California Regional Water Quality Control Board
San Diego Region

Response to Comments Report

Tentative Order No. R9-2024-0035

Addendum No. 1 to Order No. R9-2020-0001 as Amended by Order No. R9-2020-0183

NPDES No. CA0109398

Amending Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit for the City of San Diego North City Water Reclamation Plant and Pure Water Facility, Discharge to Miramar Reservoir, San Diego County

October 9, 2024

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INTRODUCTION

This report contains the California Regional Water Quality Control Board, San Diego Region's (San Diego Water Board) responses to written comments received from interested parties and persons on Tentative Order No. R9-2024-0035*, Addendum No. 1 to Order No. R9-2020-0001 as amended by Order No. R9-2020-0183, NPDES No. CA0109398, Amending Waste Discharge Requirements and National Discharge Elimination System Permit for the City of San Diego North City Water Reclamation Plant and Pure Water Facility Discharge to the Miramar Reservoir San Diego County* (Tentative or Amending Order).

The San Diego Water Board provided public notice of the release of the Tentative Order on June 13, 2024, and provided a period of at least 30 days for public review and comment on the Tentative Order. The public comment period ended on July 15, 2024.

Comments and Responses

The Tentative Order proposes to modify Order No. R9-2020-0001 as amended by Order No. R9-2020-0183 (2020 Order). Additions the Tentative Order makes to Order No. R9-2020-0001 are shown in red-underline text while deletions are shown in ~~red-strikeout~~ text.

The summarized written comments and San Diego Water Board responses are set forth below. The responses include a description of any actions taken to revise the Tentative Order as a result of the comments. Any revisions to the Tentative Order as a result of comments received are shown in blue-underline for added text and ~~blue strikeout~~ for deleted text.

COMMENTS AND RESPONSES

1. Comments from the Discharger

1.1. Comment – Modify Influent Monitoring Location Description (Table E-1 of Order No. R9-2020-0001)

The Discharger requested modification to the North City Water Reclamation Plant (NCWRP) influent monitoring location description in Table E-1 of the permit (page E-5) to maintain consistency with current and historical monitoring practices. Historically, the influent flow monitoring location at the NCWRP has been located downstream of in-plant return flows and return flows have been subtracted from the influent flow for reporting purposes, per the requirements set forth in the PLWTP 301(h) modified permit. Maintaining the monitoring location in its current location within the plant, downstream of in-plant return flows, will allow for consistent comparison with historical data which is critical to the PLWTP 301(h) modified permit process. The Discharger requested the following language for the monitoring location description:

"A location where all influent flow to the North City Water Reclamation Plant (NCWRP) ~~are~~ is accounted for in monitoring events; ~~upstream of any in-plant return flows~~, and where a representative sample of the influent can be obtained."

Response

San Diego Water Board staff agree with the Discharger's comment and modified Table E-1 of Order No. R9-2020-0001, as shown below:

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
---	INF-001	A location where all influent flow to the North City Water Reclamation Plant (NCWRP) ~~are~~ is accounted for in monitoring events; ~~upstream of any in-plant return flows, and~~ where a representative sample of the influent can be obtained. Latitude: 32.8766° Longitude: -117.1973°

1.2. Comment – Clarify Duration of Moored Sensor Monitoring (Finding 1.5.i of the Tentative Order, page 2, and Table E-16 of Order No. R9-2020-0001)

The Discharger requested clarification of the duration of the moored sensor monitoring described in section 1.5.i and Table E-16 Footnote 13. Section 1.5.i includes a monitoring period of "at least 12 months, commencing with the discharge to the Reservoir," while, Table E-16 Footnote 13 includes a monitoring

period of "at least 20 months after the discharge to Miramar Reservoir."

Response

San Diego Water Board staff agree with the Discharger's comment and modified Finding 1.5.i as shown:

….The Discharger will analyze and compare the data collected from the continuous monitoring and profile monitoring, over a period of at least 12 months prior to discharge to Miramar Reservoir and for at least 20 months after the discharge to Reservoir commences ~~12 months, commencing with the discharge to the Reservoir~~….

