

**CWA COMPLIANCE EVALUATION INSPECTION REPORT
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 5**

Facility: Village of Kingston Wastewater Treatment Plant
1050 S. South Street
Kingston, Wisconsin 53939

WPDES Permit Number: WI0036421

Purpose: To evaluate compliance with applicable regulations under the National Pollutant Discharge Elimination System (NPDES) permit program and the Clean Water Act (CWA).

Date of Inspection: May 1, 2025

EPA Region 5 Water Enforcement Compliance Assurance Representatives:

- Keith Middleton, Environmental Engineer, middleton.keith@epa.gov, 312-886-6465
- Danny Nguyen, Environmental Engineer/Scientist, nguyen.danny@epa.gov, 440-250-1709
- Eric Small, Physical Scientist, small.eric@epa.gov, 312-886-6680

Facility Representatives:

- Robert Dolgner, Village of Kingston WWTP Operator, doggy0372@gmail.com, 608-697-9909

Report Prepared by: Keith Middleton, Environmental Engineer

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Date: 2025.06.04 12:02:36 -05'00'

Approver Name and Title: Ryan Bahr, Section 2 Chief, Water Enforcement and Compliance Assurance Branch

Approver Signature: Bahr, Ryan Digitally signed by Bahr, Ryan
Date: 2025.06.05 12:20:21 -05'00'

INTRODUCTION

On May 1, 2025, representatives from the U.S. Environmental Protection Agency Region 5 conducted a Compliance Evaluation Inspection regarding the Village of Kingston Wastewater Treatment Plant (WWTP) in Kingston, Wisconsin. The purpose of this inspection was to evaluate this WWTP's compliance with the CWA and its current WPDES permit. This inspection consisted of an opening conference, a compliance discussion, a WWTP walk-through, and a closing conference at the Kingston WWTP. Any findings and concerns that EPA identified during the inspection are listed in the section entitled "Areas of Concern" starting on page 12 of this report.

WWTP BACKGROUND

The Kingston WWTP is owned by the Village of Kingston ("Village" or "Kingston"). Mr. Dolgner is the principal wastewater treatment operator of this WWTP and has been working at the WWTP since 2017. Mr. Dolgner had previously obtained his wastewater operator license from the State of Wisconsin. At the time of this inspection, Mr. Dolgner's wastewater operator license was expired.

Mr. Dolgner is typically at the WWTP every day to check the status of the pumps at the WWTP and other WWTP treatment components. Mr. Dolgner did note to EPA that originally this WWTP was designed to be operated without an WWTP operator.

WWTP History

According to Mr. Dolgner, the Kingston WWTP was constructed in approximately 1982. The Kingston WWTP was originally built utilizing the current lagoon pond system with the treated effluent to discharge to a leach field located to the east of the WWTP. In 1988, the Kingston WWTP was redesigned to pump the treated effluent 1.3 miles to the north to the Grand River, due to the leach field failing.

During the inspection, EPA learned that the WWTP serves a total of 120 sewer connections. These sewer connections are all residential connections except a mill/office building. Kingston residents also must pay sewer rates if the sewer collection system sewerage runs past their home, even if they are on a septic system and not connected to the sewer system. The Kingston residents are all on private wells for drinking water, so the sewer rates are fixed for all users.

WWTP Summary

The Kingston WWTP's average annual design flow is 0.020 million gallons per day (MGD), according to the WWTP's Wisconsin Permit Discharge Elimination System (WPDES) permit. Mr. Dolgner told EPA that the WWTP treats approximately 11,000 to 13,000 gallons per day on

average during dry weather. The most the WWTP has treated in one day was 30,000 gallons during a very heavy precipitation event in 2018.

The Kingston WWTP consists of a two-cell lagoon treatment system. Before wastewater from Kingston's sewer collection system flows into the WWTP, it first flows into a large septic tank. The septic tank is located approximately 0.75 miles northwest of the WWTP on south side of town near the intersection Vine Street and Wisconsin State Route 44. The septic tank utilizes three chambers/tanks, each sized at 19,000 gallons, and provides both settling and some anaerobic treatment. Mr. Dolgner told EPA he was not sure what the wastewater detention time is in the septic tank. The buildup of solids in the septic tank was last removed in 2020 by United Liquid Waste Recycling, Inc, located in Watertown, WI ("United"). Previously the septic tank was pumped out every 10 years, although after the last pump out by United, the company requested that the frequency be increased to every 5 years, due to the concentration of solids in the tank. Mr. Dolgner indicated that there is no diversion associated with the septic tank.

Wastewater is then pumped out of the septic tank to the WWTP using a lift station with two pumps, for redundancy. Mr. Dolgner estimated that there were 4-5 pumping events to the WWTP from the septic tank on a normal, dry weather day. There is no screening associated with the WWTP headworks. The influent flow meter for the WWTP is located in sewerage before the first lagoon cell (lagoon pond #1). Mr. Dolgner was not sure what the exact size of the first or second stage lagoon. He informed EPA that the lagoons were cone shape and about 14-feet deep with 3-feet of freeboard. Mr. Dolgner indicated that the water surface level in the lagoons will drop in the summer/dry period but are otherwise consistent. There are two aeration blower motors utilized by the Kingston WWTP; only one blower is needed to run the aeration systems in both lagoons. Ferric acid is added to the first lagoon cell for phosphorus treatment. There is a control structure in between lagoon #1 and #2 that can control the flow out of lagoon #1. Mr. Dolgner estimated that overall retention time in the two lagoon cells was approximately 105 days. The solids were last pumped out of both lagoons in 2018.

