



Source Water Protection Plan

Updated: 01APR26

Introduction and Purpose:

The purpose of this document is two-fold. First and foremost, this document is intended to provide the policy and commitment necessary to the extent practicable to protect the Chebanse community water system's source of water (or source water). Second, this document is intended to supply a framework that meets the objectives set forth in 35 IL Adm Code 604.305.

Of particular importance, it is the intent of the Chebanse community water supply (CWS) officials that this document be a living Source Water Protection Plan (Plan) that is reviewed and adjusted at least every five years. If significant changes to the content of the Plan are necessary, a review draft will be supplied to the Illinois Environmental Protection Agency (EPA) consistent with 35 IL Adm Code 604.340.

Vision Statement:

The Chebanse CWS provides the following policy and commitment to protecting its source water:

Chebanse's Source Water Protection Program is committed to maintaining a sustainable and abundant supply of safe, high-quality drinking water for the residents of Chebanse through a proactive and coordinated approach now and into the future. Our primary objective is to maintain, protect, and improve the quality of water from the source and delivery it securely to our residents.

The Village of Chebanse takes protecting our water system very seriously and has many ways to keep it safe. We have a certified water operator employed by the Village that is licensed by the IEPA. The water operator conducts routine sampling of the water system and also ensures that proper treatment of the system is working properly. Funds are set aside by the Village board to be used for routine maintenance, parts, and unforeseen circumstances that may arise. The Village water department has its own Water Emergency Response Plan that is strategically placed and is readily available for use if any such emergencies were to develop. Within the Water Emergency Response Plan is a source of vital information that will assist those who possess it with the knowledge and information needed to keep the system safely running.

In order to keep our water system secure at all times, the Village has multiple barriers utilized to safeguard itself. All Village well houses, water tower, and storage tanks are fully secure with locking doors and hatches to detour threats against terrorism, theft, and damage. The Village follows the mandated IEPA guidelines for setback zones near water sources to avoid any contamination from outside sources. The current Village setback zone is 400' from the water source. The use of liquid chlorine to treat ground water before it is introduced in

the distribution system is implemented to remove any unwanted harmful bacteria that may be found in the raw water supply. The water operator checks for proper chlorine dosages and monitors those levels through daily testing. Periodic inspections and wash downs of the water storage facilities and routine maintenance such as hydrant flushing and water valve exercising are completed to ensure a properly working and safe water system.

The Chebanse CWS wishes to express its gratitude to the following stakeholders who participated in the development of this vision statement:

Name	Role	Title	Representing
Jason Mathy	Stakeholder / Vision Statement Writer / Overseer	Mayor	Village of Chebanse
James Smith	Stakeholder / Vision Statement Writer / Overseer	Water Operator / Public Works Department	Village of Chebanse
David Allen	Stakeholder / Vision Statement Writer / Overseer	Trustee / Water Dept. Chairperson	Village of Chebanse

Source Water Assessment:

As indicated in 35 IL Adm Code 604.315(c)) the Chebanse community water supply is relying on the Source Water Assessment Program Fact Sheet prepared by the Illinois EPA to fulfill the requirements of this Section. (See the following link: [factsheet \(illinois.gov\)](https://www.illinois.gov/epa/factsheet). Note: in the future and if necessary, Chebanse may make a request to the Agency for technical assistance in conducting additional details within this source water assessment per 35 IL Adm Code 604.315(b). **With this said, the regulation does not specify that the Agency must honor this request.**

Water Percentages:

Surface Water %	Surface Water Purchase %	Ground Water %	Ground Water Purchase %	Ground Water UDI %	Ground Water UDI Purchase %
0.00	0.00	100%	0.00	0.00	0.00

Importance of Source Water:

The Village of Chebanse (Facility Number 0754240) utilizes 2 active community water supply wells. Wells #2, and #3 (Illinois EPA 47559, 47560, respectively) supply an average of 82,592 gallons per day (gpd) to 481 services of a population of 1,016 (data as of 15JUN24).

Water Supplies That Obtain Source Water from This Facility:

No connected water supplies existed at the time this Source Water Assessment fact sheet was completed.