In addition, the following corrections have been made to Finding 1.5.i:

….The Amending Order implements the following phased approach for addressing the Discharger's request to end the continuous reservoir monitoring and to increase the frequency of profile monitoring. The Discharger will continue to implement the continuous reservoir monitoring prescribed by ~~Order No. R9-2020-0183, as amended~~ the 2020 Order; and will increase the frequency of profile monitoring at monitoring location RSW-001 upon adoption of the Amending Order by the San Diego Water Board. The Discharger will analyze and compare the data collected from the continuous monitoring and profile monitoring, over a period of at least 12 months prior to discharge to Miramar Reservoir and for at least 20 months after the discharge to Reservoir commences ~~12 months, commencing with the discharge to the Reservoir~~. The Discharger will submit a final assessment report to the San Diego Water Board, providing the Discharger's conclusions on the comparative reliability and usefulness of the continuous reservoir monitoring and profile monitoring to accurately predict the possibility of formation of harmful algal bloom in the Reservoir (see section 9.3 ~~8.3~~ of the Amending Order)…..

1.3. **Comment – Correct Typo (Finding 5.1 of the Tentative Order, page 5)**

The Discharger requested correction of a minor typo in Finding 5.1:

"The San Diego Water Board notified the Discharger and interested agencies and persons of its ~~the~~ intent to adopt this Amending Order…"

Response

San Diego Water Board staff agree with the Discharger's comment and modified Finding 5.1 as shown:

The San Diego Water Board notified the Discharger and interested agencies and persons of its ~~the~~ intent to adopt this Amending Order and provided them with an opportunity to submit written comments and recommendations.

1.4. **Comment – Correct References (Section 2.3 of the Tentative Order, page 7)**

The Discharger requested to change the references in Section 2.3 from:

- VI.D.2 to IV.D.2.
- VI.A to IV.A

- VI.B to IV.B

Response

San Diego Water Board staff agree with the Discharger's comment and modified Section 2.3 of the Amending Order as shown:

2.3. Section IV. ~~VI~~.D.2 of the MRP is modified as shown:

2. **Receiving Water Monitoring Report**. The Discharger shall submit a Receiving Water Monitoring Report annually on ~~March~~ July 1. The Receiving Water Monitoring Report shall cover the receiving water monitoring requirements of sections IV. ~~VI~~.A and B of this MRP and include, as a minimum, the following information:

1.5. **Comment – Modification of High Rate Filtration Requirement (Section 3 of the Tentative Order, page 7, and Section VI.C.2.c.viii of the 2020 Order)**

The Discharger requested modification of section VI.C.2.c.viii of the 2020 Order (page 25) consistent with the language proposed in section 3 of the Amending Order (page 7), to clarify that the filtration rate requirement only applies to the production of disinfected tertiary recycled water at the NCWRP and does not apply to the production of feedwater for the NCPWF. Disinfected tertiary recycled water requires tertiary filtration via section 60301.320 of title 22 of the California Code of Regulations (Calif. Code Regs.); however, there is no comparable tertiary filter requirement in the Surface Water Augmentation regulations. The use of tertiary effluent instead of secondary effluent was a voluntary choice by the Discharger to enhance the feedwater of NCPWF and is not a regulatory requirement. The Discharger has exceeded regulatory requirements by using tertiary treated recycled water as feedwater for the Pure Water facility and should not be held to additional requirements as a result. The Discharger is not requesting:

- A change to the High-Rate Filtration standard operating procedures (SOP) for the production of disinfected tertiary treated recycled water, nor
- An exception to the pathogen crediting criteria at the NCWRP.

The Discharger is concerned with the 7.5 Nephelometric Turbidity Units (NTU) filter influent turbidity limit applied to the NCPWF feedwater. The DDW-approved High-Rate Filtration SOP states that filter influent turbidity shall be less than or equal to 7.5 NTU, which is based on the maximum observed turbidity during the 2018 8.7 gallons per minute per square foot (gpm/sf) filter loading rate evaluation. Additional solids loading stress tests, performed at the NCWRP in 2019, demonstrated that the tertiary effluent turbidity was equal to or lower than the filter effluent turbidity during non-stressed conditions. At the highest loading rate of 8.7 gpm/sf, the maximum observed influent turbidity of 10.2 NTU had an effluent turbidity of 0.3 NTU at that time. Despite an influent turbidity greater than 7.5 NTU, NCWRP filters met both the filter effluent turbidity limits and operational goals presented in the High-Rate Filtration SOP listed below.

