NPDES Permit No. IL0080291

Notice No. KKD:25082101

Public Notice Beginning Date: September 3, 2025

Public Notice Ending Date: October 3, 2025

National Pollutant Discharge Elimination System (NPDES)
Permit Program

PUBLIC NOTICE/FACT SHEET
of
Draft New NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois EPA
Division of Water Pollution Control
Permit Section
2520 West Iles Avenue
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-0610

Name and Address of Discharger:

Village of Channahon
24555 S. Navajo Drive
Channahon, IL 60410

Name and Address of Facility:

Channahon Far West STP
26300 South Tabler Road
Channahon, IL 60410
(Grundy County)

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue a NPDES Permit to discharge into the waters of the state and has prepared a draft Permit and associated fact sheet for the above named discharger. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. All comments on the draft Permit and requests for hearing must be received by the IEPA by U.S. Mail, carrier mail or hand delivered by the Public Notice Ending Date. Interested persons are invited to submit written comments on the draft Permit to the IEPA at the above address. Commentors shall provide his or her name and address and the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to those issues. Commentors may include a request for public hearing. Persons submitting comments and/or requests for public hearing shall also send a copy of such comments or requests to the Permit applicant. The NPDES Permit and notice numbers must appear on each comment page.

The application, engineer's review notes including load limit calculations, Public Notice/Fact Sheet, draft Permit, comments received, and other documents are available for inspection and may be copied at the IEPA between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the draft Permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 45 days before any public hearing. Response to comments will be provided when the final Permit is issued. For further information, please call Kaushal Desai at 217/782-0610.

The following water quality and effluent standards and limitations were applied to the discharge:

Title 35: Environmental Protection, Subtitle C: Water Pollution, Chapter I: Pollution Control Board and the Clean Water Act were applied in determining the applicable standards, limitations and conditions contained in the draft Permit.

The applicant is engaged in treating domestic wastewater for the Village of Channahon.

The length of the Permit is approximately 5 years.

The main discharge number is 001. The seven day once in ten year low flow (7Q10) of the receiving stream, Aux Sable Creek, is 0 cfs.

The design average flow (DAF) for the facility is 0.19 million gallons per day (MGD) and the design maximum flow (DMF) for the facility is 0.59 MGD. Treatment consists of screening, oxidation ditch with phosphorus removal, settling clarifiers, post aeration, and ultraviolet disinfection.

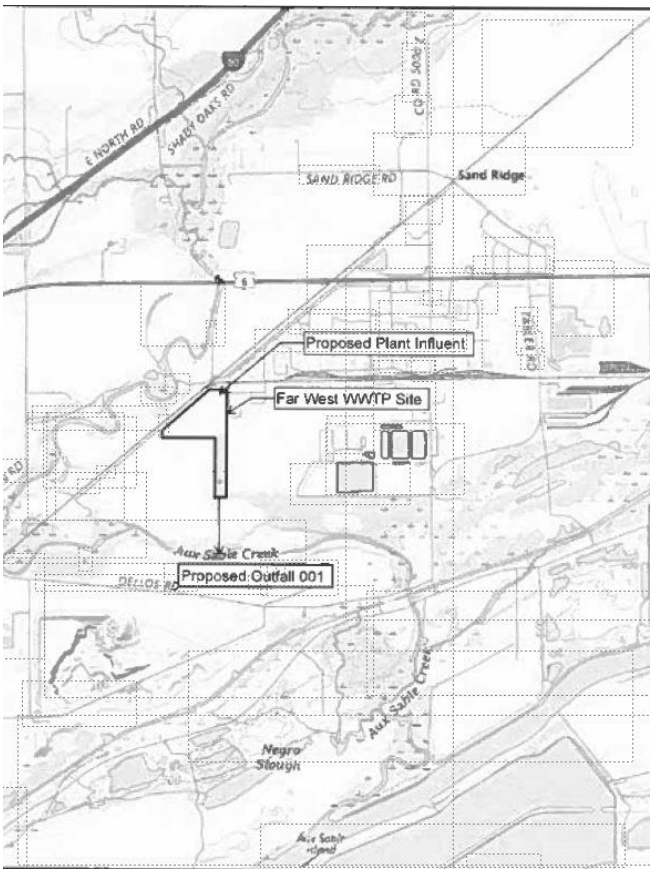
Pursuant to the waiver provisions authorized by 40 CFR § 123.24, this draft permit is within the class, type, and size for which the Regional Administrator, Region V, has waived his right to review, object, or comment on this draft permit action.

