Village of Rantoul Public Works Department
200 W. Grove Ave., Rantoul, IL 61866
https://www.village.rantoul.il.us/

Village of Rantoul - Source Water Protection Plan

July 2023

Prepared by:

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Donohue Project No.: 14281

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ABBREVIATIONS

CWS	Community Water Supply
DO	Dissolved Oxygen
IEPA	Illinois Environmental Protection Agency
OPCC	Opinion of probable construction costs
PWS	Public Water Supply
SOC	Synthetic Organic Compounds
SWA	Source Water Assessment
SWPP	Source Water Protection Plan
WHPA	Well Head Protection Area
VOC	Volatile Organic Compounds

1. INTRODUCTION

1.1 BACKGROUND

This Source Water Protection Plan (SWPP) was prepared in collaboration with Village of Rantoul Public Works to fulfill the requirements of Title 35 of the Illinois Administrative Code, Part 604, Subpart C. This SWPP pertains to the following community water supply (CWS):

CWS Name: Village of Rantoul Public Water System

PWSID: IL0190650

1.2 OVERVIEW OF CONTENTS

Information presented in this document includes, but is not necessarily limited to:

- **Vision Statement** outlining the community water supply's commitment to protecting source water, and the resources and barriers in place for source water protection
- A **Source Water Assessment** including a discussion of the importance of the source water, identification of applicable users, delineation, and description of all individual sources (e.g., wells), summary of raw and finished water quality, identification of potential sources of contamination of the source water, analysis of susceptibility to contamination, and an explanation of the community water supply's efforts to protect its source water
- A list of the community water supply's **Objectives** for protecting source water
- An **Action Plan** outlining the actions needed to achieve the objectives for protecting source water and identifying:
    - Specific projects, programs, and activities
    - Schedule for implementation
    - Necessary resources for implementation
    - Potential obstacles to implementation

1.3 DEFINITIONS

Phase 1 WHPA: 1000 ft radius around a well head. This Well Head Protection Area applies to wells that draw from confined aquifers.

Phase 2 WHPA: is the area where an aquifer is recharged from. This WHPA applies to wells that draw from aquifers that are unconfined.

1.4 VILLAGE OF RANTOUL PUBLIC WORKS GENERAL INFORMATION

1.4.1 MISSION AND RESPONSIBILITIES

The Mission of the Water Division is to provide safe drinking water throughout the Village of Rantoul. Water is supplied by a water distribution system which complies with all applicable state and federal standards. The Water Division also manages the operation of the Water Treatment Plant.

In addition to providing drinking water, the Water Division also maintains fire hydrants throughout the village. This fire protection system contributes to the safety and welfare of the community and its property. It is supported by the substantial reserve of water.

1.4.2 OPERATIONAL SERVICES

The Village staff includes just over 60 employees working in seven program divisions, each serving a different function:

- Electric Division – To oversee new construction and repairs of the Village electrical system
- Gas Division – To oversee new construction and repairs of the Village gas system.
- Lift/Pump Station and Sanitary Mains – To maintain and repair sanitary mains and all lift stations associated with the Sanitary Division as well as storm mains throughout the Village
- Street Division – To plan and coordinate snow and ice removal, install traffic and street name signs, pothole patching, shoulder repair, and street sweeping.
- Wastewater Treatment Division – To operate the Wastewater Treatment Plant and provide a healthy environment through compliance with all the current state and federal standards
- Water Division – To maintain water mains, new water taps, and main water valve, repair and replace water meters throughout the Village, and repair/maintain fire hydrants
- Water Treatment Division – To provide safe drinking water for the community and operate the Water Treatment Plant

The Village's staffing organization is described and shown in Appendix A.

1.4.3 RANTOUL PUBLIC WORKS CONTACT INFORMATION

Business hours Monday – Friday (7:30am – 4:30pm) 217.892.6526

Jake McCoy

Email: jmccoy@village.rantoul.il.us

Address: 200 W. Grove Ave., Rantoul, IL 61866

Troy Sisk

Email: TSisk@village.rantoul.il.us

Address: 101 W Belle Ave, Rantoul, IL 61866

Public Information Website: www.village.rantoul.il.us/318/Public-Works

For questions about this Source Water Protection Plan, please contact the department at 217-892-6526

2. VISION STATEMENT

The Vision Statement (605.310) for this community water supply is as follows:

- The Village of Rantoul Public Works is committed to protecting groundwater resources for all its community water supplies as part of its larger mission of providing drinking water and wastewater services in an efficient, reliable, and safe manner that meets or exceeds the expectations of customers and satisfies all local, state, and federal requirements (604.310a)
- The Village maintains this commitment through [1] staffing operation of the public water systems with certified operators overseen by regional supervisors, [2] providing engineering services to oversee the design, permitting, and construction of projects that support that protection of source water and the safe and reliable operation of the community water supply, [3] dedicating a portion of its operating budget to well maintenance and repairs, [4] providing laboratory management and services to analyze samples from the community water systems and verify compliance with local, state, and federal regulations (604.310b)
- The Village uses a multi-barrier approach to safeguard the quality of the source water and finished water that consists of [1] siting wells in appropriate areas at a safe distance from potential sources of contamination, [2] where possible, siting wells with natural geologic protection of the aquifer, [3] adhering to all applicable regulatory requirements and best practices for well construction, [4] regular monitoring of the source water quality in accordance with all local, state, and federal requirements, [5] providing treatment for disinfection and, where applicable, aesthetic improvement of the water quality (i.e., iron removal or sequestration) or corrosion control, [6] routine monitoring of finished water quality
- Key Stakeholders involved in the development of this Vision Statement include:
    - Interim Public Works Director
    - Responsible Operators in Charge
    - Chief Operator
    - Operations Technician
    - Lab Supervisor

3. SOURCE WATER ASSESSMENT

3.1 IMPORTANCE OF THE SOURCE WATER

Table 3-1 CWS General Information

Type of Connection	Amount
Service Population Size	13,000
Residential Connections	5000
Commercial Connections	400
Industrial Connections	30

Narrative Discussion: The source water represents the water supply to the residential lots located in the Village of Rantoul. The water supply is important for everyday residential use including drinking, cooking, bathing, and landscape maintenance.

3.2 WATER SUPPLIES THAT OBTAIN WATER FROM THIS CWS

Table 3-2 Interconnections Information

Type of Interconnection	Amount
Current Interconnections	None
Planned Interconnections	None

3.3 SOURCE DELINEATION

3.3.1 COMMUNITY WATER SUPPLY OVERVIEW

The Village of Rantoul obtains its water from eight community water supply wells. Wells #5, #7, #8, #9, #10, #11, #12, and #13 provide an average of 1,500,000 gallons per day to 5,000 services or a population of 13,000. These wells all draw from the Mahomet Aquifer.

Figure 3-1 shows an overview of the Village of Rantoul system.