There is no disinfection utilized at the Kingston WWTP. After the second stage lagoon (lagoon pond #2), the wastewater then flows back through a structure that Mr. Dolgner referred to as the effluent pit. After flowing through the effluent pit, wastewater will then flow by gravity to an effluent wet well south of the WWTP building, before being pumped to the Grand River. The Kingston WWTP has two effluent pumps. Mr. Dolgner will alternate between the use of these pumps and will have the pumps serviced if there are any issues. Sulfuric acid is added in the effluent pit as needed for pH adjustment. The Kingston WWTP utilizes an effluent ultrasonic flow meter, which Mr. Dolgner explained is calibrated every one to two years. The Kingston WWTP also includes a small building ("WWTP building") where records, some testing equipment, pump meters, and the aeration blower motors are housed. A small pump is utilized for the effluent compliance sampling, with the tubing located in the effluent discharge location, is also located in the WWTP building.

Receiving Waters



Exhibit 1: Kingston WWTP Discharge Location

Source: USGS The National Map

As previously mentioned, the Kingston WWTP directly discharges to the Grand River, located approximately 1.25 miles north of the WWTP. The Grand River is shown as a permanent river on the USGS National Map website (<https://apps.nationalmap.gov/viewer/>). The Grand River is impaired for aquatic life related to nitrogen/phosphorus issues.

WPDES Permit

The Kingston WWTP is located in Wisconsin and the State of Wisconsin is delegated permitting authority for this facility. The Wisconsin Department of Natural Resources (WDNR) issued the Kingston WWTP's current WPDES permit (Permit No. WI0036421). Kingston WWTP's WPDES permit is the same as an NPDES permit in other states. This WPDES permit became

effective on October 1, 2017 and the permit expires on September 30, 2022. This WPDES permit is currently administratively extended. The Village of Kingston is listed as the permittee.

The WPDES permit identifies one effluent sampling location (Outfall 001) for the Kingston WWTP and one influent sampling location (Outfall 701), post-septic tank. Outfall 001 had final effluent limitations for pH, total suspended solids (TSS), total ammonia-nitrogen, total phosphorus, chloride, fecal coliform, and five-day biochemical oxygen demand (BOD₅), with the total ammonia-nitrogen, total phosphorus, and chloride compliance sampling requiring 24-hour flow proportional composite sampling.

The WPDES permit also contains:

- Outfall 002 includes lagoon sludge sampling and disposal requirements.
- Outfall 990 includes the septic tank disposal requirements.
- Section 6 of the WPDES permit includes other standard permit requirements related to: sample and testing procedures, recording of records, sanitary sewer overflow and sewage treatment facility overflows requirements, bypass requirements, operation and maintenance, TSS and BOD₅ percent removal requirements, and additional sewage sludge requirements.

Other Background Information

- According to the EPA ECHO website, the last WDNR inspection occurred on September 25, 2019

SITE INSPECTION



Exhibit 2: General Location of the Kingston WWTP

Source: Google Maps (2025)

Inspection Discussion

The EPA team, consisting of Mr. Middleton, Mr. Small, and Mr. Nguyen, arrived at the Kingston WWTP at 10:00 am eastern daylight time (EDT) on Thursday, May 1, 2025. The weather was cloudy, and it rained during most of the inspection with a temperature of approximately 50° Fahrenheit. Mr. Dolgner, the Kingston WWTP representative present, met EPA outside of the WWTP. Soon after, Mr. Middleton began the inspection opening conference within the WWTP building. After explaining the purpose of the EPA inspection, Mr. Middleton, Mr. Nguyen, and Mr. Small then presented their EPA inspector credentials to Mr. Dolgner. Next, EPA discussed EPA's Confidential Business Information (CBI) provisions, notified Mr. Dolgner that EPA would be taking pictures of the facility and potentially be requesting documents, and proposed a tentative schedule for the inspection.

EPA inspectors then began discussing the background information of the Kingston WWTP, including the history of the facility and the general operations of the facility. This information is summarized above in the Facility Background section on page 2 of the inspection report.

WWTP WPDES Permit Compliance Discussion

Year	BOD ₅	BOD ₅	Total Phosphorus	Total Ammonia-Nitrogen	Total Ammonia-Nitrogen
	Monthly Avg.	Weekly Max	Monthly Avg.	Monthly Avg.	Weekly Avg.
2020	1	1	0	0	0
2021	1	2	9	3	4
2022	1	2	9	3	6
2023	1	0	3	2	4
2024	7	5	0	3	3
2025	1	1	0	2	3
Total	12	11	21	13	20

Exhibit 2: Kingston WWTP Last Five Years of WPDES Permit Exceedances Source: EPA's ECHO Database

Biochemical Oxygen Demand Exceedances

EPA asked Mr. Dolgner about the 23 BOD₅ WPDES permit effluent limit exceedances that had occurred in the last five years. Mr. Dolgner indicated to EPA he was unsure why these BOD₅ exceedances had occurred. EPA notes that it appears that many of these exceedances occur in spring, especially in the months of April and May. The Kingston WWTP was in SNC from the 1st Quarter of 2024 to the 3rd Quarter of 2024.

Total Ammonia-Nitrogen Exceedances

Next, EPA asked Mr. Dolgner about the 33 total ammonia-nitrogen WPDES permit effluent limit exceedances that had occurred in the last five years. Mr. Dolgner told EPA that he believed these exceedances had all occurred in the winter months when the biological activity in the lagoons was decreased by the cold conditions.