Application is made for the existing discharge(s) which is located in Grundy County, Illinois. The following information identifies the discharge point, receiving stream and stream classifications:

Discharge Number	Receiving Stream	Latitude	Longitude	Stream Classification	Integrity Rating
001	Aux Sable Creek	41° 23' 56" North	88° 20' 53" West	General Use	B

To assist you further in identifying the location of the discharge(s) please see the map below.

The stream segment receiving the discharge from outfall(s) 001, waterbody segment IL_DW-01, is on the 2020/2022 Illinois Integrated Water Quality Report and Section 303(d) as impaired for aquatic life use with potential cause given as loss of instream cover, and primary contact use with potential cause given as fecal coliform.



The discharge(s) from the facility is (are) proposed to be monitored and limited at all times as follows:

Discharge Number(s) and Name(s): 001 STP Outfall

Load limits computed based on a design average flow (DAF) of 0.19 MGD (design maximum flow (DMF) of 0.59 MGD).

The effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	LOAD LIMITS lbs/day DAF (DMF)*			CONCENTRATION LIMITS mg/L			
Parameter	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Regulation
$CBOD_5$**	16 (49)		32 (98)	10		20	35 IAC 304.120 40 CFR 133.102
Suspended Solids**	19 (59)		38 (118)	12		24	35 IAC 304.120 40 CFR 133.102
pH	Shall be in the range of 6 to 9 Standard Units						35 IAC 304.125
Fecal Coliform	Daily Maximum shall not exceed 400 per 100 mL (May through October)						35 IAC 309.146
Chlorine Residual						0.05	35 IAC 302.208
Ammonia Nitrogen: (as N)							35 IAC 355 and 35 IAC 302
March-May/Sept.-Oct.	2.4 (7.4)	6.2 (19)	7.5 (23)	1.5	3.9	4.7	
June-August	2.1 (6.4)	5.2 (16)	9.5 (30)	1.3	3.3	6.0	
Nov.-Feb.	6.3 (20)		6.2 (19)	4.0		3.9	
Total Phosphorous (as P)	1.6 (5.0)			1.0			35 IAC 309.146
Total Nitrogen (as N)				Monitor Only			35 IAC 309.146
				Monthly Avg. not less than	Weekly Avg. not less than	Daily Minimum	
Dissolved Oxygen							
March-July				N/A	6.25	5.0	35 IAC 302.206
August-February				6.0	4.5	4.0	

*Load Limits are calculated by using the formula: 8.34 x (Design Average and/or Maximum Flow in MGD) x (Applicable Concentration in mg/L)

**BOD_5 and Suspended Solids (85% removal required): In accordance with 40 CFR 133, the 30-day average percent removal shall not be less than 85 percent.

Far West Channahon -- Antidegradation Assessment

The subject facility is proposing to construct a new wastewater treatment plant serving the far west areas of the Village of Channahon (Channahon), Illinois. With the completion of the Brisbin Road Interchange on Interstate 80 (1-80), improved access to this area has provided additional incentive for development. The Village has evaluated the feasibility, preliminary design criteria, and associated probable construction costs for a sanitary sewer collection and treatment system to serve the area. The Village plans to be eligible for a low-interest loan from the Illinois Environmental Protection Agency's (IEPA) Water Pollution Control Loan Program (WPCLP).

The proposed property that would contain the WWTP is presently farm field. It is located at approximately 41° 23' 56" N and 88°, 20' 53" W, or approximately 3,000 feet south of United States Route 6 (Route 6) and 5,500 feet west of Tabler Road, near the Lyondell-Basell Morris Complex (8805 North Tabler Road). The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map shows the property outside of the 100-year floodplain elevation of the Aux Sable Creek. The nearest body of water is the Aux Sable Creek, approximately 500 feet from the property.

The information in this antidegradation assessment came from the July 2024 antidegradation report by Strand Associates, Inc. titled “Far West Project Plan Report”.