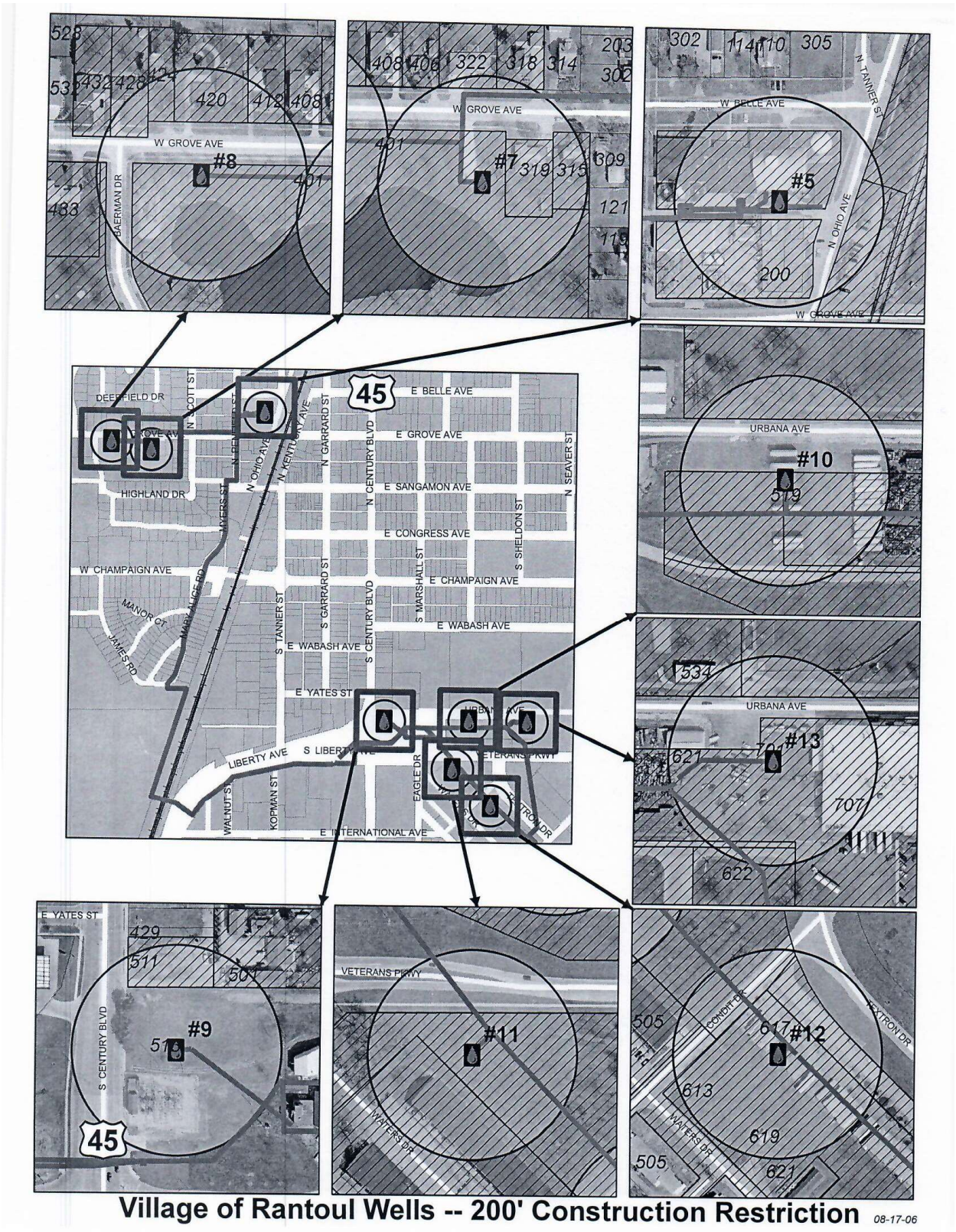


Figure 3-1 Village of Rantoul Water System Overview

3.3.2 WELL INFORMATION

Table 3-3 and Table 3-4 both contain information about the wells currently in use in the Village of Rantoul.

Table 3-3 Well Information

Item	Well 5	Well 7	Well 8	Well 9
Well ID	WL45055	WL45057	WL45058	WL45266
Location (Address)	280 N Ohio Ave	401 W Grove Ave	401 W Grove Ave	501 S Century Blvd
Location (Coordinates)	40°18'45.27"N, 88° 9'34.25"W	40°18'41.63"N, 88° 9'48.30"W	40°18'42.34"N, 88° 9'53.25"W	40°18'16.10"N, 88° 9'19.02"W
Current Status	Active	Active	Active	Active
Planned Status	Active	Active	Active	Active
Year Constructed	1963	1970	1970	1939
Depth (ft)	291	281	281	282.6
Casing Diameter (in)	10	16	16	10
Well Pump Capacity	N/A	1050 GPM	1050 GPM	500 GPM
Aquifer Type	Confined	Confined	Confined	Confined
Aquifer Description	Sand and gravel	Sand and gravel	Sand and gravel	Sand and gravel
Minimum Setback Zone	200 ft	200 ft	200 ft	200 ft
Maximum Setback Zone	None	None	None	None
Phase I WHPA	1,000 ft	1,000 ft	1,000 ft	1,000 ft
Phase II WHPA	N/A	N/A	N/A	N/A

Table 3-4 Well Information

Item	Well 10	Well 11	Well 12	Well 13
Well ID	WL45267	WL45268	WL45269	WL45270
Location (Address)	519 Urbana Ave	658 Veterans Pkwy	510 E Conduit Dr	701 W Urbana Ave
Location (Coordinates)	40°18'16.20"N, 88° 9'8.41"W	40°18'11.57"N, 88° 9'10.48"W	40°18'8.17"N, 88° 9'5.61"W	40°18'16.12"N, 88° 9'1.09"W
Current Status	Active	Active	Active	Active
Planned Status	Active	Active	Active	Active
Year Constructed	1940	1940	1940	1940
Depth (ft)	282	289	282	274
Casing Diameter (in)	10	10	12	12
Well Pump Capacity	500 GPM	500 GPM	500 GPM	500 GPM
Aquifer Type	Confined	Confined	Confined	Confined
Aquifer Description	Sand and gravel	Sand and gravel	Sand and gravel	Sand and gravel

Minimum Setback Zone	200 ft	200 ft	200 ft	200 ft
Maximum Setback Zone	None	None	None	None
Phase I WHPA	1,000 ft	1,000 ft	1,000 ft	1,000 ft
Phase II WHPA	N/A	N/A	N/A	N/A

3.3.3 CERTIFIED LABORATORIES

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
Phone (800) 752-6651

Illinois Environmental Protection Agency
1021 North Grand Avenue East, P.O. Box 19276
Springfield, IL 62794
Phone (217) 782-3397

TestAmerica Laboratories, Inc.
TestAmerica Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600

3.4 SOURCE WATER QUALITY

3.4.1 SAMPLE LOCATIONS

For the Village of Rantoul, source water sampling was taken from Well 5, Well 7, Well 8, Well 9, Well 10, Well 11, Well 12, and Well 13.