Total Phosphorus Exceedances

EPA then asked Mr. Dolgner about the 21 total phosphorus WPDES permit effluent limit exceedances that had occurred in the last five years. Mr. Dolgner explained to EPA that the Kingston WWTP had piloted 12 different treatment chemicals before deciding on the use of ferric acid to assist with phosphorus treatment. Since the use of the ferric acid, Mr. Dolgner indicated the phosphorus concentration in the treated effluent went from 5-6 mg/L to 1-2 mg/L. Mr. Dolgner also told EPA during the inspection that the use of ferric acid was a temporary solution. The Kingston WWTP was in SNC from 1st Quarter of 2021 to 1st Quarter of 2023.

85% Removal Calculations

Section 6.4.6 of Kingston WWTP's WPDES permit requires that the average effluent concentrations of BOD₅ and TSS shall not exceed 15% of the average influent concentrations. This equates to the removal of 85% of the average effluent concentrations of BOD₅ and TSS.

During the inspection, EPA asked Mr. Dolgner if the Kingston WWTP met this WPDES permit condition and Mr. Dolgner was unsure. After the inspection, EPA calculated this and found that since January 2022, the Kingston WWTP had met this condition 24 out of 39 months for BOD₅ and none of the months for TSS.

Compliance Sampling and Sample Analysis

During the inspection, Mr. Dolgner told EPA that he typically conducts the Kingston WWTP permit compliance sampling on Wednesdays before 6:00 am. The Markesan WWTP, located approximately 7 miles to the east of the Kingston WWTP, conducts the BOD₅, TSS, total ammonia-nitrogen, and total phosphorus WPDES permit compliance sample analysis for the Kingston WWTP. Mr. Dolgner performs the compliance sampling procurement and then use coolers and glassware provided by the Markesan WWTP laboratory to transport the samples, in the coolers on ice, to the Markesan WWTP. EPA learned from Mr. Dolgner that an official chain of custody sheet is not filled out; however, the bench sheet with sample information is filled out by Mr. Dolgner and then used by the Markesan WWTP laboratory to record the sample analysis results (Photograph 9 in Attachment A). After getting the results back from the Markesan WWTP laboratory, the Kingston discharge monitoring reports (DMRs) are then filled out by Mr. Dolgner and signed by Kathy Jerome, the Kingston's village clerk.

Mr. Dolgner also informed EPA that the Kingston WWTP had performed the previous WPDES permit-required fecal coliform sampling in 2019 and chloride in 2021 sampling. According to Mr. Dolgner, the last whole effluent toxicity (WET) sample analysis was done by Environmental Consulting & Testing in Superior, Wisconsin. Mr. Dolgner does the pH sampling at the Kingston WWTP and has shared with EPA that he has recently ordered a new pH meter to conduct the sample analysis.

EPA asked Mr. Dolgner about the February 2025 DMR submittal, which appeared on the EPA ECHO website as not having been submitted. Mr. Dolgner told EPA there was issue with the entry of a specific number within the DMR and, as a result, the DMR submittal for that month kept being rejected. As of the date of this inspection, the missing February 2025 DMR issues had been removed from the Kingston WWTP's compliance information on the EPA ECHO website.

Sewer Collection System and Sanitary Sewer Overflows

Next, Mr. Dolgner and EPA discussed the Kingston sewer collection system that conveys the wastewater to the WWTP. There are two main sanitary lift stations in the sewer collection system, in addition to the septic tank lift station. All three lift stations are checked on a regular basis.

The Village of Kingston has an ordinance that requires all restaurants to have grease traps, although recently both the restaurants in the Village closed. In addition, new residential connections are required to have a grinder pump. There is no formal Capacity, Management, Operation, and Maintenance (CMOM) program implemented by Kingston nor are there written maintenance collection system protocols. Mr. Dolgner informed EPA that there had not been any sanitary sewer overflows in Kingston in the last five years.

There had been two complaints of sewer backups from two residents in the past year. A local plumber televised the sewer associated with both cases and found issues in the private lateral caused the issues/blockages. Mr. Dolgner told EPA that Kingston has been cleaning its entire sanitary sewer collection system at least once every five years on a regular rotation.

Other Items Discussed:

- WWTP lagoon pond maintenance:
 - Mr. Dolgner indicated that there had been some buildup of cattails in the past within the lagoon ponds. Mr. Dolgner told EPA that WDNR recommends spraying or burning the cattails in the winter.
 - Duckweed does build-up in both the lagoons ponds. Mr. Dolgner indicated to EPA that the effluent will be slightly green once the duckweed begins to die. Once a year in the fall, Mr. Dolgner will have the surface of the lagoon ponds skimmed off to remove any buildup of duckweed before winter.
- Mr. Dolgner told EPA that the WDNR did conduct a CMOM inspection in 2024 at the WWTP, mainly going through a CMOM program self-assessment checklist.
- The Village of Kingston has considered implementing other potential treatment enhancements or changes to the WWTP, including the viability of land applying the treated effluent in lieu of a direct discharge to the Grand River.
- At the time of the inspection, there were no formalized plans to implement any upgrades to the Kingston WWTP.
- Mr. Dolgner told EPA that the required submittals in Section 5.1 in Kingston WWTP's WPDES permit was still ongoing.
- Over the past five year there have been some electrical issues with WWTP components. Mr. Dolgner indicated those issues are fixed as soon as possible, with the help of an electrician.
- Mr. Dolgner performs daily checks at the Kingston WWTP. EPA learned during the inspection that this protocol is not recorded.
- There is no designated backup for Mr. Dolgner regarding the operation of the Kingston WWTP.
- There have been no bypasses of the Kingston WWTP in the last five years.
- EPA asked Mr. Dolgner why WDNR has not reissued the WPDES permit for the Kingston WWTP. Mr. Dolgner indicated to EPA that he did not know why the permit has yet to be reissued.