Identification and Characterization of the Affected Water Body

The subject facility proposes to discharge to Aux Sable Creek at a point where 0 cfs of flow exists upstream of the outfall during critical 7Q10 low-flow conditions. The facility has a proposed DAF of 0.19 MGD. Aux Sable Creek is classified as a General Use Water. According to the 2008 IDNR document “Integrating Multiple Taxa in a Biological Stream Rating System”, Aux Sable Creek is not a biologically significant stream at this location; however, it is rated a “B” stream using IDNR’s integrity rating system at this location. Aux Sable Creek, Waterbody Segment, IL_DW-01, is listed on the 2020/2022 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for aquatic life use with potential cause given as loss of instream cover, and primary contact use with potential cause given as fecal coliform. Aquatic life use is fully supported. This segment of Aux Sable Creek is subject to enhanced dissolved oxygen standards.

Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses.

In addition to the anticipated industrial development, existing NPDES permitted facilities have expressed interest in offloading their discharges to the proposed facility.

The proposed facility will have a TP limit of 1.0 mg/L and a TN goal of 10 mg/L.

Ammonia limits in the permit will be set at water quality standards; however, ammonia loading to the receiving stream may increase over existing background levels. Biochemical oxygen demand (BOD) permit limits will be set at the most stringent effluent standards applicable in 35 IAC 304.120. The stream will nonetheless experience an increase in loading due to the new effluent discharge.

Likewise, phosphorus and total nitrogen loading may or may not increase given the aforementioned existing condition.

Fate and Effect of Parameters Proposed for Increased Loading.

The BOD and ammonia discharged by this facility will decay into simpler and harmless byproducts by naturally occurring organisms in the receiving stream. Some of the nitrogen originating in the ammonia will remain in the stream in the form of nitrates or organic nitrogen. The nutrients discharged will be absorbed by aquatic organisms or riparian terrestrial plants or will remain in the stream. Ammonia and dissolved oxygen standards will be met in the effluent prior to discharge to the receiving stream.

Purpose and Social & Economic Benefits of the Proposed Activity.

The proposed project will provide sewage collection and centralized treatment facilities for the anticipated industrial development and for the treatment capacity for future growth.

Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation.

1. Regionalization and Consolidation

One option available to a community requiring an increase in wastewater treatment capacity is to divert all or part of its flow to a new or existing WWTP. Regionalization to existing WWTPs is dependent upon cooperation between municipalities. Regionalization of wastewater treatment decreases the number of discharges to surface waters and capitalizes on economies of scale but often requires conveying wastewater greater distances.

Conveyance to the existing Channahon or Minooka's WWTP is considered infeasible due to the distance to those WWTPs (approximately 6.5 miles straight-line).

To the west of the proposed WWTP is the Morris Sewage Treatment Plant No. 2 (NDPES Permit No. IL00776902), which is approximately 3.5 miles straight-line from the proposed WWTP. The Aux Sable Creek is a regional low point; therefore, a force main would be required to pass under the Aux Sable Creek and convey wastewater to Morris. The Morris WWTP is permitted for a DAF of 0.90 MGD, and the annual average flow between May 2023 through April 2024 was 0.81 MGD. Morris does not have an effluent limit for TP. Accordingly, Morris would need to expand capacity and install new nutrient removal facilities to accept Channahon's wastewater.

The regionalization of wastewater service with existing WWTPs is not considered a feasible, cost-effective alternative for Channahon and is removed from further consideration.

2. Partial Effluent Reuse

Wastewater treatment and partial effluent reuse involves using treated effluent for agricultural, domestic, or industrial noncontact purposes. In certain areas of the country, this strategy may be attractive because of the scarcity of water. Besides reuse for agricultural irrigation, there were no other potential users of the WWTP effluent identified near the WWTP.

For additional details and requirements, refer to IAC Title 35, Subtitle C, Chapter II, Part 372 for Illinois Design Standards for Slow Rate Land Application of Treated Wastewater.

Agricultural crops grown in the Channahon area are mainly corn and soybeans, and the cropped fields near the study area do not normally depend on supplemental watering.

Assuming wet-weather discharge to the receiving water body from the proposed WWTP and the Phase I DAF, Channahon would need to reuse 0.20 MGD of its proposed effluent. If the effluent were stored during the winter for 150 days, this would require a storage volume of 30 million gallons (MG). Additional land would be necessary for effluent storage facilities. Using a 10-foot water depth and 100 foot buffer around the storage lagoon, the purchase of approximately 16 acres would be required to construct an adequately sized effluent storage lagoon. For the soil types in the study area, an average hydraulic loading rate of approximately 4,000 gpd/acre was assumed. The amount of land necessary to accommodate land application using this loading rate over a 215-day growing season is 85 acres; considering site buffers, the winter storage facilities, and unusable areas, the total area would need to be approximately 93 acres. It would be difficult to find this amount of land within proximity to the proposed WWTP, especially because the surrounding lands are slated for industrial development.