3.4.2 SOURCE WATER QUALITY DATA

Table 3-5 Well 5 Water Quality Data

Testing Parameter	Range	Trend
Hardness (total mg/L)	285	One Data Point (1983)
Alkalinity (mg/L)	375	One Data Point (1983)
pH	7.4 – 7.8	Decrease over 4 years
Temperature (°C)	13.5	One Data Point (1987)
Fluoride (mg/L)	0.19 – 0.26	Increase over 4 years
Chloride (mg/L)	0 – 1.1	Increase over 4 years

Coliform	0 – 6	Decrease over 4 years
VOCs & SOCs	Not detected	
Lead (µg/L)	6	Detected once (1983)
Copper (µg/L)	0	No significant change over 4 years
Sulfate (mg/L)	0	No significant change over 4 years
Sodium (mg/L)	28	No significant change over 4 years
Iron (µg/L)	1800 – 1895	No significant change over 4 years
Barium (µg/L)	82 – 98	Decrease over 4 years
Manganese (µg/L)	68 – 86	Increase over 4 years
Zinc (µg/L)	0 - 48	Decrease over 4 years
PFAS Chemicals	Not Detected	

Table 3-6 Well 7 Water Quality Data

Testing Parameter	Range	Trend
Hardness (total mg/L)	305 - 315	No significant change over 2 years
Alkalinity (mg/L)	367 – 465	Increase over 7 years
pH	6.8 – 7.46	No significant change over 7 years
Temperature (°C)	12.7 – 14	Decrease over 7 years
Fluoride (mg/L)	0.2 – 0.21	No significant change over 7 years
Chloride (mg/L)	0 – 1.7	No significant change over 7 years
VOCs & SOCs	Not detected	
Lead (µg/L)	0	No significant change over 7 years
Copper (µg/L)	0 – 36	Increase over 7 years

Sulfate (mg/L)	0 – 68	Increase over 7 years
Sodium (mg/L)	28 – 36	Decrease over 7 years
Iron (µg/L)	1013 – 1200	No significant change over 7 years
Barium (µg/L)	108 – 117	No significant change over 7 years
Manganese (µg/L)	40 – 45	No significant change over 7 years
Zinc (µg/L)	0	No significant change over 7 years
PFAS Chemicals	Not Detected	

Table 3-7 Well 8 Water Quality Data

Testing Parameter	Range	Trend
Hardness (total mg/L)	307	One Data Point (1982)
Alkalinity (mg/L)	418	One Data Point (1982)
pH	7.2 – 7.4	No significant change over 4 years
Temperature (°C)	13.5	One Data Point (1987)
Fluoride (mg/L)	0.22-0.25	No significant change over 4 years
Chloride (mg/L)	0 – 1.8	Decrease over 4 years
VOCs & SOCs	Not detected	
Lead (µg/L)	0	No significant change over 4 years
Copper (µg/L)	0	No significant change over 4 years
Sulfate (mg/L)	0 - 18	Decrease over 4 years
Sodium (mg/L)	36 - 41	Decrease over 4 years
Iron (µg/L)	2061 - 2190	Increase over 4 years
Barium (µg/L)	144 - 174	Decrease over 4 years

Manganese (µg/L)	60 - 79	Increase over 4 years
Zinc (µg/L)	0	No significant change over 4 years
PFAS Chemicals	Not Detected	

Table 3-8 Well 9 Water Quality Data

Testing Parameter	Range	Trend
Hardness (total mg/L)	313	One Data Point (1984)
Alkalinity (mg/L)	377	One Data Point (1984)
pH	7.9	One Data Point (1984)
Temperature (°C)		
Fluoride (mg/L)	0.25	One Data Point (1984)
Chloride (mg/L)	0	One Data Point (1984)
VOCs & SOCs	Not detected	
Lead (µg/L)	0	One Data Point (1984)
Copper (µg/L)	0	One Data Point (1984)
Sulfate (mg/L)	0	One Data Point (1984)
Sodium (mg/L)	27	One Data Point (1984)
Iron (µg/L)	1600	One Data Point (1984)
Barium (µg/L)	119	One Data Point (1984)
Manganese (µg/L)	29	One Data Point (1984)
Zinc (µg/L)	5	One Data Point (1984)
PFAS Chemicals	Not Detected	

Table 3-9 Well 10 Water Quality Data

Testing Parameter	Range	Trend
Hardness (total mg/L)	305	One Data Point (1984)
Alkalinity (mg/L)	358	One Data Point (1984)
pH	7.9	One Data Point (1984)
Fluoride (mg/L)	0.25	One Data Point (1984)

Chloride (mg/L)	0	One Data Point (1984)
VOCs & SOCs	Not detected	
Lead (µg/L)	0	One Data Point (1984)
Copper (µg/L)	0	One Data Point (1984)
Sulfate (mg/L)	0	One Data Point (1984)
Sodium (mg/L)	27	One Data Point (1984)
Iron (µg/L)	1900	One Data Point (1984)
Barium (µg/L)	107	One Data Point (1984)
Manganese (µg/L)	35	One Data Point (1984)
Zinc (µg/L)	31	One Data Point (1984)
PFAS Chemicals	Not Detected	

Table 3-10 Well 11 Water Quality Data

Testing Parameter	Range	Trend
Hardness (total mg/L)	308	One Data Point (1984)
Alkalinity (mg/L)	369	One Data Point (1984)
pH	7.9	One Data Point (1984)
Temperature (°C)		
Fluoride (mg/L)	0.25	One Data Point (1984)
Chloride (mg/L)	0	One Data Point (1984)
Lead (µg/L)	0	One Data Point (1984)
Copper (µg/L)	0	One Data Point (1984)
Sulfate (mg/L)	0	One Data Point (1984)
Sodium (mg/L)	26	One Data Point (1984)
Iron (µg/L)	2000	One Data Point (1984)
Barium (µg/L)	94	One Data Point (1984)
Manganese (µg/L)	34	One Data Point (1984)
Zinc (µg/L)	9	One Data Point (1984)

PFAS Chemicals	Not Detected	

Table 3-11 Well 12 Water Quality Data

Testing Parameter	Range	Trend
Hardness (total mg/L)	298	One Data Point (1984)
Alkalinity (mg/L)	362	One Data Point (1984)
pH	7.9	One Data Point (1984)
Temperature (°C)		
Fluoride (mg/L)	0.25	One Data Point (1984)
Chloride (mg/L)	0	One Data Point (1984)
Lead (µg/L)	0	One Data Point (1984)
Copper (µg/L)	0	One Data Point (1984)
Sulfate (mg/L)	0	One Data Point (1984)
Sodium (mg/L)	28	One Data Point (1984)
Iron (µg/L)	1600	One Data Point (1984)
Barium (µg/L)	125	One Data Point (1984)
Manganese (µg/L)	27	One Data Point (1984)
Zinc (µg/L)	22	One Data Point (1984)
PFAS Chemicals	Not Detected	

Table 3-12 Well 13 Water Quality Data

Testing Parameter	Range	Trend
Hardness (total mg/L)	279	One Data Point (1984)
Alkalinity (mg/L)	325	One Data Point (1984)
pH	8	One Data Point (1984)
Temperature (°C)		
Fluoride (mg/L)	0.25	One Data Point (1984)
Chloride (mg/L)	0	One Data Point (1984)
Lead (µg/L)	0	One Data Point (1984)

Copper (µg/L)	0	One Data Point (1984)
Sulfate (mg/L)	0	One Data Point (1984)
Sodium (mg/L)	21	One Data Point (1984)
Iron (µg/L)	1500	One Data Point (1984)
Barium (µg/L)	93	One Data Point (1984)
Manganese (µg/L)	27	One Data Point (1984)
Zinc (µg/L)	7	One Data Point (1984)
PFAS Chemicals	Not Detected	