Time Period	Not-to-Exceed Limit	Goal when filtration rate is > 5 gpm/sf
Average over 24-hour period	2 NTU	1.5 NTU
5% of the time within a 24-hour period	5 NTU	2.5 NTU
At any time	10 NTU	5 NTU

The distinction requested by the Discharger will not impact the conditions for disinfected tertiary recycled water. If filter influent turbidity is greater than 7.5 NTU, the water will not be used for recycled water but should still be available for use as NCPWF feedwater. Additionally, if the filter effluent turbidity is in exceedance of the pathogen crediting criteria and Title 22 disinfected tertiary recycled water criteria, the water will not be used for recycled water but can continue to be used as NCPWF feedwater without the NCWRP pathogen credits, given that the total pathogen credit for the project remains in compliance. The Discharger requested the following language:

"Filtration Rates. For the production of disinfected tertiary treated recycled water to be distributed under the Master Recycling Permit for the City of San Diego North City Water Reclamation Plant, San Diego County (Order No. R9-2015-0091), tThe NCWRP may operate at filtration rates up to a daily average 8.7 gallons per minute per square feet (gpm/sf), subject to meeting the following conditions: ..."

Response

San Diego Water Board staff does not agree with the Discharger's comment. The requirement in section 3 of the Tentative Order which applies the 8.7 gpm/sf high filtration rate requirement to the production of non-potable tertiary treated recycled water is being removed from the Tentative Order based on a recommendation from DDW. DDW in its comment letter on the Tentative Order, dated July 15, 2024, stated it does not find it acceptable to apply the high filtration rate requirements to the production of non-potable recycled water. The *Draft Title 22 Engineering Report for the North City Pure Water Project* (Engineering Report), dated April 2019, does not specifically indicate that the filter loading rate is only intended for the production of non-potable recycled water. As a result, the Title 22 conditional acceptance letter, dated July 12, 2019, issued to the Discharger by DDW applies the high filtration rate conditions to both the production of recycled water for non-potable reuse and the production of feed water for the NCPWF. In addition, the recycled water produced by the NCWRP is the same recycled water that is used for both non-potable reuse and as feed water to the NCPWF.

Section 3 of the Tentative Order and section VI.C.2.c.viii of the 2020 Order is modified as follows as recommended by DDW:

viii. **Filtration Rates.** ~~For the production of disinfected tertiary treated recycled water to be distributed under the Master Recycling Permit for the City of San Diego North City Water Reclamation Plant, San Diego County (Order No. R9-2015-0091), the~~ The NCWRP may operate at filtration rates up to a daily average 8.7 gallons per minute per square feet (gpm/sf), subject to meeting the following conditions:

1.6. **Comment – Changes to Footnotes for Table E-16 (Footnote 9, Table E-16 of Attachment E of the 2020 Order)**

The Discharger requested changing Footnote 9 in Table E-16 applied to total coliform and E. coli back to the footnote previously used in the 2020 Order. Footnote 5, previously used in the 2020 Order allows for use of the more sensitive drinking water methods as well as the option to pursue an Alternate Test Procedure (ATP).

Response

San Diego Water Board staff agree with the Discharger's comment. Table E-16 is modified as requested by the Discharger (see changes below):

Table E-16. Reservoir Water Monitoring Requirements[1]

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method	Monitoring Location
Visual Observations	---	Visual	[2]	---	[2]
Reservoir inflow	MGD	Recorder/ Totalizer	Continuous	---	---
Reservoir outflow	MGD	Recorder/ Totalizer	Continuous	---	---
Reservoir storage volume	MG (million gallons)	Calculation	1/Day	---	---
Total Coliform[3]	MPN/100 mL	Grab	1/Month	~~5~~ 9	RSW-001[4,6,7,8] RSW-003[4,7,8]
E. coli[3]	MPN/100 mL	Grab	1/Week[10]	~~5~~ 9	RSW-001[4,6,7,8], RSW-003[4,7,8]
Color[3]	ADMI Color Units	Grab	1/Month	[5]	RSW-001[4,6,7,8], RSW-003[4,7,8]

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method	Monitoring Location
Odor[3]	Units	Grab	1/Month	5	RSW-001[4,6,7,8], RSW-003[4,7,8]
Temperature[3]	°F	Continuous profile	1/Week[11,~~13~~]	--	RSW-001, RSW-002, RSW-003
Temperature[3]	°F	Recorder	Continuous[12,13]	~~9~~ --	RSW-001[4]
Dissolved Oxygen[3]	mg/L	Recorder	Continuous[12,13]	~~9~~ --	RSW-001[4]
Dissolved Oxygen[3]	mg/L	Continuous profile	1/Week[11,~~13~~]	--	RSW-001, RSW-002, RSW-003
pH	standard units	Recorder	Continuous[12,13]	~~9~~ --	RSW-001[4]
pH	standard units	Continuous profile	1/Week[11,~~13~~]	--	RSW-001, RSW-002, RSW-003
Turbidity[3]	NTU	Continuous profile	1/Week[11,~~13~~]	--	RSW-001, RSW-002, RSW-003
Nitrate Nitrogen[3]	mg/L	Grab	14	9	RSW-001[4,7,8], RSW-002[4,7,8], RSW-003[4,7,8]
Nitrite Nitrogen[3]	mg/L	Grab	14	9	RSW-001[4,7,8], RSW-002[4,7,8], RSW-003[4,7,8]
Nitrogen, Total (as N)[3]	mg/L	Grab	14	9	RSW-001[4,6,7,8], RSW-002[4,7,8], RSW-003[4,7,8]
Dissolved Phosphorus[3]	mg/L	Grab	14	9	RSW-001[4,6,7,8], RSW-002[4,7,8], RSW-003[4,7,8]
Phosphorous, Total (as P)[3]	mg/L	Grab	14	9	RSW-001[4,6,7,8], RSW-002[4,7,8], RSW-003[4,7,8]