Highly productive agricultural land in the Channahon area is presently selling for up to approximately $100,000 per acre. The total land purchase for the effluent storage lagoon and irrigation would need to be approximately 109 acres, at a cost of approximately $11 million. Preliminary capital costs of an effluent storage lagoon and facilities for conveying effluent to land located one-half mile from the proposed WWTP are approximately $2 million. This assumes construction of an effluent pump station with approximately 0.20 MGD firm capacity, force mains, hydrants, and irrigation of effluent onto the land using a traveling gun irrigator. The total capital cost to implement this alternative would be approximately $13 million, in addition to the total capital cost of a new WWTP. In addition to high cost and limited land availability, this alternative would also provide little benefit because supplemental watering of crops is typically unnecessary near the study area. It would also be difficult to expand the partial effluent reuse system in the future as wastewater flows and loads increase and development results in less available agricultural land. Therefore, this alternative was not considered further.

3. Land Application

Land application typically involves using the treated or partially treated wastewater for irrigation of agricultural land. For additional details and requirements, refer to IAC Title 35, Subtitle C, Chapter II, Part 372 for Illinois Design Standards for Slow Rate Land Application of Treated Wastewater.

Like the partial effluent reuse alternative described earlier, land application would involve storing effluent in a lagoon during the winter, conveying effluent to the land application site, and applying the effluent to agricultural fields with irrigation equipment. Unlike the effluent reuse alternative, this alternative would eliminate the current surface water discharge, resulting in the entire 0.73 MGD of flow being used for irrigation (Phase I peak hourly flow). Storage of the entire WWTP flow during winter would require an effluent storage lagoon of approximately 110 MG. Assuming a 10-foot water depth and 100-foot buffer around the storage lagoon, the purchase of approximately 46 acres would be required to construct an adequately sized effluent storage lagoon for this alternative.

Likewise, the size of the agricultural fields necessary for land application also increases in this alternative. To accommodate land application over a 215-day growing season requires approximately 310 acres; considering site buffers and unusable areas, the total area would need to be approximately 341 acres. The total land purchase for the effluent storage lagoon and irrigation would need to be approximately 386 acres, at a cost of approximately $39 million. Preliminary capital costs of an effluent storage lagoon and facilities for conveying effluent to land located 0.5 mile from the proposed WWTP are approximately $15 million. Therefore, the cost of purchasing land, constructing the required lagoons, constructing the conveyance facilities to the agricultural sites, and purchasing the irrigation equipment would be approximately $54 million, in addition to the cost of a new WWTP.

In addition to high cost and limited land availability, this alternative would also provide little benefit because supplemental watering of crops is typically unnecessary near the study area. It would also be difficult to expand the partial effluent reuse system in the future as wastewater flows and loads increase and development results in less available agricultural land. Therefore, this alternative was not considered further.

4. Constructed Treatment Wetland

There are currently no Illinois design standards for constructed treatment wetlands.
USEPA's Guiding Principles for Constructed Treatment Wetlands (EPA 843-B-00-003 dated October 2000) provides the following information that indicates several reasons why a constructed treatment wetland must be carefully considered and is not always ideal, particularly for Channahon:

"Constructed treatment wetlands should generally be constructed in uplands (outside waters of the U.S.) and outside floodplains or floodways (unless there are opportunities for restoration of degraded or former wetlands) in order to avoid damage to natural wetlands and other aquatic resources. "Strand Associates, Inc.® (Strand) is not aware of the presence of degraded or former wetlands at the location of the proposed WWTP.

"Adverse impacts to waters of the U.S. should be avoided. Potential adverse impacts may include but are not limited to: disruption of the composition and diversity of plant and animal communities; alteration of the existing hydrologic regime of natural wetlands or adjacent surface water bodies; introduction and spread of noxious species; threats to fish and wildlife from toxins and/or pathogens; and degradation of downstream water quality and groundwater sources."