3.4.3 SOURCE WATER QUALITY TRENDS

- Well 5 Trends
  - Most parameters of water quality presented in table 3-5 don't have enough data points to establish trend.
  - Chloride, iron, and manganese all slightly increase but there are only 2 data points, so confidence is low.
  - Zinc seems to decrease but there are only 2 data points, so confidence is low.
- Well 7 Trends
  - Zinc and lead never detected.
  - Alkalinity, copper, and sulfate seems to increase.
  - Temperature and sodium seem to decrease.
  - Most other parameters in table 3-6 show no significant change over 7 years.
- Well 8 Trends
  - Most parameters of water quality presented in table 3-7 don't have enough data points to establish trend.
  - Chloride, sodium, iron, barium, and manganese all seem to decrease, but there are only 2 data points, so confidence is low
- Well 9 Trends
  - Most parameters of water quality presented in table 3-8 don't have enough data points to establish trend.
- Well 10 Trends
  - Most parameters of water quality presented in table 3-9 don't have enough data points to establish trend.
- Well 11 Trends
  - Most parameters of water quality presented in table 3-10 don't have enough data points to establish trend.
- Well 12 Trends
  - Most parameters of water quality presented in table 3-11 don't have enough data points to establish trend.
- Well 13 Trends

- Most parameters of water quality presented in table 3-12 don't have enough data points to establish trend.

3.5 FINISHED WATER QUALITY

3.5.1 TREATMENT OVERVIEW

At the water treatment plant, the water is aerated to assist in removing iron, softened to reduce mineral hardness, filtered to remove any other impurities, and disinfected to protect against any bacteria.

3.5.2 SAMPLE LOCATIONS

The Village of Rantoul Water Plant Finished water quality sampling was done via sampling outlet at the Water Treatment Plant in Rantoul.

Table 3-13 Water Plant Finished Water Quality Data

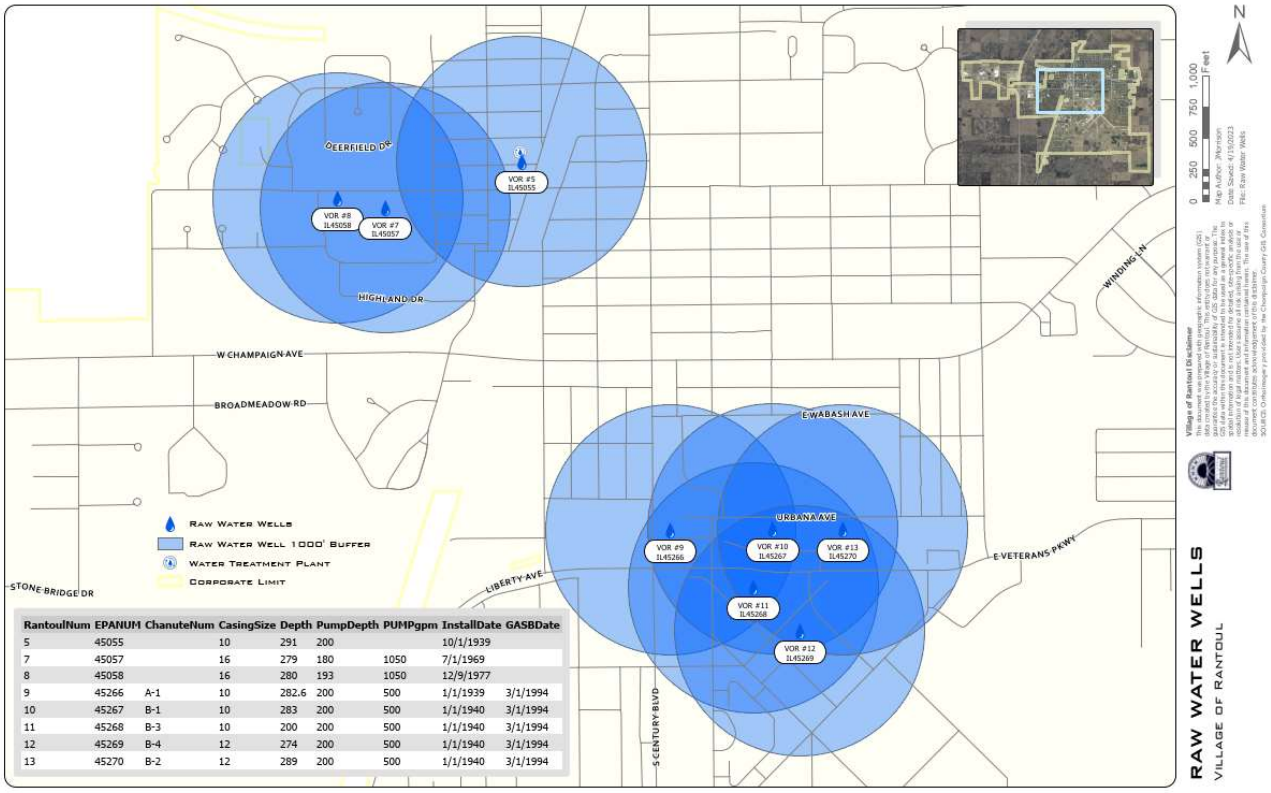
Testing Parameter	Range	Trend
Chlorine (ppm)	0.3 – 0.036	No significant change over 3 years
TTHMS (ppb)	8 – 39.1	Decrease over 5 years
Haloacetic Acids (HAA5) (ppb)	4 – 15.7	Decrease over 5 years
Arsenic (µg/L)	0 – 0.88	Slight increase over 12 years
Barium (µg/L)	15 - 25	Slight decrease over 12 years
Beryllium (mg/L)	0	Never detected
Cadmium (mg/L)	0	Never detected
Chromium (mg/L)	0	Never detected
Cyanide (mg/L)	0	Never detected
Fluoride (mg/L)	0.92 – 1.37	No significant change over 12 years
Iron (mg/L)	0	Never detected
Manganese (ppm)	1.3 - 13.1	Decrease over 2 years
Mercury (mg/L)	0	Never detected
Nitrate as nitrogen (mg/L)	1 - 2	Decrease over 5 years
Selenium (µg/L)	0	Never detected
Sodium (mg/L)	23 - 31	No significant change over 12 years
Sulfate (mg/L)	0 – 11.4	Only detected once in 12 years
Thallium (mg/L)	0	Never detected

Zinc (mg/L)	0	Never detected
Radium (pCi/L)	0.82	Detected once (2014)
Gross Alpha Emitters (pCi/L)	2.7	Detected once (2014)
Copper (ppm)	0.047 – 1.3	Decrease over 3 years
Lead (ppm)	1.3 – 1.6	Decrease over 3 years

3.5.3 POTENTIAL SOURCES OF CONTAMINATION

3.5.4 PHASE I WHPA

Figure 3-2 shows 1000 ft radius from each well head. Within these radii are residential housing, below ground fuel storages, above ground fuel storage, a hardware store, electrical generators/substations, auto repairs, above or below ground fuel storage, vehicle sales, auto bodies, stores/sales, printing, small engine repair, four manufacturing processes, a military installation, a former petroleum storage facility, a treated wood/lumber yard, and a dry cleaner. No farms or locations listed on Toxic Release Inventory on EPA DWMAPS were found within those circles.



