



## *Annual Drinking Water Quality Report for 2021*

# Village of South Dayton

*Village of South Dayton Water System  
17 Park Street, South Dayton, NY 14138-0269  
Public Water Supply ID#NY0400351*

## **INTRODUCTION**

To comply with State regulations, the Village of South Dayton Water System will be issuing a report annually describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water resources. Last year, your tap water met all State drinking water health standards. We are proud to report that our system did not violate a maximum contaminant level or any other water quality standard. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report or concerning your drinking water, please contact **Mr. Steve Smuda at 374-0065**. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Village Board meetings. The meetings are held the second Wednesday of each month at 7:00 p.m.

## **WHAT IS THE SOURCE OF OUR WATER?**

In general, the sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water system serves approximately 661 people through 250 service connections. Our water supply is presently drawn from three (3) drilled wells. Groundwater is pumped from the wells into the treatment plant where it is filtered to remove iron (Fe) and manganese (Mn) and then is disinfected with sodium hypochlorite before it enters the distribution system.

Well No. 5 was the newest well and was our primary source. The well was drilled in 2002 and put into use in January 2003. However, in recent years well production declined steadily and in late 2020 the well was shut down.

Well No. 2 is located in the Southeast quadrant of the village and was drilled about 1951, but was not activated until 1955. It was originally a 100 GPM well but the most recent yield tests show a safe yield of 65 GPM. When Well No. 5 had to be shut down, Well No. 2 was reactivated and is currently the village's primary source again.

Well No. 4 is immediately next to Well No. 2, and has been reactivated to serve as an auxiliary source. This well was drilled in 1972 and is fitted with a 100 GPM pump. Present safe yield is also estimated at 65 GPM.

**NOTE:** The Village worked with our engineers and applied for financing in 2020 to drill a new well to replace Well No. 5 and complete other comprehensive water system improvements. In February 2022 the Village was officially notified that they were approved for a \$1.8 M grant and \$1.2 M 0% interest loan from the NYS Drinking Water State Revolving Fund to complete the \$3.1 M project. Already new well specifications were prepared for the many other improvements including upgrades to wells 2 and 4; repairs and maintenance to the water plant and treatment equipment; replacement of several old water mains and some water service lines; replacement of some old hydrants and valves; water system controls upgrade and installation of emergency power equipment; and all new water meters and meter reading system and software programs. Parts of the project were bid out in March 2022 and will go to construction in summer 2022. The remainder of the project will not be completed until 2023.

In 2003, the NYS DOH completed a source water assessment for our water system, based on available information. Possible and actual threats to the drinking water were evaluated. The source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. The susceptibility rating is an estimate of the potential contamination of the source water. It does not mean that the drinking water is, or will become contaminated. See section "ARE THERE CONTAMINANTS IN OUR DRINKING WATER?" for a list of contaminants that have been detected. The source water assessments provide resource managers with additional information for protecting source water into the future.

As was mentioned before, our water can be derived from several wells. The source water assessment has rated the combined susceptibility to contamination for these wells as medium-high from cations/anions (salts, sulfate), halogenated solvents, herbicides/pesticides, metals, nitrates, other industrial organics and petroleum products; and medium from enteric viruses. These ratings for the wells are due to their proximity to pasture land, industrial activities and permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the State and/or Federal government). A copy of this assessment, including maps of the assessment areas, can be obtained by contacting us, as noted above.

### ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: coliform bacteria, inorganic compounds, nitrate, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological and synthetic organic contaminants. The table presented below depicts which compounds were detected in your drinking water. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

It should be noted that all drinking water, including bottled water, might be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791) or the Cattaraugus County Health Department at (716) 701-3386. Information is also available from the EPA website: <https://www.epa.gov/dwreginfo/drinking-water-regulations>.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
<b>Disinfectant</b>							
Chlorine Residual	No	2021	Avg. = .80 (.06 - 2.12)	mg/l	N/A	MRDL = 4	Water additive used to control microbes.
<b>Inorganic Contaminants</b>							
Barium	No	4/6/21	101	ug/l	2,000	MCL = 2,000	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Copper <sup>1</sup>	No	9/29/21	106 (12 - 116)	ug/l	1,300	AL = 1,300	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead <sup>2</sup>	No	9/29/21	2.31 (ND - 3.73)	ug/l	0	AL = 15	Corrosion of household plumbing; erosion of natural deposits.
Nitrate	No	4/6/21	1.55	mg/l	10	MCL = 10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
<b>Disinfection By-products</b>							
Total Haloacetic Acids	No	8/12/21	4.21	ug/l	N/A	MCL = 60	By-product of drinking water disinfection needed to kill harmful organisms.
Total Trihalomethanes	No	8/12/21	12.6	ug/l	N/A	MCL = 80	By-product of drinking water chlorination needed to kill harmful organisms.

