

April 5, 2024

Jericho Water District
PWS ID No. NY2902831
MCL Exemption for 1,4-Dioxane
Quarterly Report – First Quarter 2024

Introduction

On behalf of the Jericho Water District (JWD or District), D&B Engineers and Architects (D&B) has prepared this document in accordance with the requirements of the New York State Department of Health (NYSDOH) for public water suppliers who have been granted exemptions from maximum contaminant level (MCL) violations for 1,4-dioxane. The District was granted an MCL deferral for 1,4-dioxane in 2020, which was renewed in 2022 with the expiration of the renewal in August 2023. JWD was granted an exemption in August 2023 because it has been proactive in its efforts to establish and implement an action plan for managing the above-referenced compounds.

The last three years have been a time of unprecedented disruption in the supply chain of chemical supplies, equipment, infrastructure components, pipe and materials (e.g., steel), and treatment systems. Contractors and water suppliers, locally and nationwide, have been impacted by these issues in completing both small-scale and large-scale projects. Shortages of necessary items have significantly impacted the District, primarily in terms of price increases, decreased availability, and longer lead times. In addition, due to the rapidly changing regulatory environment through an expanded list of contaminants with lower regulatory advisory levels or MCLs, local and state regulators are experiencing a large number of capital project submissions, in addition to their regular responsibilities. This increased workload has led to longer regulatory review times of engineering reports, detailed design plans, and specifications. In many cases, these factors, which are out of the District's control, have caused delays in obtaining final regulatory approval, commencing construction, procuring equipment and necessary components, and conforming to the construction schedules proposed in the District's original application for a deferral.

The District has done everything within its power to adhere to the project schedules approved in the original deferral request, as described in the previous quarterly deferral reports. The wide reach of the impact of supply chain issues and delays was not known at the time of the original compliance deferrals and, as such, these delays were expected to become worse before improving because of increased national demand. Recognizing these exceptional circumstances, the District requested and received a 12-month deferral renewal, which extended our MCL compliance deadline to August 25, 2023. However, the supply chain issues and delays have not lessened and, therefore, additional time is necessary to achieve compliance. As such, the District was granted a 12-month MCL exemption, extending its compliance deadline to August 25, 2024.

Despite the challenges of the current supply chain along with the ever-changing regulatory environment, the District has worked tirelessly to preserve the quality of its drinking water. There are currently four different treatment plants being constructed specifically for the removal of 1,4-dioxane from seven District wells. The combined cost of these projects is greater than \$50 million

and this does not include the other construction projects that the District currently has ongoing to enhance other components of its water infrastructure.

The District's goal, as always, is to provide an adequate supply of potable water to its community and will continue to move forward on these projects to further that goal.

The following is a report describing JWD's progress towards maintaining the highest quality of water for our customers and working to meet the deadlines set forth in the original deferral approval. Updated schedules for each project are contained in Attachment A.

Corrective Action Plan Milestones

Wells 9 and 14

An Application for an Approval of Completed Works was filed with the NYSDOH in December 2023. Representatives from the Nassau County Department of Health (NCDH) inspected the facility in March 2024. Subject to addressing the comments from the inspection, the District anticipates receiving approval to operate the advanced oxidation process (AOP) facility in April 2024. Contractors continue to address minor work items to satisfy their contract obligations.

Although it has been granted an exemption, JWD has been able to minimize the usage of these wells during the period of this report.

Wells 20 and 21

This project is currently in the construction phase. The NCDH and NYSDOH issued approval of the engineering report during August and September 2022 and of the design plans in June and July 2023. Process piping installation is underway and works continues within the AOP and granular activated carbon (GAC) buildings. The electrical equipment and service gear delivery scheduled for the end of December 2023 remains delayed. The best case timeline for the site to be operational would be summer of 2024, but only using the GAC treatment system (as approved by the NYSDOH and NCDH) used last pumping season while continuing to progress the AOP. A submittal was made to NCDH and NYSDOH for approval to operate through the AOP equipment as pipes until it is ready to be put in service. Even though the District is working with its contractor, vendors, and manufacturers to bring the project to completion as quickly as possible, it may not be able to return the site to full operation until the late fall of 2024.

Even though it has been granted an exemption, the JWD removed these wells from service for the first quarter 2024 and will continue its monitoring and minimization strategy for the usage of these wells to the greatest extent practicable while meeting system demands. JWD will continue to monitor the 1,4-dioxane concentrations and work to minimize future run times of the wells where the concentration exceeds the MCL.

Well 22

This project is currently in the construction phase. The NCDH and NYSDOH issued approval of the engineering report in October 2022 and approval of the design specifications and plans in November 2023. The general construction contract of the project was re-bid and bids were received on March 15, 2024. The well is removed from service and will continue to be out of service for the duration of construction and likely throughout the 2024 pumping season. The well, with treatment installed, is anticipated to be returned to service early in the 2025 pumping season.

Although it has been granted an exemption, JWD continues to monitor and minimize the usage of this well to the greatest extent practicable while meeting system demands.

Wells 25 and 26 (Kirby Lane Facility)

This project is currently in the construction phase. The District received NCDH approval of the engineering report in September 2021. The District received NCDH approval of the detailed design documents on July 12, 2022 and NYSDOH approval of the engineering report and detailed design documents on July 25, 2022. Construction has been progressing on-site. The AOP and GAC systems are fully installed, where initial testing of the first treatment train was completed in November 2023 and initial testing of the second treatment train was completed in January 2024. Performance testing and sampling was completed for both treatment trains in March 2024. A request for approval to operate will be made upon receipt of all sampling results from the performance testing and sampling and is expected prior to the end of spring 2024.