RantoulNum	EPANUM	ChanuteNum	CasingSize	Depth	PumpDepth	PUMPgpm	InstallDate	GASBDate
5	45055		10	291	200		10/1/1939	
7	45057		16	279	180	1050	7/1/1969	
8	45058		16	280	193	1050	12/9/1977	
9	45266	A-1	10	282.6	200	500	1/1/1939	3/1/1994
10	45267	B-1	10	283	200	500	1/1/1940	3/1/1994
11	45268	B-3	10	200	200	500	1/1/1940	3/1/1994
12	45269	B-4	12	274	200	500	1/1/1940	3/1/1994
13	45270	B-2	12	289	200	500	1/1/1940	3/1/1994

Figure 3-2 Village of Rantoul 1000 ft Radius

Table 3-14 Potential Contamination Sources

Well	Phase I 1000 radius setback	Phase II WHPA	Greater Surrounding Area
Well 5	Auto repair, power company, fuel storage	N/A	Auto repair, hardware store, fuel/oil companies
Well 7	Power company, lumber company	N/A	Fuel/oil companies, auto repair, auto sale, dry cleaners, hardware/lumber company, stores
Well 8	N/A	N/A	Fuel/oil companies, auto repair, auto sale, dry cleaner, hardware/lumber company, stores
Well 9	Gas station, auto repair/parts, auto sale, store/sales, printing	N/A	Power company, auto parts, military installation
Well 10	Gas station, electrical substation, power company, military installation, store/sales	N/A	Auto parts/sales, auto repair, military installation, printing
Well 11	Military installation, auto repair, electrical substation, power company	N/A	Gas station, fuel/oil companies, store, auto sales, auto parts
Well 12	Power company, auto parts, military installation	N/A	Gas station, auto repair, electrical substation, auto parts/sales, printing, store
Well 13	Power company, auto parts, military installation	N/A	Gas station, auto repair, electrical substation, auto parts/sales, printing, store

3.5.5 PHASE II WHPA

Phase II WHPA is not applicable for the Village of Rantoul system because all the wells draw from a confined aquifer.

3.5.6 GREATER SURROUNDING AREA

Within 2 miles of these wells are various commercial zones with dry cleaners, stores, printing, auto parts/sales, and hardware/lumber companies. There are also a few gas stations, a power company, a military installation, and fuel/oil companies. A set of railroad tracks also runs through the town. Otherwise, it is generally residential.

3.6 SUSCEPTIBILITY TO CONTAMINATION

The Illinois EPA has determined that all the wells in use in the Village of Rantoul are not susceptible to IOC, VOC, and SOC contamination. This determination is based on several criteria including monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and the available hydrogeologic data for the wells.

3.7 EFFORTS TO PROTECT SOURCE WATER

Table 3-15 Protecting Source Water

Category	Efforts to Protect Source Water
Operation & Maintenance	Water supply staff encouraged to review their cross-connection control program to ensure that it remains current and viable. The Village may wish to enact a "maximum setback zone" ordinance; provides additional protection up to a fixed distance from the wells.
Water Quality Monitoring	Laboratory services and routine sampling. Contracting with external certified labs when required.
Planning & Administration	Emergency Response Plan has been completed and is available upon request. The Village is developing a source water protection program. Water supply staff may wish to revisit their contingency planning documents.

4. SOURCE WATER PROTECTION PLAN OBJECTIVES

- Developing and maintaining a vision statement
- Ongoing source water assessment - collecting data that supports source water quality monitoring and protection already doing more than min testing/monitoring results for our systems, will keep current practices.
- Follow best practices to protect ground water.
- Ongoing source water assessment - tracking potential sources of contamination. Review well set back zones for potential sources of contamination every 5 years with the SWPP update.
- Enhancing physical protection of source water as needed.
- Promote public health, economic development, and community infrastructure by insuring potable drinking water at reasonable costs for all residents.
- Effectively prepare the community of the Village of Rantoul for disruptions to the water distribution system.

5. ACTION PLAN

Table 5-1 Action Plan

Action Item Description	Objectives Addressed	Current Efforts	Schedule	Required Resources	Obstacles
Review and Update Vision statement	Developing and maintaining a vision statement	Hired consultants to develop SWPP	Revise with SWPP update (Every 5 years)	The Village Staff Meeting	Scheduling with staff members
Update SWPP	Developing and maintaining a vision statement, ongoing source water assessment	Developing SWPP	Revise every 5 years	The Village Staff time and meetings	The Village staff capacity
Outreach to The Village customers	Support Departmental efforts to Increasing Public Awareness	Public Works website	Ongoing	Newsletter, Website, or Contact from The Village	Non-receptive/engaged customers
Promote interdepartmental efforts to protect source water.	Support other Departmental efforts to increase public awareness	Share other departments information on programs	Ongoing	Newsletter, Website, or Contact from The Village	Non-receptive/engaged customers
Make water quality reports available to customers	Support Departmental efforts to Increasing Public Awareness	The Village provides yearly CCRs on its website under water quality	Annually provide reports	Website, Laboratory services	None
Security Improvements (fencing, cameras)	Enhancing physical protection of source water	Well house planned for well 3	Review when implementing a CIP project for a well.	The Village construction team's time, materials	Construction team's time
Revise Source Water Assessment	Ongoing source water assessment	Water quality data collection and analysis	Review with SWPP (Every 5 years)	Laboratory services, data analysts, The Village staff Meeting	Staff Coordination, Staff capacity
Monitor Static and pumping levels in wells	Ongoing source water assessment	Well Pump testing done during installation, and reported on monthly	Ongoing	Data collection, the Village monthly well visits	Staff capacity
Water Quality Monitoring	Ongoing source water assessment	The Village currently tests for many analytes regularly	Ongoing	Laboratory services	Laboratory testing parameter limitations

Track and document progress on action plan implementation	Promote public health, economic development, and community infrastructure by insuring potable drinking water at a reasonable cost for all residents.	Developing SWPP Action plan	Review every 2.5 years	The Village staff time	interdepartmental coordination

Appendix A:

Village of Rantoul Organization Chart

VILLAGE OF RANTOUL
Public Works
Organizational Chart

Jake McCoy
Interim Director of Public Works
Email

???
Assistant Director of Public Works
Email

PROFESSIONAL SERVICES

Jay Pacunas
Office Manager
Email

Nicole Quinlan
Administrative Assistant
Email

Rich Carr
Inventory Specialist
Email

AIRPORT / EDC

Carson Vericker
Airport & EDC Manager
Email

TECHNICAL SERVICES

Jonathan Morrison
Public Works Systems Supervisor
Email

Haley Turner
Lab Technician
Email

UTILITY BILLING

Michele Krickovich
Utility Office Supervisor
Email

Melissa Judy
Utility Clerk
Email

Myka Fawbush
Utility Clerk
Email

STREET & SYSTEMS

Mike Esslinger
Street & Systems Foreman
Email

Clay Evans
Operator
Email

Brian Bina
Operator
Email

Mike Smith
Operator
Email

Josh Kopmann
Operator
Email

Tyler Sisk
Operator
Email

Jon Marchakitus
Operator
Email

Amos Huckstep
Operator
Email

Rex Brooks
Operator
Email

Chris Schoonover
Operator
Email

???
Operator
Email

WATER

Troy Sisk
Water Treatment Chief of Operations
Email

John Davis
Operator
Email

Mark Owen
Operator
Email

Brian Brooks
Operator
Email

Curtis Kelley
Operator
Email

Levi Etheridge
Operator
Email

Matt Colunga
Operator
Email

WASTEWATER

Wastewater Plant
Chief of Operations
Email

Curtis Gaston
Operator
Email

Lance Cloninger
Operator
Email

Travis Wilson
Operator
Email

Brandon Dolan
Operator
Email

???
Operator
Email

SANITARY

Travis Ramme
Pump Stations & Sanitary Division Chief
Email

Shawn Franzen
Operator
Email

Kurt Wolken
Operator
Email

Mike Goodwin
Operator
Email

Jeff Tucker
Operator
Email

GAS / HVAC

Jay Schroeder
Gas Division Chief
Email

Mike Crow
Gas Technician
Email

Brandon Lord
Gas Technician
Email

???
Gas Technician
Email

Tyler Oser
HVAC Technician
Email

Ryan Masterson
Lineman
Email

Klayton Grove
Apprentice Lineman
Email

Matt Moore
Apprentice Lineman
Email

ELECTRIC

Matt Caldwell
Electric Distribution Forman
Email

Murray Clifton
Electric Technician
Email

John Schluter
Lineman
Email

Charlie Krickovich
Lineman
Email

Teune Vanarath
Lineman
Email

Wade Blankenship
Lineman
Email

Matt Schluter
Lineman
Email

Kyle Grice
Apprentice Lineman
Email

Nicholas Sondag
Apprentice Lineman
Email

Randy Etheridge
Electric Technician Forman
Email

Keegan Combest
Electric Technician
Email

Geoff Wahl
Electric Technician
Email

Austin Shreves
Electric Technician
Email

Kevin Bird
Electric Technician
Email

Dean Miller
Apprentice Technician
Email

Last Edited: February 16, 2023; J Morrison

Appendix B:

IEPA Correspondence

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397

JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

July 28, 2021

Facility Number: 0190650
Rantoul – Champaign County

Public Water Supply Evaluation Report – Noncompliance Advisory

Village President and
Board of Trustees
Village of Rantoul
333 S. Tanner
Rantoul, IL 61866

Ladies and Gentlemen:

An engineering evaluation of the Rantoul Public Water Supply has been completed by Engineer Shane McCulley. Mr. McCulley inspected the water supply facilities on July 14, 2021, at which time he was accompanied by Troy Sisk, Certified Operator.

These evaluations are periodically conducted to determine if your public water supply complies with the requirements of the Environmental Protection Act, 415 ILCS 5/1 et seq. (Act), Title 35 of the Illinois Administrative Code (IAC), and related standards. The deficiencies determined as a result of this evaluation are outlined in Attachment A. Attachment B includes suggested improvements. A copy of the evaluation report is also enclosed.

A written reply directed to this office at 2125 South First Street, Champaign, Illinois 61820, indicating the plan of action to correct the deficiencies listed in Attachment A is required within 45 days. The reply must include a specific date by which each deficiency will be corrected. A response to the items in Attachment B is also requested.

This letter is a Noncompliance Advisory and is not a Violation Notice as specified in Section 31(a)(1) of the Act. If you do not adequately respond to the Noncompliance Advisory, the Illinois EPA may issue a formal violation notice according to Section 31(a)(1) of the Act.

We appreciate the courtesy extended Mr. McCulley by Mr. Sisk. If you have any questions regarding this letter or other water supply matters, please contact this office at (217) 278-5800.

Sincerely,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

Steve Vance
Field Operations Section Manager
Division of Public Water Supplies
Illinois Environmental Protection Agency

SM:

Attachments A and B

cc: Village Clerk
Troy Sisk, Water Plant Superintendent
Champaign County Health Department
Troy Sisk, Certified Operator
Illinois State Water Survey

Facility Number: 0190650
Rantoul – Champaign County

ATTACHMENT A

SUMMARY OF DEFICIENCIES

The current evaluation of your community water supply indicates that the following conditions appear to violate Title IV of the Illinois Environmental Protection Act 415 ILCS 5/1-58.17 (2018) (The Act), 35 Illinois Administrative Code (35 IAC), the Recommended Standards for Water Works (2012) (Standards) and related standards.

FINISHED WATER STORAGE

1) Install an additional 24-mesh screen inside the 0.3 MG elevated storage tank overflow line to prevent contamination as required by Section 18 of the Illinois Environmental Protection Act, 415 ILCS 5/18, 35 IAC Section 604.1305.e.1 and the Recommended Standards for Water Works, 2012 Edition, Part 7.0.7 (c).

MONITORING AND REPORTING; DATA VERIFICATION

2) Community water supplies distributing water without a free chlorine residual are required to develop a Nitrification Action Plan (NAP) [Section 19 of the Act; 35 Ill. Adm. Code 604.140]. The NAP must contain plans for monitoring total ammonia-N, free ammonia-N, nitrite-N, nitrate-N, monochloramine residual, dichloramine residual, and total chlorine residual. For each chemical, levels must be set that, when exceeded, stipulate responses or corrective actions that must be initiated.

3) Provide testing equipment for the measurement of nitrification-related chemicals which utilizes a method, or methods, approved in Standard Methods for the Examination of Water and Wastewater. Ensure that the test equipment is capable of performing the following tests [Section 19 of the Act; 35 Ill. Adm. Code 604.140] at the frequencies described in Chapter 18 of the *Sample Collector's Handbook*:

   a) Ammonia-N, total;
   b) Ammonia-N, free;
   c) Nitrite-N;
   d) Nitrate-N;
   e) Monochloramine;
   f) Dichloramine;
   g) Chlorine, total;
   h) Chlorine, free, using Freechlor F® or similar reagent to avoid interference with ammonia.

4) In addition to the information being provided on the Monthly Operational Reports (MOR) submitted to this office, include the following changes [Section 19 of the Act; 35 IAC, Sections 604.165]:

   a) Signature of the responsible operator in charge;
   b) Certification number of the responsible operator in charge;
   c) Date(s) on which the monthly bacteriological samples are taken.

MANAGEMENT AND OPERATIONS

5) Submit a revised Notification of Ownership or Responsible Personnel form [Section 18 of the Act, 35 IAC 603.105]. Notification of changes in responsible personnel is required to be made within 15 days of the change. A blank form is enclosed. Submit the completed form to:

   Illinois EPA
   Bureau of Water/DPWS #19
   1021 North Grand Ave. East
   P.O. Box 19276
   Springfield, IL 62794-9276

6) Establish and routinely update an emergency management plan which is adequate for the provision of drinking water under emergency circumstances as required by Section 18(a) of the Illinois Environmental Protection Act, 415 ILCS 5/18, 35 IAC Section 604.135.d. The plan should include, but is not limited to:

   a) water plant operating procedures;
   b) emergency notification procedures;
   c) a list of state, county, and local emergency contacts;
   d) personnel responsible for operation and response actions;
   e) assessment of alternate water sources that could be made available if the basic water system is incapacitated;
   f) actions that shall be taken in case of unanticipated loss of key personnel, and;
   g) an inventory of emergency equipment that could be made available to the water system.