- Kathy Jerome, Kingston village clerk, came out to the Kingston WWTP during the inspection around 11:00 am to introduce herself to the EPA inspectors.

WWTP Walk-Through

Note that Mr. Dolgner, Mr. Middleton, Mr. Nguyen and Mr. Small did view some components of the Kingston WWTP during the initial discussion portion of the inspection, with a more thorough WWTP walk-through occurring at noon after the conclusion of the discussion.

At 10:18 am, EPA and Mr. Dolgner viewed the influent pit that flowed into the Kingston WWTP from the septic tank. This wastewater then flowed into Lagoon Pond #1 (Photograph 1 in Attachment A). At this time, Mr. Dolgner and EPA followed the influent to Lagoon Pond #1 (Photograph 2 in Attachment A). EPA observed that the surface aeration setup on both lagoon ponds, which consisted of an air hose that was attached to two perforated pipes in the center of the pond (Photograph 4 in Attachment A). This perforated pipe appeared to be in places not making contact with the surface of the pond. Mr. Dolgner did mention later in the inspection that there had been some consideration for a different aeration setup than the current WWTP setup. EPA also noticed riprap along the water surface level to restrict vegetation growth and erosion. EPA and Mr. Dolgner went back inside to the WWTP building to continue discussing the WWTP operation.

At approximately 10:27 am, Mr. Dolgner then showed EPA a room within the WWTP building that housed the aeration blower motors (Photograph 5 in Attachment A). Mr. Dolgner explained to EPA that the blower motors are rotated in and out of service every 3-4 months. In addition, Mr. Dolgner performs the routine maintenance on this equipment. While in this room, EPA observed the ferric acid (Photograph 6 in Attachment A) and the sulfuric acid dosing setup. Mr. Dolgner estimated that the Kingston WWTP uses approximately one 55-gallon drum of ferric acid each month. Mr. Dolgner indicated to EPA that the WWTP uses much less sulfuric acid, which is added to the effluent to achieve a constant pH of about 7.5. Mr. Dolgner told EPA that the ferric acid and sulfuric acid are supplied by Hawkins, a wastewater treatment chemical supply company. EPA and Mr. Dolgner then went back to the main room in the WWTP building to continue discussing EPA's questions related to the Kingston WWTP.

While EPA and Mr. Dolgner discussed the Kingston WWTP's WPDES permit compliance sampling, Mr. Dolgner showed EPA the pump used to obtain compliance samples from the Kingston WWTP effluent sampling point (Photograph 7 in Attachment A). Mr. Dolgner then used the pump to obtain an effluent sample (Photograph 8 in Attachment A). The sample obtained at this time appeared clear.

At approximately 11:55 am, EPA and Mr. Dolgner began a more comprehensive walkthrough of the Kingston WWTP. EPA and Mr. Dolgner first went to the Lagoon Pond #1 and then walked to the lagoon ponds' control structure in between Lagoon Pond #1 and Lagoon Pond #2 (Photograph 11 in Attachment A). Mr. Dolgner told EPA that he typically does not adjust the

weir that controls the water surface elevation in the lagoon ponds, unless there is a large precipitation event that has occurred. EPA and Mr. Dolgner then turned to the north to observe lagoon pond #2. The aeration setup for Lagoon Pond #2 was similar to Lagoon Pond #1, with the same perforated aeration pipe setup (Photograph 13 in Attachment A). EPA did notice that there was some algae buildup on the southwest corner of Lagoon Pond #2 (Photograph 14 in Attachment A). There was also some buildup of material in Lagoon Pond #2 along the northern aeration hose (Photograph 15 in Attachment A).

After observing Lagoon Pond #2, EPA and Mr. Dolgner began walking towards the south to the effluent pit. Along the way, Mr. Dolgner identified the old leach field that the Kingston WWTP originally discharged to (Photograph 15 in Attachment A). While viewing the leach field, EPA inspectors noticed plastic chemical drums/containers arranged around a power pole just to the west of the leach field. Mr. Dolgner told EPA that he thought the drums surrounded the power pole to prevent a lawn mower from hitting the pole and the drums had been there for as long as he could remember. EPA checked the drums and determined that they were filled with liquid. Mr. Dolgner thought that the drums might be filled with water, but he was unsure. Labels on the drums indicated that the drums were used at one time to contain aluminium sulfate solution.

Next, EPA and Mr. Dolgner walked to the effluent pit. At the effluent pit, Mr. Dolgner removed the cover to allow EPA to look in at the pit (Photograph 18 and 19 in Attachment A). Mr. Dolgner explained that he covers the effluent pit because the pit can freeze in the winter and cause a disruption that would not allow the WWTP to discharge effluent. EPA also observed the effluent flow meter readout screen on the west wall of the WWTP building (Photograph 17 in Attachment A). EPA and Mr. Dolgner then walked to the effluent wet well that was located south of the WWTP building. Mr. Dolgner removed the effluent wet well manhole cover to allow EPA to observe the wet well (Photograph 20 in Attachment A).