Although it has been granted an exemption, JWD continues to monitor and minimize the usage of these wells to the greatest extent practicable while meeting system demands. JWD will continue to monitor the 1,4-dioxane concentrations and work to minimize future run times of the wells where the concentration exceeds the MCL.

Public Notification

In accordance with the terms of the exemption, JWD has maintained an open line of communication with the public regarding its exemption. The exemption public notification documentation and the previous deferral and exemption quarterly reports are still featured prominently on the District website.

Analytical Sampling

The wells for which the exemption was granted (Wells 9, 14, 20, 21, 22, 25 and 26) were not sampled during the first quarter of 2024 due to well performance testing and ongoing construction.

Conclusion

As demonstrated above, JWD is actively working to preserve the quality of water for its customers and comply with the requirements put forth by the NYSDOH. The District looks forward to continuing to work towards completion of its treatment facilities.

Should you have any questions, please contact Superintendent Peter Logan at 516-921-8280 or visit the website, www.jerichowater.org.

Very truly yours,

Board of Commissioners
Jericho Water District

Enclosures

cc: K. Wheeler (NYSDOH)
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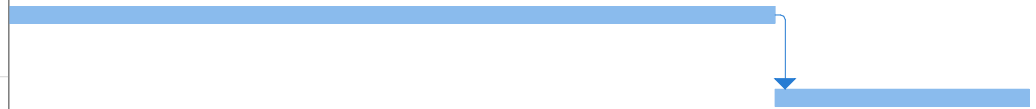
ATTACHMENT A

**Project Schedules Associated with
MCL Exemption**

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Wells 9 and 14
AOP Project Schedule

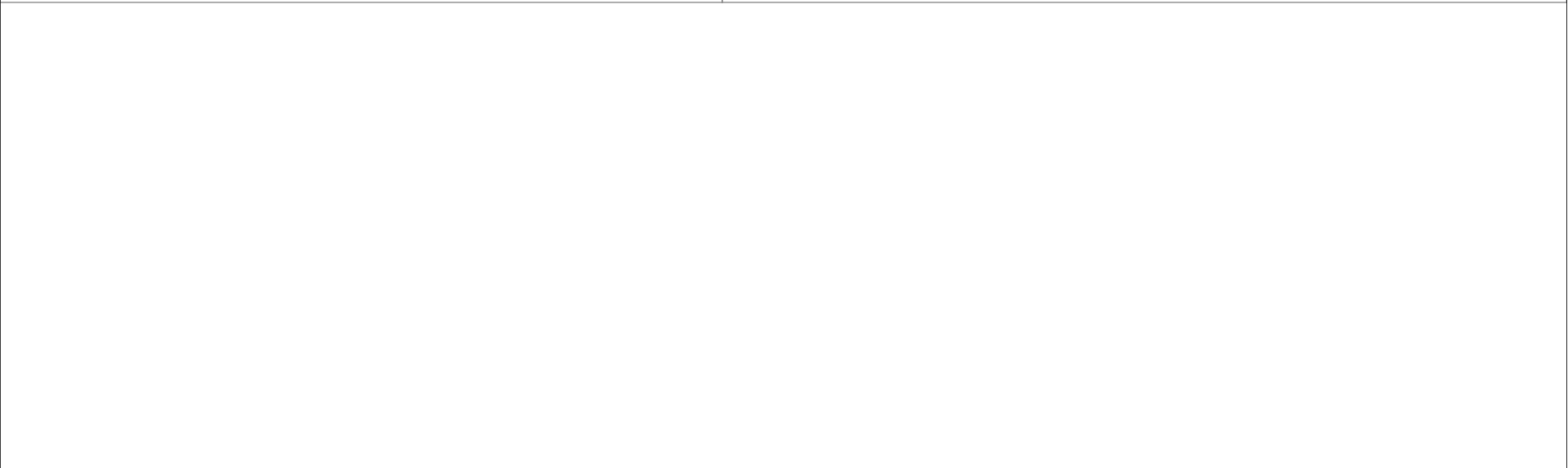
Task Name	2023				2024	
	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2
Pilot Test and Planning (Complete)						
Engineering Report (Complete)						
NCDH and NYSDOH Review of Engineering Report (Complete)						
Detailed Design (Complete)						
NCDH and NYSDOH Review of Contract Documents (Complete)						
Bidding and Construction (Complete)						
Startup and Testing (Complete); NCDH Approval (In Progress)						



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Well 22
AOP Project Schedule

Task Name	2023				2024				2025		
	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3
Pilot Test and Planning (Complete)											
Engineering Report (Complete)											
NCDH and NYSDOH Review/Approval of Engineering Report (Complete)											
Detailed Design (Complete)											
NCDH and NYSDOH Review of Contract Documents (Complete)											
Bidding (Complete) and Construction (In Progress)											
Startup and Testing											



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Wells 25 and 26
AOP Project Schedule

Task Name	2023				2024		
	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3
Pilot Test (Complete)							
Engineering Report (Complete)							
NCDH and NYSDOH Review of Engineering Report (Complete)							
Detailed Design (Complete)							
NCDH and NYSDOH Review of Contract Documents (Complete)							
Bidding (Complete) and Construction (In Progress)							
Startup and Testing							