**Notes:**

1 - The level presented represents the 90<sup>th</sup> percentile of the 10 sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90<sup>th</sup> percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, ten samples were collected at your water system and the 90<sup>th</sup> percentile value was the second highest value, 106 ug/l. The action level for copper was not exceeded at any of the sites tested.

2 - The 90<sup>th</sup> percentile level for lead was 2.31 ug/l. None of the ten sites exceeded the action level of 15 ug/l.

**Definitions:**

**Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

**Micrograms per liter (ug/l):** Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

**Milligrams per liter (mg/l):** Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

**Not Detected (ND):** Laboratory analysis indicates that the constituent was not present.

## WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no violations. We have learned through years of testing that some contaminants have been detected; however, these contaminants were found at concentrations well below the level allowed by the State. Regardless, we are required to provide the following information on lead in drinking water.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. The Village of South Dayton is responsible for providing high quality drinking water, but cannot control the variety of materials used in private home plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your home's plumbing, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

## **DO I NEED TO TAKE SPECIAL PRECAUTIONS?**

Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791), or at <http://www.cdc.gov/parasites/water.html>.

## **WHY SAVE WATER AND HOW TO AVOID WASTING IT?**

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- ◆ Saving water saves energy and some of the costs associated with both of these necessities of life;
- ◆ Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- ◆ Saving water lessens the strain on the water system during a dry spell or drought and helps to avoid severe water use restrictions, so that essential fire fighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- ◆ Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity;
- ◆ Turn off the tap when brushing your teeth;
- ◆ Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Repair it and you can save almost 6,000 gallons per year;
- ◆ Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Repair it and you save more than 30,000 gallons a year.

## **CLOSING**

Thank you for allowing us to continue to provide your family with quality drinking water this past year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office if you have questions.

***This institution is an equal opportunity provider and employer.***

*If you wish to file a Civil Rights program complaint of discrimination, complete the USDA Program Discrimination Complaint Form, found online at [http://www.ascr.usda.gov/complaint\\_filing\\_cust.html](http://www.ascr.usda.gov/complaint_filing_cust.html), or at any USDA office, or call (866) 632-9992 to request the form. You may also write a letter containing all of the information requested in the form. Send your completed complaint form or letter to us by mail at U.S. Department of Agriculture, Director, Office of Adjudication, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, by fax (202) 690-7442 or email at [program.intake@usda.gov](mailto:program.intake@usda.gov).*

**Appendix D**  
**Annual Water Quality Report (AWQR) Delivery Options**  
**Questions and Answers for Water Suppliers**

In January 2013, the United States Environmental Protection Agency (USEPA) determined that specific methods of electronic delivery may be used by a community water supplier to meet the regulatory requirement to “mail or otherwise directly deliver” Consumer Confidence Reports, also known as the Annual Water Quality Report (AWQR), to their bill paying customers. In conformance with the USEPA’s efforts, community water systems in New York State may now use electronic delivery as an additional option in order to distribute the AWQR. A list of frequently asked questions along with the answers is provided to assist you with the different acceptable options.

**Q. Why the change?**

A. There has been an increase in the number and type of communication tools available to water systems since AWQR requirements were first enacted in 1999. This updated interpretation of the rules for direct delivery will improve the communication with your customers and may reduce costs associated with printing and mailing your AWQR to customers.

**Q. What does this mean for a water supplier?**

A. Beginning in 2013, there were additional options for directly delivering an AWQR. You may continue to report as you have always reported, or you may decide to use some alternative methods to distribute the AWQR to your water customers.

**Q. Does this mean I can go totally electronic (paperless)?**

A. No. It will depend on your customers. More than one method of delivery may be necessary to reach all your bill paying customers. You will be required to provide a paper copy to those customers who cannot receive the report electronically or who prefer to receive a paper copy.

**Q. What new AWQR delivery methods are now acceptable?**

A. In addition to mailing paper copies to your customers, you may now also use the following methods:

- Notification by monthly/quarterly bill, newsletter or separate mailing that the AWQR is available on a public website via a direct URL;
- Email with a message containing a direct URL link to the AWQR;
- Email with the AWQR, in electronic form, as an attachment;
- Email with the AWQR included as an embedded image.

**Q. How do we implement an electronic AWQR delivery approach?**

- A. There are two overall approaches you can take: (1) a paper AWQR delivery with an electronic AWQR delivery option; or (2) an electronic delivery with a paper AWQR delivery option.