EPA and Mr. Dolgner then left this portion of the Kingston WWTP and drove 5 minutes to the north to the Kingston village hall building to view the WWTP backup generator (Photograph 21 in Attachment A). Mr. Dolgner informed EPA that this backup diesel generator that can power the WWTP and the three lift stations located within the Kingston sewer collection system. Next, EPA and Mr. Dolgner drove to the east to observe the lift station (Photograph 22 and 23 in Attachment A) and the septic tank (Photograph 24 in Attachment A). EPA learned from Mr. Dolgner that the lift station at this location could pump about 2,200 gallons per minute to the Kingston WWTP. Mr. Dolgner also explained to EPA how the three septic tanks were arranged and how United would pump solids out of the septic tank.

Then, EPA and Mr. Dolgner drove a short distance north to view one of the Kingston sewer collection system lift station locations. In Doc Meyers Community Park, EPA observed the lift station location (Photograph 25 in Attachment A). Next, EPA and Mr. Dolgner drove west to 550 Main Street to view the last lift station within Kingston (Photographs 26 and 27 in Attachment A). At both of these locations, EPA did not notice or observe any evidence of a

discharge or spill in and around the lift stations. EPA and Mr. Dolgner then drove to the Kingston WWTP Outfall 001 discharge location. Mr. Dolgner showed EPA that the discharge occurred just downstream of a private bridge over the Grand River on the south side of the bank. At this location, EPA observed white bubbles that appeared more numerous than in other locations in the Grand River. Mr. Dolgner also explained that he did the WET sampling upstream of the discharge location on the Grand River, as required by the WPDES permit.

Then, EPA and Mr. Dolgner drove approximately 7 miles to the east to the Markesan WWTP in order to observe the Markesan WWTP laboratory where the majority of Kingston's compliance sampling analysis occurred. After arriving at the Markesan WWTP laboratory at approximately 1:00 pm, EPA inspectors met Jeff Heberer, the Markesan Water/Wastewater Superintendent. While at the laboratory, EPA asked Mr. Dolgner how the samples were dropped off. Mr. Dolgner told EPA that usually the samples were either turned over to someone in the lab or dropped off into the sampling storage refrigerator in the laboratory. Mr. Heberer then showed EPA the sampling storage refrigerator, which included a calibrated thermometer inside (Photograph 30 in Attachment A). Mr. Dolgner did add that there were a few times where he had dropped off the sample in the exterior sampling cooler in the Markesan WWTP parking lot. Mr. Heberer indicated that this storage cooler did not have temperature control. EPA then asked about if the Kingston WWTP compliance samples were ever received by the Markesan WWTP laboratory frozen; both Mr. Dolgner and Mr. Heberer said that the Kingston WWTP compliance samples had never been frozen before analysis.

EPA inspectors then continued to ask Mr. Dolgner and Mr. Heberer questions regarding the Kingston WWTP sampling including go over the sampling procedure and sampling sheets that are filled out and act as a chain of custody form. Mr. Heberer informed EPA that Matt Mace, a Markesan WWTP employee, does most of the sample analysis in the Markesan WWTP laboratory. Mr. Heberer then showed EPA a summary sheet of the results of the Kingston WWTP 2025 WWTP. Overall, the Markesan WWTP laboratory appear to be clean and well organized.

Closing Conference

Mr. Middleton began the closing conference in the Markesan WWTP laboratory at approximately 1:30 pm. Mr. Middleton, Mr. Nguyen, and Mr. Small, Mr. Dolgner, and Mr. Heberer were all present for the closing conference. After thanking Mr. Dolgner and Mr. Heberer for their time, EPA then went over the preliminary concerns it found during its inspection, some of which are listed below. EPA also told Mr. Dolgner that it would develop an inspection report that summarized its inspection of this facility and anticipated that it would provide a copy of the report to him in approximately 60 days. After EPA confirmed that it had not obtained any information or taken any pictures that were considered CBI, the closing conference ended at approximately 1:36 pm.

EPA ended the inspection and exited the facility at approximately 1:40 pm.

AREAS OF CONCERN:

EPA has identified 16 areas of concern based on findings during the inspection of the Kingston WWTP. An enumerated list of the areas of concern are listed below:

1. Biochemical Oxygen Demand 5-Day Exceedances: Kingston WWTP has reported 23 WPDES permit exceedances related to the Kingston WWTP's BOD₅ effluent limits in the last five years. EPA is concerned that the exceedances typically occur each year in the April to June timeframe; suggesting that something is occurring with the lagoon ponds at this time of year that leads to the effluent limit exceedances.
2. Total Ammonia-Nitrogen Exceedances: Kingston WWTP has reported 33 WPDES permit exceedances related to the Kingston WWTP's ammonia-nitrogen effluent limits in the last five years. EPA is concerned that the exceedances occur each year in the colder months of the year.
3. Total Phosphorous Issues
 - a. Total Phosphorous Exceedances: Kingston WWTP has reported 21 WPDES permit exceedances related to the Kingston WWTP's Phosphorous effluent limits in the last five years. EPA notes that the phosphorous effluent limits have ceased since Kingston WWTP use of ferric acid.
 - b. EPA is unclear what the status is of water quality based effluent limit (WQBEL) for total phosphorus, including the schedule for required submittals and which submittals have been made in Section 5.0 in Kingston WWTP's WPDES permit. In addition, it is unclear if Kingston WWTP has utilized or looked to Water Quality Trading or the Watershed Adaptive Management Options, pursuant to Section 2.2.1.4 of the WPDES permit.
 - c. Given the use of ferric acid, EPA notes that more material may be settling out within the lagoon ponds. This may fill up the lagoon ponds faster than what occurred before the use of ferric acid.
4. 85% Removal of TSS and BOD₅: Section 6.4.6 of Kingston WWTP's WPDES permit requires that the average effluent concentrations of BOD₅ and TSS shall not exceed 15% of the average influent concentrations. EPA has calculated that the Kingston WWTP has met this requirement 24 out of 39 months for BOD₅ and none of the months for TSS since 2022. Note that the TSS requirement would not apply to the Kingston WWTP if the Kingston WWTP received a variance for TSS granted under NR 210.07(2), Wis. Adm. Code, pursuant to Kingston WWTP's WPDES permit.