Source of Water Supply:

Well #2 is located at 180 W. First North Street in the center of the Village. Well #3 is located at 501 W. Chebanse Avenue. Wells #2, and #3 are producing approximately 325, and 160 gallons per minute (gpm), respectively. The wells are operated for a combined maximum output of roughly 200,000 gpd. Wells #2, and #3 are 150, and 205 feet in depth, respectively. The wells obtain their source water from a shallow permeable bedrock aquifer overlain by relatively impermeable material. Permeability is a measure of the capability of a soil or sediment to transmit fluids. These wells are considered geologically sensitive by the Illinois EPA.

Well Data for This Facility:

Well ID	Well Description	Status	Depth	Minimum Setback	Pumpage	Aquifer Description
47558	Well #1 located at 180 W. First North Street	Abandoned Inactive	152	400	0	SHALLOW BEDROCK
47559	Well #2 located at 180 W. First North Street	Active	150	400	12,152,000	SHALLOW BEDROCK
47560	Well #3 located at 501 W. Chebanse Avenue.	Active	205	400	17,994,000	SHALLOW BEDROCK

Intake Details:

No Data

Source Water Quality:

The Village's wells were sampled beginning on March 3, 1985 as part of a Statewide Groundwater Monitoring Network. The samples were analyzed for inorganic chemicals (IOC), volatile organic compounds (VOC), and synthetic organic compounds (SOC). VOC and SOC analyses did not detect quantifiable levels of any organic compounds. IOC analyses indicate that concentrations of these chemicals are consistent with other shallow bedrock aquifers of similar character in Illinois. It is important to note that the IOC results were below the groundwater quality standards established under 35 Illinois Administrative Code Part 620.410.

Finished Water Quality:

As referenced in the Source Water Quality Section of this report, the Village of Chebanse community water supply has mineralized groundwater. Further information on finished water quality data tables of monitored parameters, contaminants detected, health advisory information, drinking water standards and maximum contaminant levels are available at <http://www.epa.gov/ogwdw/>. Similar information is also available in the Consumer Confidence Report supplied by the Village of Chebanse to their customers.

Potential Sources of Contamination:

The sites labeled on the Wellhead Protection Planning Map and described in the following tables are considered "potential" sources of contamination. (Maps and tables are not available in the Visually Impaired Accessible version. However, the information presented in the maps and tables is summarized within the following text sections of this fact sheet.) These sites are predominantly identified through the Illinois EPA's Well Site Survey program based on the nature of their activity, the availability of data in electronic databases, and their geographic proximity to the source water protection area. In addition, the Illinois EPA made use of the information from its leaking underground storage tank database (<http://epadata.epa.state.il.us/land/ust/search.asp>) and site remediation program database (<http://epadata.epa.state.il.us/land/srp/search.asp>) to further assess potential sources of contamination to the Clayton-Camp Point Water Commission's source water. These databases include information from the Illinois EPA Division of Land Pollution Control (LPC) and the Illinois Emergency Management Agency (IEMA). The following is a list of facilities contained within these databases. As a result of multiple possible contamination sources, individual sites may be listed in the table more than once in relation to a well.

IEMA #	LPC #	Site Name Address City ZIP Code
20020042	0914245011	Chebanse Crop Service 7089 South Chestnut St. Chebanse 60922
871896	0754240001	Bloomquist Oil I-57 Chebanse 60922
912620	0914245005	Borden Inc. Rt. 52 South of Chebanse 60922
923352	0754240001	Bloomquist Oil I-57 Chebanse 60922
962215	0914245009	Chebanse Grain 165 Locust St. Chebanse 60922
982651	0754240001	Bloomquist Oil Co. P.O. Box 116 Chebanse 60922

Site Data for This Facility:

Well ID	Map Code	Site Name	Site Description	Distance (Feet)
47558	10283	PREVIOUS GAS STATION	BELOW GROUND STORAGE (PET	1325
47558	10284	J&K FARMERS SERVICE	FERTILIZER ANHYDROUS STORA	550
47558	10290	TRUCK STORAGE & REPAIR	VEHICLE PARKING	1250
47558	10286	BAKERS AUTO BODY	AUTOBODY	1200
47558	10282	JIM DUVALL AUTO BODY REPAIR	AUTOBODY	350
47558	10287	OLD GRAIN ELEVATOR	GRAIN ELEVATOR	300
47558	10285	MIKES SUNOCO	BELOW GROUND STORAGE (PET	800
47558	10288	OLD GAS STATION	BELOW GROUND STORAGE (PET	1325
47558	10289	CULLIGAN WATER SOFTENER C	CHEMICAL HANDLING (i.e. MANUF	1150
47558	10292	UNION 76	BELOW GROUND STORAGE (PET	1125
47558	10291	TRUCK STORAGE & REPAIR	AUTO REPAIR	1250
47558	10281	KEN'S TRUCK REPAIR	AUTO REPAIR	200
47558	10280	WILKING TRUCKING	BELOW GROUND STORAGE (PET	350
47559	10286	BAKERS AUTO BODY	AUTOBODY	1250
47559	10292	UNION 76	BELOW GROUND STORAGE (PET	1150
47559	10288	OLD GAS STATION	BELOW GROUND STORAGE (PET	1375
47559	10291	TRUCK STORAGE & REPAIR	AUTO REPAIR	1300
47559	10287	OLD GRAIN ELEVATOR	GRAIN ELEVATOR	300
47559	10290	TRUCK STORAGE & REPAIR	VEHICLE PARKING	1300
47559	10280	WILKING TRUCKING	BELOW GROUND STORAGE (PET	350
47559	10285	MIKES SUNOCO	BELOW GROUND STORAGE (PET	850
47559	10283	PREVIOUS GAS STATION	BELOW GROUND STORAGE (PET	1325
47559	10282	JIM DUVALL AUTO BODY REPAIR	AUTOBODY	350
47559	10284	J&K FARMERS SERVICE	FERTILIZER ANHYDROUS STORA	600
47559	10281	KEN'S TRUCK REPAIR	AUTO REPAIR	200
47559	10289	CULLIGAN WATER SOFTENER C	CHEMICAL HANDLING (i.e. MANUF	1200
47560	10290	TRUCK STORAGE & REPAIR	VEHICLE PARKING	3400
47560	10292	UNION 76	BELOW GROUND STORAGE (PET	3170
47560	10281	KEN'S TRUCK REPAIR	AUTO REPAIR	2140
47560	10287	OLD GRAIN ELEVATOR	GRAIN ELEVATOR	2290
47560	10282	JIM DUVALL AUTO BODY REPAIR	AUTOBODY	2360
47560	10289	CULLIGAN WATER SOFTENER C	CHEMICAL HANDLING (i.e. MANUF	3460
47560	10283	PREVIOUS GAS STATION	BELOW GROUND STORAGE (PET	3020
47560	10288	OLD GAS STATION	BELOW GROUND STORAGE (PET	3450
47560	10284	J&K FARMERS SERVICE	FERTILIZER ANHYDROUS STORA	2580
47560	10280	WILKING TRUCKING	BELOW GROUND STORAGE (PET	2150
47560	10286	BAKERS AUTO BODY	AUTOBODY	3240
47560	10285	MIKES SUNOCO	BELOW GROUND STORAGE (PET	2850
47560	10291	TRUCK STORAGE & REPAIR	AUTO REPAIR	3400

Other Identified Potential Sources:

For this community water supply, no additional potential sources of contamination have been identified beyond those in Illinois EPA databases.

Susceptibility to Contamination:

To determine the Village of Chebanse's susceptibility to contamination, the following document was reviewed: a Well Site Survey, published in 1995 by the Illinois EPA. Based on the information obtained in this document there are 13 potential sources of groundwater contamination that could pose a hazard to groundwater utilized by the Village's community water supply wells. These potential sources include 5 below ground fuel storage tanks, 2 auto repairs, 1 autobody shop, 1 fertilizer storage, 1 grain elevator, 1 chemical handling, and 1 vehicle parking lot. In addition, information provided by the Leaking Underground Storage Tank and Remedial Project Management Sections of the Illinois EPA indicated additional sites with on-going remediation which may be of concern.

Based upon this information, the Illinois EPA has determined that the Village of Chebanse Community Water Supply's source water is susceptible to contamination. The land use within the recharge area of the wells was analyzed as part of this susceptibility determination. This land use includes residential, commercial, and agricultural properties.

Source Water Protection Efforts:

The Illinois Environmental Protection Act provides minimum protection zones of 400 feet for the village's wells. These minimum protection zones are regulated by the Illinois EPA. To further reduce the risk to the source water, a maximum protection zone may be established for the wells, which is authorized by the Illinois Environmental Protection Act and allows county and municipal officials the opportunity to provide additional source prohibitions up to 1,000 feet from their wells.