**Q. Are there any restrictions on the URL used to provide access to the AWQR?**

A. Yes. The URL must take the customer directly to the entire AWQR. The URL must be to a public webpage that is readily viewed by commonly available browsers, and that does not require subscription, payment or login accounts. The URL must be live when the notification of the AWQR's availability on the website goes out to your customers. It is recommended that the URL be short and easy to type. Any URL that requires the customer to search for or navigate through a website to retrieve the AWQR does not meet the "directly deliver" requirement. A Community Water System should have the AWQR maintained in a prominent location on their website throughout the year.

**Q. What electronic methods are not allowed?**

A. Social media such as Twitter and Facebook, automated telephone notifications systems, and using an indirect URL that requires the customer to search for the AWQR on your water systems main website are not acceptable methods for direct delivery.

**Q. If the AWQR is posted on a website, how often do we need to make notification to our customers?**

A. At a minimum, notification must be made once annually. However, we recommend that notification be made on a more frequent basis (e.g. on customer billing statements, in newsletters, or in correspondence) to ensure the message is widely delivered.

**Q. If we decide to mail notifications that the AWQR is available on our website via a direct URL, are there rules about how the notification is displayed?**

A. Yes. The message and direct URL must be prominently displayed in a typeface that is at least as large as the largest type on the statement or other mail notification. There must also be an option included (e.g. a checkbox on return portion of the utility bill) for customers to request a paper copy, and directions must be provided on how to request a paper copy via phone, mail, or email.

**Q. What if we email a direct URL to the AWQR to customers?**

A. The email must include a direct URL link and should also include a short statement encouraging readership. The message must also provide information on how to request a paper copy of the AWQR. If an email is returned undelivered, the email must be sent to a corrected email address or the report delivered by another acceptable direct delivery method.

**Q. Is it acceptable to email customers and include the AWQR as an attachment?**

A. Yes. The AWQR as an electronic file (e.g. portable document format PDF) can be attached to an email. The email should also include a short statement encouraging readership and it must provide information on how to request a paper copy of the AWQR. If an email is returned undelivered, the email must be sent to a corrected email address or the report delivered by another acceptable direct delivery method.

**Q. Is it acceptable to email the AWQR embedded in the message?**

A. Yes. You may email the AWQR text and tables as an image inserted into the body of an email. The email must also provide information on how to request a paper copy of the AWQR. If an email is returned undelivered, the email must be sent to a corrected email address or the report delivered by another acceptable direct delivery method.

**Q. What if I select more than one delivery method? How do I know I've reached my intended audience?**

A. It is your responsibility to ensure delivery of the AWQR to each bill paying customer. Employing a variety of delivery methods enhances the likelihood you reached all customers.

**Q. What do I need to consider as I plan my AWQR delivery program?**

A. Here are some recommendations:

**Know your customer base:** Find out if there are customers who don't have internet service. Learn from your past experiences including e-bill or e-pay participation, other electronic communication efforts and current website usage.

**Know your electronic delivery method capabilities:** Research the various delivery methods and your system's technical capabilities. Are you able to send mass emails? Do you have the resources to handle emails returned as undeliverable? Do you have a public website? Will your computer network, internet server, etc. support electronic AWQR delivery?

**Know your costs:** Determine the costs and benefits. Would a gradual transition benefit your system? What resources will you need and which approach will be best? Are you ready to make a change?

**Give customers a heads up and an option:** Inform customers of the change in delivery approach before delivery of the AWQRs to the customers. Give them a chance to choose if they prefer to receive paper or electronic reports.

**Get the word out and catch customers' attention:** If you are mailing a direct URL, include an option on every water bill for a customer to choose to receive a paper AWQR. Include a short message to encourage readership of the AWQR.

**Keep a record:** Record customer delivery preferences for future AWQR deliveries.

**Remind auto-pay customers:** To ensure that electronic bill and auto-pay customers are aware of their AWQR, a separate email should be sent to them.

**Respond to requests and email:** Be prepared to respond to requests for mailed paper copies of the AWQRs. If an email is returned as undeliverable, resend the AWQR by an alternative means. Keep your email database up to date.

**Q. Do we still need to certify how the AWQR was distributed?**

A. Yes. By September 1, of each year, you must provide certification on how the AWQR was distributed. The certification form has been revised to include the electronic delivery options.

**Q. Where can we obtain more information?**

A. Information on AWQR preparation and delivery options can be found on the New York State Health Department's website in the document, Preparing Your Drinking Water Annual Report – Guidance for Water Suppliers at:

[http://www.health.ny.gov/environmental/water/drinking/annual\\_water\\_quality\\_report/](http://www.health.ny.gov/environmental/water/drinking/annual_water_quality_report/)

or you may contact your local health department.