5. 24-Hour Flow Proportional Sampling: Section 2.2.1 of Kingston WWTP's WPDES permit requires 24-hour proportional sampling for total ammonia-nitrogen and total phosphorous. "24-hour composite sample" is defined in Wisconsin *NR 218.04* as "a combination of individual samples taken at intervals of not more than one hour such that the volumes of each of the individual samples and of the combination are proportional to the volumes of flow during each interval and during the 24-hour period respectively." During the inspection, it was unclear if Mr. Dolgner was regularly performing 24-hour flow proportional sampling for total ammonia-nitrogen and total phosphorous. The Kingston WWTP also did not possess a composite sampler. When 24-hour flow proportional sampling was attempted in the past, Mr. Dolgner indicated he would visit the wastewater treatment plant throughout the 24-hour sampling period and take a sample every 1-2 hours. EPA is concerned that this procedure does not meet the Wisconsin requirements and Kingston WWTP does not have the equipment to perform the required 24-hour proportional sampling properly.
6. Duckweed and Algae Build-up: During the inspection, Mr. Dolgner indicated that duckweed builds up in the lagoon ponds throughout the summer into early fall. Since duckweed can lower the dissolved oxygen within the lagoon ponds and, therefore, effect the treatment efficacy of the lagoon ponds, the duckweed must be controlled. EPA is concerned that the Kingston WWTP only removes the duckweed in the fall and does not employ other methods to control duckweed when it starts to accumulate.

In addition, EPA observed some algae build-up in the southwest corner of Lagoon Pond #2. Aerated lagoons should not have a build-up of algae. Since algae can raise the amount of TSS and BOD5 levels, especially when it begins to die, EPA is concerned about its presence in the Kingston WWTP. EPA is unclear if the Kingston WWTP has employed any measure, such as copper sulfate, to control the build-up of algae.

7. Lagoon Ponds Detention Time: EPA learned from Mr. Dolgner during the inspection that he had estimated the detention time of the Kingston WWTP lagoon ponds to be 105 days. The "Operation of Municipal Wastewater Treatment Plants Manual of Practice" (Water Environmental Federation MOP 11) indicates a normal detention time range of 3 to 10 days for aerated lagoons (page 799). EPA is concerned that the elevated detention time of the Kingston WWTP lagoon ponds may have caused/contributed to some of the WPDES permit effluent limit exceedance issues and the algae/duckweed build-up in the lagoon ponds.
8. pH Sampling: When Mr. Dolgner performs the pH WPDES permit compliance sampling, the time when the sample was taken and when the sample analysis was performed was not recorded. Therefore, EPA was unable to determine if the required holding time of 15 minutes, as specified in 40 C.F.R. Part 136, was met.

9. Lack of Operator License: Section 6.2.9 of the Kingston WWTP WPDES permit indicates the operation of the facility's wastewater treatment shall be by or under the supervision of a state certified operator, as required by NR 108.06(2), Wis. Adm. Code. During the inspection, the EPA learned that Mr. Dolgner operator certification had expired, and the Kingston WWTP did not employ any other state certified operator.
10. Chemical Drum Storage Outside: During the inspection, EPA observed chemical drums/storage containers oriented around a power pole in between the Kingston WWTP and the leach field (Photograph 16 in Attachment A). The drums were labeled to contain aluminium sulfate and EPA confirmed that there was still liquid in the drums. Mr. Dolgner was not sure what was in these drums. If the drums still did contain aluminium sulfate, EPA would be concerned about the spill potential associated with the drums stored in this manner.
11. Chain of Custody/Bench Sheet/Compliance Sample Processing: EPA observed the following concerns within the chain of custody/bench sheet sampling document filled out by Kingston WWTP and Markesan WWTP:
 - a. There is no recorded analysis time for the samples. EPA, therefore, cannot confirm that the required applicable holding time for the sample parameters, as specified in 40 C.F.R. Part 136, was met.
 - b. Although the Markesan WWTP laboratory does record the temperature of the sample in the provided chain of custody, the document does not confirm that the other preservation requirements for the total phosphorus and ammonia-nitrogen were met.
 - c. If the samples were dropped off to a person by Mr. Dolgner, that person is not identified in this document.
 - d. The person who performed the compliance sample analysis is not identified in this document.
12. Use of the Exterior Sampling Cooler at the Markesan WWTP: During the inspection, Mr. Dolgner indicated that rarely Kingston WWTP samples were left in the exterior sampling cooler at the Markesan WWTP. Since there is no cooling element or temperature monitoring in the exterior sampling cooler, EPA is concerned that the required sample preservation temperature could not be maintained for compliance samples stored in this cooler.
13. Backup WWTP Operator/Sampler: There is not a proper contingency plan for WWTP operation and WPDES compliance sampling in the case of Mr. Dolgner's absence or unavailability.