Vector control is a concern, particularly mosquitos as planned development continues around the WWTP site.

Creation of a constructed treatment wetland was not evaluated as a treatment alternative primarily due to the amount of land required and lack of land availability. Strand is not aware of permitted constructed treatment wetlands that provide secondary treatment of raw wastewater in Illinois. USEPA's Wastewater Technology Fact Sheet for Free Water Surface Wetlands (EPA 832-F-00-024, dated September 2000) indicates typical loading rates for various constituents. A design annual average flow of 0.62 MGD would require wetland area of up to 180 acres to treat the projected raw influent total BODs loads.

Adding a constructed treatment wetland as a tertiary polishing step would be an added cost that is not necessary to meet NDES effluent limits and may even reduce effluent quality during few times of the year or hydrologic conditions. The following are additional considerations and concerns, besides the lack of land available:

There would be significant additional cost for the earthwork, liner system, hydraulic controls, plantings, and other components of a constructed wetland system; and added cost for operation and maintenance (O&M), with few commensurate benefits.

Effluent sampling for compliance with the NPDES permit would need to be before the wetland to prevent potential for effluent BODs, TSS, TN, and/or TP spikes (loss of sediment) during wet weather events, to prevent higher effluent TSS because of algae and duck weed growth in the wetland, to prevent other seasonal uncertainty or variability in performance of wetland treatment systems, and prevent disinfection issues associated with fecal coliform bacteria from birds and other wildlife that are attracted to wetlands.

There would be seasonal increased temperatures as well as periodic low DO and soluble phosphorus release from anoxic and anaerobic wetland sediments and decaying plants.

Operations and maintenance of wetland treatment systems is challenging and often difficult to perform because it is not within the set of wastewater treatment operator skills required by IEPA.

BMPs would need in place for removing pollutants like TP and metals that build up in the wetland sediment over time. Channahon would likely need to subcontract a specialty firm to perform this work, which incurs additional capital and administrative costs.

There is limited performance for nitrification, which prevents reducing the size and cost of other WWTPs.

There is limited performance during cold weather, which prevents reducing the size and cost of other WWTPs.

For the reasons previously listed, this alternative was not considered further.

5. Direct Potable Reuse

Direct potable reuse was considered for the WWTP. Potable reuse is defined by American Water Works Association (AWWA) as using advanced treated water as part of the potable water supply without the use of an environmental buffer and with or without retention in an engineered storage buffer. AWWA standard G485-18 provides standards for the operation and management of a direct potable reuse water program. The AWWA standard indicates that there are no current federal regulations that identify or address potable water reuse. However, it states the Safe Drinking Water Act requirements must be met. Strand is not aware of any direct potable reuse programs that have been successfully implemented in the Midwest. Assuming potable reuse treatment consisting of reverse osmosis, microfiltration, and UV Advanced Oxidation Processes, the opinion of cost is more than $110 million, in addition to the cost of a new WWTP. With this high cost and ample fresh water supply for drinking water in the vicinity of Channahon, as well as its ongoing plans to switch to Lake Michigan water, this alternative was not considered further.

6. Groundwater Discharge

Effluent discharge to groundwater is not commonly implemented in Illinois. Shallow groundwater discharge can migrate into potable water wells and/or surface waters and potentially impact potable water well quality, cause the release of pollutants into surface waters, or require high levels of treatment before discharge. Groundwater discharge could be considered indirect potable reuse, which could require meeting Safe Drinking Water Act requirements. IAC Title 35, Subtitle F, Chapter I, Part 620 Section 620 contains additional information regarding nondegradation provisions, standards for quality of groundwaters, and various procedures and protocols for the management and protection of groundwaters. Opinion of cost for groundwater discharge would be expected to be similar to direct potable reuse. Accordingly, this alternative was not considered further.

7. Microconstituents

Microconstituents include chemicals such as endocrine disrupting compounds, pharmaceuticals, and personal care products that are often used as components in cosmetics, toiletries, and household consumer products. Many microconstituents have been shown to change the function of the endocrine system, affecting the way an organism reproduces, grows, or develops. The environmental effects of microconstituents have gained attention from the public and regulators in recent years. Microconstituents are sometimes referred to as pollutants of emerging concern. The opinion of

cost for implementing microconstituent treatment for the Phase 3 flows and loads is approximately $13 million, in addition to the cost of a new WWTP. This included the cost of secondary effluent pumps, ozonation, and advanced biological treatment with biological activated carbon. Currently there are no regulations in Illinois for microconstituents. This alternative was not considered further due to the high cost and lack of regulation.

Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities.

On May 10, 2024, the IDNR EcoCAT web-based tool was used (IDNR Project Number: 2414766) and indicated that there were endangered/threatened species (Greater Redhorse (Moxostoma valenciennesi) and Rainbow (Villosa iris)) present in the vicinity of the discharge. IDNR evaluated the submittal and determined that impacts to the protected resources are unlikely. IDNR terminated the consultation request on May 24, 2024.

Agency Conclusion.

This preliminary assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 Ill. Adm. Code 302.105 (antidegradation standard) and was based on the information available to the Agency at the time the draft permit was written. We tentatively find that the proposed activity will result in the attainment of water quality standards; that all existing uses of the receiving stream will be maintained; that all technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity; and that this activity will benefit the community at large by providing sewage treatment for the expected industrial development. Comments received during the NPDES permit public notice period will be evaluated before a final decision is made by the Agency.

This draft Permit also contains the following requirements as special conditions:

1. Reopening of this Permit to include different final effluent limitations.
2. Operation of the facility by or under the supervision of a certified operator.
3. Submission of the operational data in a specified form and at a required frequency at any time during the effective term of this Permit.
4. More frequent monitoring requirement without Public Notice.
5. Prohibition against causing or contributing to violations of water quality standards.
6. Recording the monitoring results on Discharge Monitoring Report Forms using one such form for each outfall each month and submitting the forms to IEPA each month.
7. The provisions of 40 CFR Section 122.41(m) & (n) are incorporated herein by reference.
8. Effluent sampling point location.
9. Reopening of this Permit to include revised effluent limitations based on a Total Maximum Daily Load (TMDL) or other water quality study.
10. Submission of semi annual reports indicating the quantities of sludge generated and disposed.
11. Submission of annual fiscal data
12. Notify Agency of facility completion
13. Total Nitrogen goal
14. Compliance Schedule for phosphorus
15. Seasonal Coliform Limits

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Illinois Environmental Protection Agency

Division of Water Pollution Control

2520 West Iles Avenue

Post Office Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

New (NPDES) Permit

Expiration Date:

Issue Date:
Effective Date:

Name and Address of Permittee:

Village of Channahon
24555 S. Navajo Drive
Channahon, IL 60410

Facility Name and Address:

Channahon Far West STP
26300 South Tabler Road
Channahon, IL 60410
(Grundy County)

Receiving Waters: Aux Sable Creek

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of the Ill. Adm. Code, Subtitle C, Chapter I, and the Clean Water Act (CWA), the above-named Permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the Effluent Limitations, Monitoring, and Reporting requirements; Special Conditions and Attachment H Standard Conditions attached herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the Permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Brant D. Fleming, P.E.
Manager, Municipal Unit, Permit Section
Division of Water Pollution Control

BDF:KKD:25082101

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Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 001 STP Outfall

Load limits computed based on a design average flow (DAF) of 0.19 MGD (design maximum flow (DMF) of 0.59 MGD).

From the effective date of this Permit until the expiration date, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	LOAD LIMITS lbs/day DAF (DMF)*			CONCENTRATION LIMITS mg/L				
Parameter	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Sample Frequency	Sample Type
Flow (MGD)							Continuous	
$CBOD_5$**,***	16 (49)		32 (98)	10		20	1 Day/Week	Composite
Suspended Solids***	19 (59)		38 (118)	12		24	1 Day/Week	Composite
pH	Shall be in the range of 6 to 9 Standard Units						1 Day/Week	Grab
Fecal Coliform	Daily Maximum shall not exceed 400 per 100 mL (May through October)						1 Day/Week	Grab
Chlorine Residual						0.05	1 Day/Week	Grab
Ammonia Nitrogen: As (N)								
March-May/Sept.-Oct.	2.4 (7.4)	6.2 (19)	7.5 (23)	1.5	3.9	4.7	1 Day/Week	Composite
June-August	2.1 (6.4)	5.2 (16)	9.5 (30)	1.3	3.3	6.0	1 Day/Week	Composite
Nov.-Feb.	6.3 (20)		6.2 (19)	4.0		3.9	1 Day/Week	Composite
Total Phosphorous (as P)****	1.6 (5.0)			1.0			1 Day/Week	Grab
Total Nitrogen (as N)*****				Monitor Only			1 Day/Week	Grab

	Monthly Avg. not less than	Weekly Avg. not less than	Daily Minimum		
Dissolved Oxygen					
March-July	N/A	6.25	5.0	1 Day/Week	Grab
August-February	6.0	4.5	4.0	1 Day/Week	Grab

*Load limits based on design maximum flow shall apply only when flow exceeds design average flow.