   Additionally, care should be given to identify and anticipate potential natural and human-caused risks to the water system; measures for averting or avoiding these risks; and a training plan that assures preventative awareness by all personnel.

Facility Number: 0190650
Rantoul – Champaign County

ATTACHMENT B

REMINDERS AND/OR RECOMMENDED IMPROVEMENTS

The following recommended improvements are intended to increase the Technical, Managerial and/or Financial Capacity of your water system:

TREATMENT

1) Provide secondary containment around the hydrofluosilicic acid day tank.

DISTRIBUTION SYSTEM

2) Exercise all valves on the distribution system at least annually to ensure that the valves are in working order for use when needed. Repair or replace any main valves that are found to be inoperable.

FINISHED WATER STORAGE

3) When water main repair, replacement or flushing is planned, notification of potentially affected residents must be conducted to provide information regarding potential sediment, possibly containing lead, that may result from the repair or replacement project. Notification should include recommendations that may reduce the potential lead exposure, including flushing of service lines for at least three minutes prior to use, cleaning of faucet aerator screens, and/or replacement of the lead service line.

4) It is recommended that maintenance and routine updating of the Lead and Copper materials inventory for the distribution system be conducted. The materials inventory should include locations of lead service lines, along with maps designating the length, size and types of all distribution mains. The information can be used in revising the lead and copper sample site plan subsequent to lead service line removal projects and to comply with monitoring requirements included in the Lead and Copper Rule.

5) Take action to reduce the water loss that is apparently occurring in your distribution system. Even after excluding the water used by your large water customers the municipality's average daily per capita usage is approximately 111 gallons, which is high for similar communities. Water loss was reported to be approximately 28% of the total water produced. The goal should be a water loss of no more than 15%. Reducing the water loss could lead to shorter run times for the wells and thus reduce power consumption and chemical costs.

6) If the elevated tanks do not already have tank mixing equipment, consider installing this improvement in order to eliminate thermal stratification, reduce nitrification potential, inhibit the formation of trihalomethane disinfection byproduct, and promote better preservation of chlorine residuals for safer water quality.

MONITORING AND REPORTING; DATA VERIFICATION

7) Consider taking ammonia measurements in the raw water from each well. Periodic data points like these can help ensure the reliability of disinfection utilizing chloramination chemistry by anticipating the average quantity of ammonia in each well and adjusting chlorine dosages accordingly.

8) Install a downturned smooth-nosed sample tap to replace the existing non-smooth-nosed sample tap on Well #8.

MANAGEMENT AND OPERATIONS

9) Each community water supply that treats surface or groundwater as a primary or emergency supply of water must develop a source water protection plan that contains the following minimum elements [35 Ill. Adm. Code 604.305]:

   a) a vision statement as set forth in Section 604.310;
   b) a source water assessment as set forth in Section 604.315;
   c) the objectives set forth in Section 604.320; and
   d) an action plan as set forth in Section 604.325.

   A community water supply in existence as of July 26, 2019, must develop and submit to the Agency for approval a source water protection plan within the following time frame after July 26, 2019 [35 Ill. Adm. Code 604.330(b)]:

      1) within 3 years, for a community water supply serving a population *greater* than **50,000** persons;
      2) within 4 years, for a community water supply serving a population of *greater* than **3,000** *but less than or equal* to **49,999** persons; or
      3) within 5 years, for a community water supply serving a population of *less than or equal* to **2,999** persons.

10) Source water protection is one of the four pillars in the Multiple Barrier Approach to drinking water safety. Along with a source water protection plan, effective treatment design and proper disinfection, the Agency would like to emphasize the assurance of distribution system sanitary integrity. This emphasis encourages operators to take chlorine residual samples at various locations in the far areas of the system at frequencies above those required for Monthly Operating Reports (MOR). Additional samples taken in this fashion are not necessarily required for submittal on the MOR. However, if multiple samples are taken during a day and only one is reported, the lowest residual measured, along with time and location, should be the one included. Alternatively, the operator can choose to report all chlorine residual samples taken during a day in order to demonstrate how residuals behave throughout the distribution system.

FY2022

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF PUBLIC WATER SUPPLIES

PUBLIC WATER SUPPLY DATA SHEET

Facility #: 0190650 (W0190650002) **County and Supply:** Champaign – Rantoul

Date of Inspection: July 13, 2021 **EPA Lab Fee Participant:** No
Exemption Status: None **Water Plant Phone:** 217/892-2710
Public Works Phone: 217/892-2178
Village Hall Phone: 217/893-1661

Plant ROINC: Troy Sisk, *A* ..... **Cell Phone:** 217/778-5734
Email: tsisk@village.rantoul.il.us
Distribution System Operator: Mike Esslinger, *D* ..... **Cell Phone:** 217/841-3775

<vacant>, Public Works Director ..... **Cell Phone:**
Email:
Charles K. Smith, Mayor ..... **Cell Phone:** 217/841-3765
Email: cksmith@village.rantoul.il.us

Send Mail To: Charles K. Smith; Village of Rantoul, P.O. Box 38; Rantoul, IL 61866

Interviewed: Troy Sisk

Brief description of supply: Water obtained from eight drift wells, passes through an aerator, is treated with alum, and can be directed to either of the two lime softening treatment plants. The plants are located in the same building. At the west plant, approximately 70% of the water passes through two parallel upflow clarifiers and 30% passes to two rectangular setting basins into which the effluent of the upflow clarifiers also passes. Lime is added at the clarifiers. Carbon dioxide is added to the softened water before the settling basins. Water exiting the settling basins is treated with phosphate, fluoridated, filtered, chlorinated, passes to the 250,000-gallon clearwell, and is pumped to the distribution system and elevated tanks. At the east plant, approximately 70% of the water passes through one Claricone clarifier and 30% passes to two rectangular settling basins into which the effluent of the Claricone clarifier also passes. Lime is added at the Claricone clarifier. Carbon dioxide is added to the softened water before the settling basins. Water exiting the settling basins is treated with phosphate, fluoridate, filtered, chlorinated, passes to separate 250,000 gallon clear well, and is pumped to the distribution system and elevated tanks. The Village has three elevated tanks (1.0 MG, 0.5 MG, and 0.3 MG). Three other elevated tanks at Chanute were razed in 2013.

Capacities: **Wells (8): Rated 5,400 gpm Actual 4,800 gpm**
Aerator: 3,600 gpm
Filters (10): Each Rated 450 gpm
High Service Pumps (6): Each Rated 1,200 gpm

Number of Services: Direct **3,400** – 100% Metered

Adequacy of Supply:
Annual Pumpage in Million Gallons: **617** Average Daily Pumpage in Million Gallons: **1.69**
Maximum Average Seven Day Pumpage in Million Gallons: **1.83** between **July 6 to 12, 2020**
Estimated Population: **13,000** Average Daily per Capita Consumption in Gallons: **111***
Hours Required to Produce Average Daily Consumption @ **3,600 gpm: 7.8**
Hours Required to Produce Maximum Average Daily Consumption @ **3,600 gpm: 8.6**
Large Consumers: **Pork Processing plant (250,000 gpd)**

Emergency Water and Power Sources: A diesel generator is provided at the water plant that can power the west or the east treatment plant including the three wells in Rantoul. The generator is exercised monthly under load.