14. Operation and Maintenance Activities: Given the concerns in #13, above, EPA is concerned that if Mr. Dolgner was not available to perform the Kingston WWTP maintenance activities, there may be an issue to determine what needed maintenance activities to be done and how that maintenance would be done.
15. WWTP Effluent Discharge in Grand River: At Outfall 001 (Kingston WWTP treated effluent discharge to the Grand River), EPA observed numerous small white bubbles around the submerged discharge pipe (Photograph 28 in Attachment A). It was unclear if the presence of these white bubbles was because of the composition of the discharge or because of the submerged discharge being discharged to the Grand River under pressure. Section 6.4.4 of Kingston WWTP's WPDES permit indicates that "there shall be no discharge of floating solids or visible foam other than trace amounts."
16. Capacity, Management, Operation and Maintenance Program: During the inspection, Mr. Dolgner told EPA that the Kingston WWTP did not have a CMOM Program. Section 6.3.2. of the Kingston WWTP's WPDES permit requires that the permittee "shall develop and maintain written documentation of the CMOM program components in NR 210.23 Wis Adm. Code." The components of a CMOM program are identified in NR 210.23(4) and include goals, organization, legal authority, operation and maintenance, design and performance standards, and an overflow emergency response plan. It is unclear if the Kingston WWTP has developed all of the components of a CMOM program and has written CMOM program documentation.

LIST OF ATTACHMENTS:

- A. Inspection Photograph Log

Attachment A: Village of Kingston WWTP Inspection Photograph Log
U.S. EPA Inspection – May 1, 2025
All photos taken by Eric Small, Physical Scientist, U.S. EPA and Keith Middleton,
Environmental Engineer, U.S. EPA
Camera: Pentax WG-1



1: IMGP0001

Description: Influent into Kingston WWTP from Septic Tank

Location: Kingston WWTP

Camera Direction: N/A

Date/Time: 5/01/2025 at 10:18 A.M.



2: IMGP0002

Description: Lagoon Pond #1 with Aerators

Location: Kingston WWTP

Camera Direction: Northwest

Date/Time: 05/01/2025 at 10:19 A.M.



3: IMGP0003

Description: Lagoon Pond #1 with Aerators

Location: Kingston WWTP

Camera Direction: Northwest

Date/Time: 05/01/2025 at 10:19 A.M.



4: IMGP0004

Description: Lagoon Pond #1 with Aerators

Location: Kingston WWTP

Camera Direction: Northwest

Date/Time: 05/01/2025 at 10:19 A.M.



5: IMGP0005

Description: Aeration Blower Motors

Location: Kingston WWTP

Camera Direction: N/A - Inside

Date/Time: 05/01/2025 at 10:28 A.M.



6: IMGP0006

Description: WWTP Ferric Acid Dosing Setup

Location: Kingston WWTP

Camera Direction: N/A - Inside

Date/Time: 05/01/2025 at 10:29 A.M.



7: IMGP0007

Description: Effluent Compliance Sampling Location

Location: Kingston WWTP

Camera Direction: N/A - Inside

Date/Time: 05/01/2025 at 10:34 A.M.



8: IMGP0008

Description: WWTP Sample Effluent

Location: Kingston WWTP

Camera Direction: N/A - Inside

Date/Time: 05/01/2025 at 10:45 A.M.

FACILITY Kingston

SAMPLE DATE 4/9/25

SAMPLE TIME 6:00 AM

SAMPLED BY BS

DATE SAMPLE DELIVERED TO LAB 4/9/25

TIME SAMPLE DELIVERED TO LAB 6:30 AM

SAMPLE DELIVERED TO LAB BY BS

WAS SAMPLE RECEIVED ON ICE ☒ YES or NO AND

TEMPERATURE OF SAMPLE RECEIVED 3

BOD RESULTS using ANALYTICAL METHOD 5210B

Influent [ki] 105 mg/l

Effluent [ke] 19 mg/l

SUSPENDED SOLIDS RESULTS using METHOD 2540D

Influent [ki] 18 mg/l

Effluent [ke] 2 mg/l

AMMONIA NITROGEN RESULTS using METHOD Hach 10205

Influent [ki] 25.861 mg/l LOD 2.3

Effluent [ke] 20.337 mg/l LOQ 7.7

TOTAL PHOSPHORUS RESULTS using METHOD 4500-P E

Influent [ki] 2.169 mg/l LOD 0.150

Effluent [ke] 0.308 mg/l LOQ 0.500

QC Exceedance _____

MARKESAN LAB # 424004680

9: IMGP0009

Description: WWTP Compliance Sampling **Benchsheet**

Location: Kingston WWTP

Camera Direction: N/A - Inside

Date/Time: 05/01/2025 at 11:16 A.M.



10: IMGP0010

Description: Lagoon Pond #1

Location: Kingston WWTP

Camera Direction: West

Date/Time: 05/01/2025 at 11:57 A.M.



11: IMGP0011

Description: Control Structure Between Lagoon Pond #1 and Lagoon Pond #2

Location: Kingston WWTP

Camera Direction: N/A

Date/Time: 05/01/2025 at 11:59 A.M.



12: IMGP0012

Description: Lagoon Pond #2

Location: Kingston WWTP

Camera Direction: Northwest

Date/Time: 05/01/2025 at 12:00 P.M.