**Carbonaceous BOD_5 ($CBOD_5$) testing shall be in accordance with 40 CFR 136

***BOD_5 and Suspended Solids (85% removal required): In accordance with 40 CFR 133, the 30-day average percent removal shall not be less than 85 percent. The percent removal need not be reported to the IEPA on DMRs but influent and effluent data must be available, as required elsewhere in this Permit, for IEPA inspection and review. For measuring compliance with this requirement, 5 mg/L shall be added to the effluent $CBOD_5$ concentration to determine the effluent BOD_5 concentration. Percent removal is a percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the raw wastewater influent concentrations to the facility and the 30-day average values of the effluent pollutant concentrations for a given time period.

**** See Special Condition 14

***** See Special Condition 13

Flow shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

pH shall be reported on the DMR as minimum and maximum value.

Dissolved oxygen shall be reported on the DMR as a minimum value.

Fecal Coliform shall be reported on the DMR as a daily maximum value.

Chlorine Residual shall be reported on the DMR as daily maximum value.

Total Phosphorus shall be reported on the DMR as a monthly average.

Total Nitrogen (as N) shall be reported on the DMR as a monthly average.

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Influent Monitoring, and Reporting

The influent to the plant shall be monitored as follows:

Parameter	Sample Frequency	Sample Type
Flow (MGD)	Continuous	
BOD_5	1 Day/Week	Composite
Suspended Solids	1 Day/Week	Composite

Influent samples shall be taken at a point representative of the influent.

Flow (MGD) shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

BOD_5 and Suspended Solids influent data shall be reported on the DMR as a monthly average concentration.

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Special Conditions

SPECIAL CONDITION 1. This Permit may be modified to include different final effluent limitations or requirements which are consistent with applicable laws and regulations. The IEPA will public notice the permit modification.

SPECIAL CONDITION 2. The use or operation of this facility shall be by or under the supervision of a Certified Class 2 operator.

SPECIAL CONDITION 3. The IEPA may request in writing submittal of operational information in a specified form and at a required frequency at any time during the effective period of this Permit.

SPECIAL CONDITION 4. The IEPA may request more frequent monitoring by permit modification pursuant to 40 CFR § 122.63 and Without Public Notice.

SPECIAL CONDITION 5. The effluent, alone or in combination with other sources, shall not cause a violation of any applicable water quality standard outlined in 35 Ill. Adm. Code 302 and 303.

SPECIAL CONDITION 6. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) electronic forms using one such form for each outfall each month.

In the event that an outfall does not discharge during a monthly reporting period, the DMR Form shall be submitted with no discharge indicated.

The Permittee is required to submit electronic DMRs (NetDMRs) instead of mailing paper DMRs to the IEPA unless a waiver has been granted by the Agency. More information, including registration information for the NetDMR program, can be obtained on the IEPA website, https://epa.illinois.gov/topics/water-quality/surface-water/netdmr.html.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 25th day of the following month, unless otherwise specified by the permitting authority.

Permittees that have been granted a waiver shall mail Discharge Monitoring Reports with an original signature to the IEPA at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Attention: Compliance Assurance Section, Mail Code # 19
2520 West Iles Avenue
Post Office Box 19276
Springfield, Illinois 62794-9276

SPECIAL CONDITION 7. The provisions of 40 CFR Section 122.41(m) & (n) are incorporated herein by reference.

SPECIAL CONDITION 8. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

SPECIAL CONDITION 9. This Permit may be modified to include alternative or additional final effluent limitations pursuant to an approved Total Maximum Daily Load (TMDL) Study or upon completion of an alternate Water Quality Study.