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method	Monitoring Location
Ammonia, un-ionized (as N)	mg/L	Grab	14	9	RSW-001[4,6,7,8], RSW-002[4,7,8], RSW-003[4,7,8]
Chlorophyll-*a* biomass (ash free dry weight)[3]	mg/m^3	Grab	14	9	RSW-001[4,6,7,8] RSW-002[4], RSW-003[4,7,8]
Total Toxins (measured separately): Microcystin, Cylindrospermopsin, Anatoxin[12]	µg/L	Grab	14	15	RSW-001[4], RSW-002[4], RSW-003[4,]
Total Organic Carbon[3]	mg/L	Grab	14	9	RSW-001[4,6,7,8], RSW-003[4,7,8]
Total Dissolved Solids[3]	mg/L	Grab	14	5	RSW-001[4,6,7,8], RSW-003[4,7,8]
Electrical Conductivity[3]	mmho/cm or dS/m	Continuous profile	1/Week[11,~~13~~]	--	RSW-001, RSW-002, RSW-003
Electrical Conductivity	mmho/cm or dS/m	Recorder	Continuous[12,13]	[9 --]	RSW-001[4]
Chloride[3]	mg/L	Grab	1/Month	5	RSW-001[4,6,7,8], RSW-003[4,7,8]
Iron[3]	µg/L	Grab	1/Month	5	RSW-001[4,6,7,8], RSW-003[4,7,8]
Sulfate[3]	µg/L	Grab	1/Month	5	RSW-001[4,6,7,8], RSW-003[4,7,8]
Manganese[3]	µg/L	Grab	1/Month	5	RSW-001[4,6,7,8], RSW-003[4,7,8]
Total Hardness (as $CaCO_3$)	mg/L	Grab	1/Month	9	RSW-001[4,6,7,8], RSW-003[4,7,8]

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method	Monitoring Location
MBAS (surfactants)[3]	µg/L	Grab	1/Month	[5]	RSW-001[4,6,7,8], RSW-003[4,7,8]
Thiobencarb[3]	µg/L	Grab	1/Month	[5]	RSW-001[4,6,7,8], RSW-003[4,7,8]
Methyl-*tert*-butyl ether (MTBE)[3]	mg/L	Grab	1/Month	[5]	RSW-001[4,6,7,8], RSW-003[4,7,8]
PFAS[3]	µg/L	Grab	1/Month	[17]	RSW-001[6]
PARAMETERS FOR THE PROTECTION OF AQUATIC LIFE					
Aluminum[3]	µg/L	Grab	1/Month	[5]	RSW-001[4,6,7,8], RSW-003[4,7,8]
Arsenic, Total	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Cadmium, Total	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Chromium (VI), Total Recoverable[5]	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Copper, Total[3]	µg/L	Grab	1/Month	[5]	RSW-001[4,6,7,8], RSW-003[4,7,8]
Lead, Total	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Mercury, Total	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Nickel, Total	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Selenium, Total	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Silver, Total[3]	µg/L	Grab	1/Month	[5]	RSW-001[4,6,7,8], RSW-003[4,7,8]
Zinc, Total[3]	µg/L	Grab	1/Month	[5]	RSW-001[4,6,7,8], RSW-003[4,7,8]
Cyanide, Total	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Ammonia Nitrogen, Total (as N)	mg/L	Grab	1/6-Months	[9]	RSW-002[16]
Phenolic Compounds (nonchlorinated)[1]	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Phenolic Compounds (chlorinated)[1]	µg/L	Grab	1/6-Months	[9]	RSW-002[16]