13: IMGP0013

Description: Lagoon Pond #2

Location: Kingston WWTP

Camera Direction: North

Date/Time: 05/01/2025 at 12:01 P.M.



14: IMGP0014

Description: Lagoon Pond #2

Location: Kingston WWTP

Camera Direction: West

Date/Time: 05/01/2025 at 12:03 P.M.



15: IMGP0015

Description: Leach Field

Location: Kingston WWTP

Camera Direction: East

Date/Time: 05/01/2025 at 12:04 P.M.



16: IMGP0016

Description: Assorted Chemical Drums

Location: Kingston WWTP

Camera Direction: East

Date/Time: 05/01/2025 at 12:06 P.M.



17: IMGP0017

Description: Effluent Flow Meter Read-Out

Location: Kingston WWTP

Camera Direction: East

Date/Time: 05/01/2025 at 12:08 P.M.



18: IMGP0018

Description: Effluent Pit

Location: Kingston WWTP

Camera Direction: N/A

Date/Time: 05/01/2025 at 12:09 P.M.



19: IMGP0019

Description: Covered Effluent Pit

Location: Kingston WWTP

Camera Direction: N/A

Date/Time: 05/01/2025 at 12:10 P.M.



20: IMGP0020

Description: Effluent Wet Well

Location: Kingston WWTP

Camera Direction: N/A

Date/Time: 05/01/2025 at 12:12 P.M.



21: IMGP0021

Description: Backup WWTP Diesel Generator

Location: Kingston Village Hall

Camera Direction: East

Date/Time: 05/01/2025 at 12:29 P.M.



22: IMGP0022

Description: Lift Station From Septic Tank to Kingston WWTP

Location: Septic Tank Location

Camera Direction: N/A

Date/Time: 05/01/2025 at 12:33 P.M.



23: IMGP0023

Description: Lift Station From Septic Tank to Kingston WWTP

Location: Septic Tank Location

Camera Direction: Southeast

Date/Time: 05/01/2025 at 12:35 P.M.



24: IMGP0024

Description: Village of Kingston Main Lift Station

Location: Septic Tank Location

Camera Direction: Southeast

Date/Time: 05/01/2025 at 12:36 P.M.



25: IMGP0025

Description: Doc Meyers Community Park Lift Station

Location: Doc Meyers Community Park

Camera Direction: n/a

Date/Time: 05/01/2025 at 12:39 P.M.



26: IMGP0026

Description: Main Street Lift Station

Location: 550 Main Street

Camera Direction: North

Date/Time: 05/01/2025 at 12:43 P.M.



27: IMGP0027

Description: Main Street Lift Station

Location: 550 Main Street

Camera Direction: n/a

Date/Time: 05/01/2025 at 12:43 P.M.



28: IMGP0028

Description: Outfall 001 Effluent Location

Location: Outfall 001

Camera Direction: West

Date/Time: 05/01/2025 at 12:46 P.M.



29: IMGP0029

Description: Grand River; Downstream of Outfall 001

Location: Outfall 001

Camera Direction: West

Date/Time: 05/01/2025 at 12:46 P.M.



30: IMGP0030

Description: Sampling Refrigerator with Thermometer

Location: Markesan WWTP Department Lab

Camera Direction: N/A - Inside

Date/Time: 05/01/2025 at 1:06 P.M.



31: IMGP0031

Description: Bottles Used for Two-Point pH Calibration

Location: Markesan WWTP Department Lab

Camera Direction: n/a

Date/Time: 05/01/2025 at 1:08 P.M.

2025 Kingston Testing Results									
Date	BOD		S.S		Ammonia		Phosphorus		
	INF	EFF	INF	EFF	INF	EFF	INF	EFF	
1-3-25	89	23	18	12	37.994	30.568	5.326	1.662	
1-8-25	97	21	26	20	32.796	32.598	5.290	1.618	
1-15-25	136	17	28	14	46.570	46.312	6.400	2.099	
1-24-25	113	24	26	14	47.495	48.160	6.525	2.165	
1-29-25	121	23	42	22	31.947	42.278	6.066	2.845	
2-5-25	113	20	28	18	44.580	46.472	6.811	1.893	
2-12-25	127	27	18	22	43.710	45.603	7.174	1.832	
2-21-25	125	27	30	24	42.432	45.040	6.028	2.317	
2-26-25	120	32	22	23	54.351	44.222	6.828	2.330	
3-5-25	124	29	22	37	44.273	32.203	6.334	2.906	
3-12-25	110	47	24	40	53.175	35.679	5.474	1.865	
3-19-25	122	39	30	20	36.724	32.100	6.200	1.732	
3-26-25	112	32	14	11	29.448	31.896	4.347	1.920	
4-2-25	95	24	16	7	31.436	35.707	5.436	0.843	
4-9-25	105	19	18	2	25.861	20.557	2.169	0.308	
4-16-25	117	47	16	7	31.691	14.046	2.914	0.845	
4-23-25	133	41	26	12	34.044	8.420	3.773	0.662	
4-30-25					31.691	4.057	5.163	0.912	

32: IMG0032

Description: Kingston WWTP Sampling Results

Location: Markesan WWTP Department Lab

Camera Direction: n/a

Date/Time: 05/01/2025 at 1:12 P.M.



33: IMGP0033

Description: Exterior Sampling Cooler at Markesan Wastewater Treatment Plant

Location: Markesan WWTP Department

Camera Direction: West

Date/Time: 05/01/2025 at 1:37 P.M.