SPECIAL CONDITION 10. For the duration of this Permit, the Permittee shall determine the quantity of sludge produced by the treatment facility in dry tons or gallons with average percent total solids analysis. The Permittee shall maintain adequate records of the quantities of sludge produced and have said records available for U.S. EPA and IEPA inspection. The Permittee shall submit to the IEPA, at a minimum, a semi-annual summary report of the quantities of sludge generated and disposed of, in units of dry tons or gallons (average total percent solids) by different disposal methods including but not limited to application on farmland, application on reclamation land, landfilling, public distribution, dedicated land disposal, sod farms, storage lagoons or any other specified disposal method. Said reports shall be submitted to the IEPA by January 31 and July 31 of each year reporting the preceding January thru June and July thru December interval of sludge disposal operations.

Duty to Mitigate. The Permittee shall take all reasonable steps to minimize any sludge use or disposal in violation of this Permit.

Sludge monitoring must be conducted according to test procedures approved under 40 CFR 136 unless otherwise specified in 40 CFR 503, unless other test procedures have been specified in this Permit.

Planned Changes. The Permittee shall give notice to the IEPA on the semi-annual report of any changes in sludge use and disposal.

The Permittee shall retain records of all sludge monitoring, and reports required by the Sludge Permit as referenced in Standard Condition 25 for a period of at least five (5) years from the date of this Permit.

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If the Permittee monitors any pollutant more frequently than required by this permit or the Sludge Permit, the results of this monitoring shall be included in the reporting of data submitted to the IEPA.

The Permittee shall comply with existing federal regulations governing sewage sludge use or disposal and shall comply with all existing applicable regulations in any jurisdiction in which the sewage sludge is actually used or disposed.

The Permittee shall comply with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish the standards for sewage sludge use or disposal even if the permit has not been modified to incorporate the requirement.

The Permittee shall ensure that the applicable requirements in 40 CFR Part 503 are met when the sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator.

Monitoring reports for sludge shall be reported on the form titled "Sludge Management Reports" to the following address:

Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section
Mail Code #19
2520 West Iles Avenue
Post Office Box 19276
Springfield, Illinois 62794-9276

SPECIAL CONDITION 11. During January of each year the Permittee shall submit annual fiscal data regarding sewerage system operations to the Illinois Environmental Protection Agency/Division of Water Pollution Control/Compliance Assurance Section. The Permittee may use any fiscal year period provided the period ends within twelve (12) months of the submission date.

Submission shall be on forms provided by IEPA titled "Fiscal Report Form For NPDES Permittees".

SPECIAL CONDITION 12. The Permittee shall notify the IEPA in writing once the treatment plant expansion has been completed. A letter stating the date that the expansion was completed shall be sent to the following address within fourteen (14) days of the expansion becoming operational:

Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section, Mail Code #19
2520 West Iles Avenue
Post Office Box 19276
Springfield, Illinois 62794-9276

SPECIAL CONDITION 13. The Permittee shall submit an annual progress report to the Agency by March 31 of each year that summarizes the Permittee's efforts to achieve a monthly average concentration goal of 10 mg/L of Total Nitrogen in the effluent. Correspondence shall be directed to:

Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section, Mail Code #19
2520 West Iles Avenue
Post Office Box 19276
Springfield, Illinois 62794-9276

SPECIAL CONDITION 14. A phosphorus limit of 1.0 mg/L (monthly average) shall become effective 12 months from the operational attainment of the proposed Channahon Far West STP.

The Permittee must implement the following compliance measures consistent with the schedule below:

A. Progress Report on Operations	6 months from operational attainment of the Channahon Far West STP
B. Achieve Annual Concentration and Loading	12 months from operational attainment of the Channahon Far West STP

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Special Conditions

Effluent Limitations for Total Phosphorus

Reporting shall be submitted on the NETDMR's on a monthly basis.

REPORTING

The Permittee shall submit reports for items A and B of the compliance schedule indicating: a) the date the item was completed, or b) that the item was not completed, the reasons for non-completion and the anticipated completion date to the Agency Compliance Section.

SPECIAL CONDITION 15. Fecal Coliform limits for Discharge Number 001 are effective May thru October. Sampling of Fecal Coliform is only required during this time period.

The total residual chlorine limit is applicable at all times. If the Permittee is chlorinating for any purpose during the months of November through April, sampling is required on a daily grab basis. Sampling frequency for the months of May through October shall be as indicated on effluent limitations, monitoring and reporting page of this Permit