January 1, 2024

Jericho Water District PWS ID No. NY2902831 MCL Exemption for 1,4-Dioxane Quarterly Report – Fourth Quarter 2023

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

Startup and performance testing of the new treatment systems have been completed. The Nassau County Department of Health has been notified that the facility is ready for operation. The District anticipates approval to operate during the first quarter of 2024.

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. Site work is progressing and the building structural bracing, trussing, and roofing work have been completed. The AOP equipment installation is underway and the building enclosures are nearly complete. The majority of the electrical equipment and service gear delivery is scheduled for January 2024. The best case timeline for the site to be operational would be early pumping season 2024, without the use of the automatic transfer switch that is on order. 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 operation until the summer of 2024.

Even though it has been granted an exemption, the JWD removed these wells from service for the fourth quarter 2023 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 on-site construction of the AOP facility is underway and the well is now removed from 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 prior to 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 is anticipated to be completed in January 2024. Performance testing and sampling will then follow where approval to operate 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 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 fourth quarter of 2023 due to well performance testing and ongoing construction. Sampling may resume again in the first quarter of 2024.

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

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ATTACHMENT A

Project Schedules Associated with MCL Exemption

Jericho Water District MCL Exemption

Wells 9 and 14 AOP Project Schedule

ask Name	2022 Qtr 1	Qtr 2	Qtr 3	Qtr 4	2023 Qt	Qtr 2	Qt	r 3	Qtr 4	2024 Qtr 1	Qtr 2
Pilot Test and Planning (Complete)	Q u	 	4			 		. 5		1 40.	40.2
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)											

Jericho Water District Wells 20 and 21 **AOP Project Schedule** MCL Exemption Quarterly Report - Q4 2023 Task Name 2022 2024 2023 Qtr 2 Qtr 2 Qtr 2 Qtr 3 Qtr 4 Qtr 1 Qtr 3 Qtr 4 Qtr 1 Qtr 1 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 Award of Contracts (Complete) Construction (In Progress) Startup and Testing

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Well 22 AOP Project Schedule

Task Name	2022 Qtr 1 Qtr 2 Qtr 3 Q	2023 Otr 4 Otr 1 Otr 2	Qtr 3 Qtr 4 Qtr 1	Otr 2 Otr 3	Qtr 4 Qtr
Pilot Test and Planning (Complete)		X			
Engineering Report (Complete)					
NCDH and NYSDOH Review/Approval of Engineering Report (Complete)					
Detailed Design (Complete)					
NCDH and NYSDOH Review of Contract Documents (In Progress)	•		•		
Bidding (Complete) and Construction (In Progress)					
Startup and Testing					

Jericho Water District

Wells 25 and 26

MCL Exemption Quarterly Report - Q4 2023	AC)P Proj	ject S	Schedul	е									
Task Name	2022 Qtr 1	Qtr	r 2	Qtr 3	Qtr 4	2023 Qtr 1	Qtı	r 2	Qtr 3	Qtr 4	2024 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 and Construction (In Progress)	-													
Startup and Testing														