**Removes large consumer usage*

CHANGES IN WATERWORKS

No recommendations were made as a result of the October 29, 2014 evaluation.

The following suggestions were made:

1) Establish a scheduled inspection program for the elevated tanks so that maintenance on the steel tanks is performed as warranted. Steel tanks should be examined at a maximum of five-year intervals dependent on the findings of the previous inspection. **The 0.3 MG elevated tank is tentatively scheduled for inspection in Q3 or Q4, 2021. The other two elevated tanks were painted in 2019 and inspected in July 2021.**

2) Exercise all valves on the distribution system at least annually to ensure that the valves are in working order for use when needed. **Not all isolation valves are exercised on an annual basis.**

SUMMARY OF FINDINGS

The following deficiencies or issues of note were found during the inspection:

1) Not all isolation valves are exercised on an annual basis.

2) Unaccounted for water loss is estimated at 28% of total water produced.

3) The Emergency Management and Operating Plan will require a revision to reflect recent changes in personnel. It will also require the submittal of a Notification of Ownership and Responsible Operating Personnel form.

4) The treatment process replaced disinfection using chlorine gas with disinfection using sodium hypochlorite. The inspector commends the choice to improve operator safety.

5) Measurements in the raw water back in 1983 to 1992 indicate naturally occurring ammonia. This results in the supply disinfecting using chloramination chlorine chemistry. Chloraminated water does not carry a "free" chlorine residual. Supplies providing finished water without a "free" chlorine residual are required to develop a Nitrification Action Plan (NAP).

6) The Monthly Operating Report (MOR) requires the following revisions:

   - A signature by the responsible operator;
   - The responsible operator's certification number;
   - The date(s) on which the monthly bacteriological samples are taken.

7) The flap gate on the overflow line of the 0.3 MG elevated tank requires a screen installed inside the pipe itself.

8) The hydrofluosilicic acid barrels are not equipped with secondary containment.

9) The sample tap on Well #8 is not smooth-nosed.

PERIODIC TESTING ANALYSES

Ammonia:

Date	Location	mg/L
03-Mar-82	WELL 8	3
01-Mar-83	WELL 3	1.9
01-Mar-83	WELL 6	2
01-Mar-83	WELL 7	2.8
01-Mar-83	WELL 5	2.2
04-Apr-84	WELL 7	0.78
07-Aug-84	WELL 7	2.3
30-Oct-84	WELL	2.6
27-Nov-84	WELL 10	1.4
27-Nov-84	WELL	1.4
27-Nov-84	WELL 9	2.2
27-Nov-84	WELL 11	1.3
27-Nov-84	WELL 11	1.3
27-Nov-84	WELL 13	1.5
27-Nov-84	WELL 12	2.4
27-Nov-84	WELL 12	2.4
27-Nov-84	WELL 9	2.2
21-Feb-85	WELL 7	2.3
10-Mar-87	WELL 6	1.8
10-Mar-87	WELL 5	1.9
10-Mar-87	WELL 8	2.9
16-Dec-87	WELL 3	2.1
24-Jul-90	WELL 7	2.1
29-Jan-91	WELL 7	2.2
03-Jun-91	WELL 7	2
22-Aug-91	WELL 7	2.6
05-Dec-91	WELL 7	2.1
20-Feb-92	WELL 7	2
04-Jun-92	WELL 7	1.9
10-Dec-92	WELL 7	1.6

Bacteriological Analyses:

One thousand nine hundred and twenty-seven samples were submitted to a certified laboratory between January 2, 2014 and May 5, 2020. One sample came back positive for total coliform. No other issues with bacteriological sampling were found.

Chlorine Residuals:

Minimum chlorine residuals of 0.5 mg/L free or 1.0 mg/L combined are always required to be maintained throughout the distribution system. The system appears to utilize chloramination chemistry for disinfection. One chlorine residual test was performed during the inspection:

Fire Department on Maplewood (2:05 PM)
- Total: 0.8 mg/L

Disinfection Byproducts:

Location	590 Hazelcrest		Location	520 S. Tanner	
Date	HAA5 (µg/L) MCL = 60 µg/L	TTHM (µg/L) MCL = 80 µg/L	Date	HAA5 (µg/L) MCL = 60 µg/L	TTHM (µg/L) MCL = 80 µg/L
18-Feb-14	3.2	8.018	18-Feb-14	0	5.859
20-May-14	9	21.8	20-May-14	8.8	16.74
19-Aug-14	0	2.999	19-Aug-14	0	3.096
06-May-15	0	12.19	06-May-15	2.1	17.26
17-May-16	0	1.84	17-May-16	0	1.58
16-May-17	6.22	13.6	16-May-17	2.74	19
15-May-18	15.7	39.1	15-May-18	12.06	31.7
15-May-19	8.63	19	15-May-19	9.99	22.6
Location	1625 East Grove		Location	892 W. Champaign	
Date	HAA5 (µg/L) MCL = 60 µg/L	TTHM (µg/L) MCL = 80 µg/L	Date	HAA5 (µg/L) MCL = 60 µg/L	TTHM (µg/L) MCL = 80 µg/L
18-Feb-14	0	8.94	18-Feb-14	8	12.9
20-May-14	0	12.79	20-May-14	8.2	14.56
19-Aug-14	0	8.368	19-Aug-14	0	5.145

Fluoride Analyses:

Testing records for 2020 report an average fluoride content of 0.75 mg/L tested at the site and 0.70 mg/L tested in the lab. The target goal for fluoride is 0.70 mg/L.

Inorganic Analyses:

Date	**Location**	**Arsenic** (µg/L) MCL = 10 µg/L	**Iron** (µg/L) *	**Manganese** (µg/L) **
15-Oct-14	Sampling point for wells	1.4	0.027	3.9
04-Oct-17	"	0	0.014	0

* Federal Secondary Limit 300 µg/L; State limit 1,000 µg/L in municipalities > 1,000 people
** Federal Secondary Limit 50 µg/L; State limit 150 µg/L in municipalities > 1,000 people

Lead/Copper Analyses:

DATE	Copper action level = 1.3 mg/l	Lead action level = 0.015 mg/l
6/28/14	0.061	0.0014
7/14/17	0.081	0.0016

Nitrate/Nitrite Analyses:

Date	Location	Nitrate MCL = 10 mg/L	Nitrite MCL = 1 mg/L
09 Jul 14	Sampling point for wells	1.6	
01-Jul-15	"	2	0
06-Jul-16	"	1.4	
19-Jul-17	"	1.5	
31-Jul-18	"	1.4	0
17-Jul-19	"	1.3	

Radiochemistry Analyses:

Date	Location	Radium-226 (pCi/L)	Radium-228 (pCi/L)	Combined Radium MCL = 5.0 pCi/L
10/1/14	Sampling point for wells	0.38	0.441	0.82

Synthetic Organic Analyses: No synthetic organic chemicals were detected during the tests performed on 2/5/20.

Volatile Organic Analyses: No organics were detected during the tests performed on 1/15/14 and 2/5/20.

Shane McCulley, EPE III, Champaign

SM:

cc: Troy Sisk, Certified Operator
Village of Rantoul
Illinois State Water Survey