To further minimize the risk to the Village's groundwater supply the Illinois EPA recommends that the following additional activities be considered. First, the water supply staff may want to develop a contingency plan.

Contingency planning documents are a primary means to ensure that, through emergency preparedness, a community will minimize their risk of being without water. Second, the water supply staff is encouraged to review their cross-connection control ordinance to ensure that it remains current and viable. Cross connections to either the water treatment plant (for example, at bulk water loading stations) or in the distribution system may negate all source water protection initiatives. Finally, the Illinois EPA recommends that the village investigate additional source water management options to address the land use within the community wells' recharge areas. To further reduce the risk to source water, the village may wish to implement a wellhead protection program which includes the proper abandonment of potential routes of groundwater contamination within the recharge area and correction of sanitary defects at the water treatment facility. This effort may result in the community water supply receiving a special exception permit from the Illinois EPA, which allows a reduction in monitoring and laboratory analysis costs.

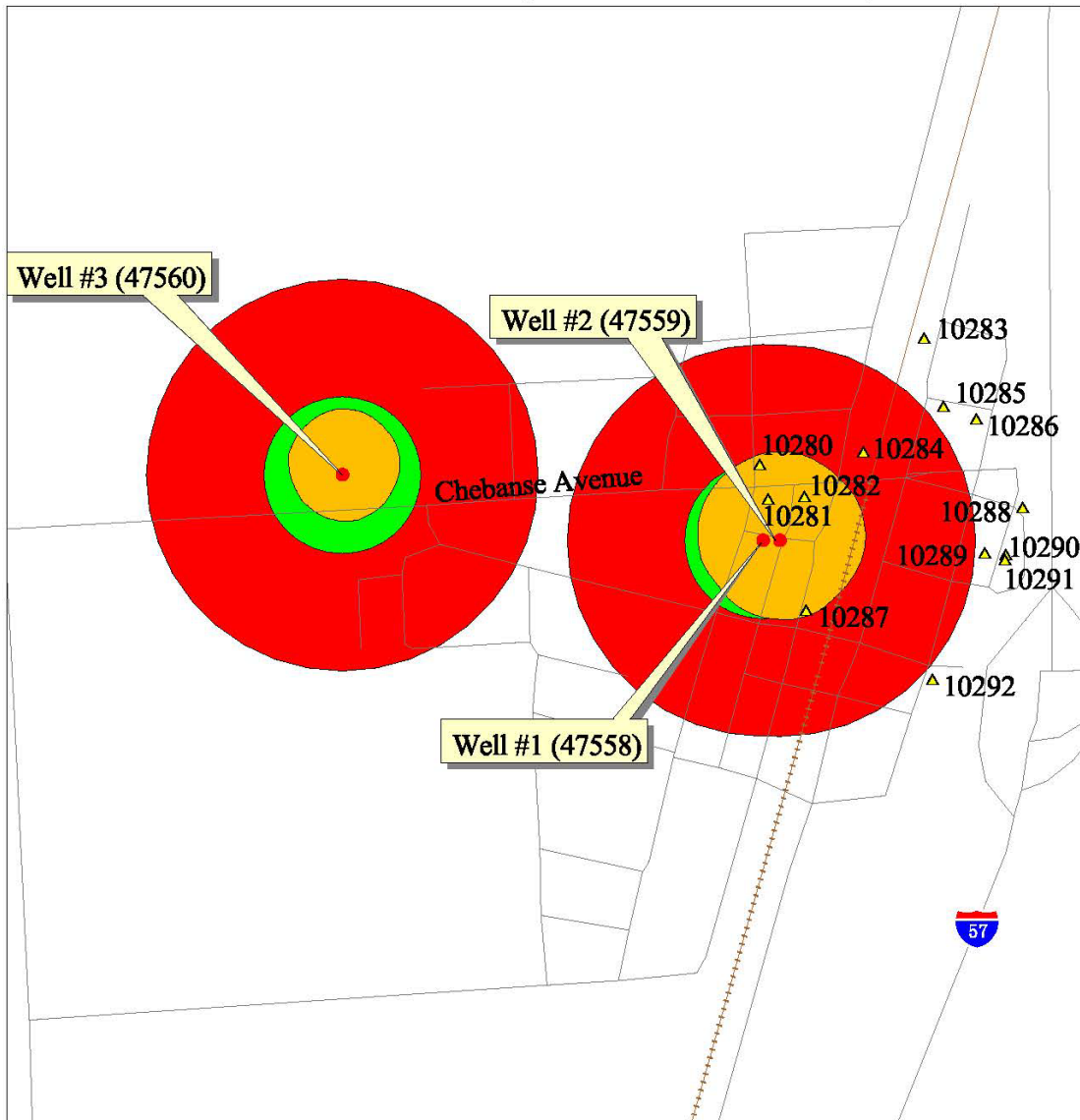
Source Water Protection Plan Objectives:

The source water protection plan must contain a list of the community water supply's objectives for protecting source water. These objectives can include meeting the requirements of any of the Sections in this Subpart, including developing a vision statement or performing a source water assessment. Objectives may also address the specific problems or issues identified in the source water assessment and should consider current and potential future issues. (35 IL Adm Code 604.320)

In keeping with the vision of this plan, source water protection objectives must help ensure that water quality that meets or exceeds state and federal requirements in the Chebanse CWS is achievable. Specifically, source water protection is the first barrier in maintaining water quality to protect public health. Therefore, the following objectives are established:

- Continued representative source water quality monitoring to observe trends in water chemistry.
- Optimizing land use to minimize contamination risk to source waters.
- Continued risk evaluation and emergency planning to reduce the likelihood of a “water” emergency; and continued work to secure funds and stakeholder support to optimize resource allocations and public awareness.

WELLHEAD PROTECTION PLANNING MAP FOR CHEBANSE (FACILITY #0754240)



Legend

- CWS Wells
- ▲ Potential Sources Of Contamination
- ⚡ Rails
- ⚡ Roads
- ⚡ Streams
- Minimum Setback Zone
- Existing or Potential Maximum Setback Zone
- Recharge Area

0 500 1000 1500 Feet

FOR MORE INFORMATION CONTACT:

Groundwater Section, Bureau of Water
 Illinois Environmental Protection Agency
 1021 North Grand Avenue East
 Springfield, IL 62794-9276
 Ph# (217)785-4787

Source Information

Roads, Rails, and Streams from Illinois DNR.
 CWS Wells and Potential Sources from Illinois EPA.
 Map compiled by Groundwater Section, Illinois EPA.

Action Plan:

As part of our ongoing efforts to meet our goals and objectives for the Chebanse water supply, the Village of Chebanse Water Department along with the Village of Chebanse Stakeholders Committee have multiple actions in our plan to insure the delivery of safe potable water within our community.

- 1- The Village routinely monitors the water within the system through the use of monthly sampling that is tested by an approved IEPA laboratory (Pace Laboratories, Peoria, IL). The system tests daily for chlorine and phosphate levels to insure maximum dosage effectiveness.
- 2- A five-year expense plan is in discussion for future improvements and maintenance of the Chebanse water supply infrastructure. The plan would set aside necessary funding for all water related programs. Annual budget meetings are held by the Village of Chebanse Trustees to earmark the funds needed to complete necessary projects to the water system. In the event where funding is low, the Village has the capabilities to finance projects through our local banking facility.
- 3- The water system has adopted its own Emergency Response Plan that is specific to the water system. This plan will be updated every 3 years in order to maintain the highest level of accuracy in emergency situations.
- 4- Currently, the Village maintenance department flushes and tests all Village owned fire hydrants. Our goal to replace inoperable hydrants is ongoing and we will continue to replace any that are in need. We are averaging 1-2 hydrant replacements per year.
- 5- Water main valves are exercised routinely. As of now, we are averaging 2-3 water main valve replacement projects per year as a continuing effort to provide maximum effectiveness when isolating any emergency water main repairs throughout the Village.
- 6- The Village has one elevated storage tank and one ground storage tank that are both on a 3-year inspection plan. Each tank is inspected for safety concerns, structure weaknesses and potential health threats to the system. Each site is visited daily for sampling and safety inspections.
- 7- The Village has recently implemented an asset mapping program that continues to be most beneficial in documenting the precise location of all Village assets to include water mains, water main isolation valves, fire hydrants, customer shut-off lines, and previous water main and supply repair locations. This program allows for quicker responses to utility locates and creates a path leading to the direction of future repairs and improvements to the water system.
- 8- Efforts to update our Village well houses with more sophisticated “smart” pumps are in review. Updates to pumps and meters withing the well houses are seen as a crucial part to creating a more sufficient and cost saving process for the entire Chebanse water system.