC
Large Capacity Waste Water Disposal Site (potential Class V)	CVWWD
Leaking Underground Storage Tank	LUST
Misc. Injection Well (potential Class V)	INJWLL
Motor Vehicle Waste Disposal Well (potential Class V)	CVMVW
Pipeline Facility	PLFAC
Potential Contamination Site ¹	PCS
Recharge Well (potential Class V)	RWLL
Reinjection Well (potential Class V)	RIWLL
Solid Waste Management Site	SWMS
Special Drainage Well (potential Class V)	SPDW
Spills	SPL
Storage or Preparation Area	STOR
Chemicals (include RMP facilities here)	C000
Fertilizers	A050
Fuels, gases, and oils	F000
Hazardous substances (include TRIS facilities here)	C001
Solvents and coatings	S000
Waste	W000

Potential Contaminant Sources (PCS)

PCS Codes

Material

Material Codes

Stormwater Injection Well (potential Class V)	SWI
Suspected Contaminant of Concern	SCC
Chemical	C000
Food, agricultural, and consumer products	A000
Fuels, gases, and oils	F000
Materials and minerals	M000
Pathogens	P000
Solvents and coatings	S000
Waste	W000
Underground Storage Tank	UST
Chemicals	C000
Fertilizers	A050
Fuels, gases, and oils	F000
Hazardous substances	C001
Solvents and coatings	S000
Waste	W000
Wells	WEL

Footnotes:

¹Potential Contamination Sites (PCS) include the following:

Brownfields (BMS)

Delisted State Superfund Sites (DPLP)

Federal Superfund Sites (NPL)

Hazardous Waste Investigative/cleanup (HWIC)

No Further Remedial Action Planned (NFRAP)

State Superfund Sites (PLP)

Suspected Hazardous Waste Site (CERCL)

Voluntary Investigative Cleanup (VIC)

Activity Status; Codes; and Descriptions

Status	Code	Description
Active	A	PCS is operative or in use. Examples: Animal feedlot is active. Well is in use or has maintenance permit.
Closed	C	PCS is inactive and is not open from a regulatory viewpoint. Example: Leaking storage tank site or landfill is closed.
Inactive	I	PCS is present but not currently active. Examples: Gravel pit is inactive. Well is un-used.
Removed	R	PCS has been removed. Example: Underground storage tank has been removed.
Unknown	U	Activity status of the PCS is not known definitely or has not been evaluated. Examples: Class V site status unknown. Well is thought to be sealed, but no official sealing record has been identified.