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method	Monitoring Location
Endosulfan[1]	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Endrin	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
HCH[1]	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Radioactivity	pCi/L	Grab	1/6-Months	[9]	RSW-002[16]
PARAMETERS FOR PROTECTION OF HUMAN HEALTH – NONCARCINOGENS					
Acrolein	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Antimony, Total	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Bis (2-chloroethoxy) Methane	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Bis (2-chloroisopropyl) Ether	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Chlorobenzene	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Chromium (III), Total Recoverable	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Di-n-butyl Phthalate	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Dichlorobenzenes[1]	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Diethyl Phthalate	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Dimethyl Phthalate	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
4,6-dinitro-2-methylphenol	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
2,4-dinitrophenol	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Ethylbenzene	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Fluoranthene	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Hexachlorocyclopentadiene	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Nitrobenzene	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Thallium, Total	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Toluene	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Tributyltin	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
1,1,1-trichloroethane	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
PARAMETERS FOR PROTECTION OF HUMAN HEALTH – CARCINOGENS					
Acrylonitrile	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Aldrin	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Benzene	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Benzidine	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Beryllium, Total	µg/L	Grab	1/6-Months	[9]	RSW-002[16]

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method	Monitoring Location
Bis (2-chloroethyl) Ether	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Bis (2-ethlyhexyl) Phthalate	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Carbon Tetrachloride	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Chlordane[1]	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Chlorodibromomethane	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Chloroform	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Dichlorodiphenyltrichloroethane (DDT)[1]	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
1,4-dichlorobenzene	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
3,3'-dichlorobenzidine	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
1,2-dichloroethane	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
1,1-dichloroethylene	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Dichlorobromomethane	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Dichloromethane	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
1,3-dichloropropene	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Dieldrin	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
2,4-dinitrotoluene	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
1,2-diphenylhydrazine	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Total Trihalomethanes[1]	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Heptachlor	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Heptachlor Epoxide	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Hexachlorobenzene	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Hexachlorobutadiene	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Hexachloroethane	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Isophorone	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
N-nitrosodimethylamine	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
N-nitrosodi-N-propylamine	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
N-nitrosodiphenylamine	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Polynuclear Aromatic Hydrocarbons (PAHs)[1]	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Polychlorinated Biphenyls (PCBs)[1]	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
TCDD equivalents[1]	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
1,1,2,2-tetrachloroethane	µg/L	Grab	1/6-Months	[9]	RSW-002[16]

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method	Monitoring Location
Tetrachloroethylene	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Toxaphene	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Trichloroethylene	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
1,1,2-trichloroethane	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
2,4,6-trichlorophenol	µg/L	Grab	1/6-Months	[9]	RSW-002[16]
Vinyl Chloride	µg/L	Grab	1/6-Months	[9]	RSW-002[16]

Notes for Table E-16

1. See Attachment A for definitions of abbreviations and a glossary of common terms used in this Order.
2. Visual observations of the surface water conditions at the designated receiving water stations shall be conducted in such a manner as to enable the observer to describe and report the presence, if any, of floatables of sewage origin. Observations of wind (direction and speed), weather (cloudy, sunny, or rainy), direction of current, water color, discoloration, oil and grease, turbidity, odor, presence of algal blooms, and status of Miramar Reservoir at the point of discharge shall be recorded. These observations shall be taken whenever a sample is collected. Visual observations shall also be conducted for repeat sampling.
3. Pursuant to section 60320.326 of title 22 of the CCR, prior to augmentation of Miramar Reservoir with advanced treated recycled water, each month the Discharger must collect samples, for no less than 24 consecutive months, from the identified monitoring locations. The samples must be analyzed for the secondary MCLs, TOC, total nitrogen, E.coli, total coliform, temperature, dissolved oxygen, chlorophyll a, total and dissolved phosphorus, and other DDW-specified chemicals and contaminants. The Discharger must continue to conduct monthly monitoring for no less than the initial 24 months of operating at the final ramp-up stage. After the completion of the initial 24 months of operating at the final ramp-up stage, the Discharger may request to the San Diego Board and DDW for reduced on-going monitoring.
4. At the surface (0.3 m, approximately 1 foot below surface).
5. Samples shall be collected on the same day and analyzed within acceptable method holding times using both a Clean Water Act method specified in 40 CFR part 136 and a drinking water method-approved by the State Water Board for the contaminant pursuant to section 60320.304 of title 22 of the CCR ~~for the contaminant~~ and by a laboratory accredited by the State Water Board Environmental Laboratory Accreditation Program (ELAP) for the analytical method used. Results of both analyses shall be included in monitoring reports required by this MRP. Analyses

using the Clean Water Act methods are not required if the equivalent drinking water methods are more sensitive. Samples can be analyzed using Alternative Test Procedures (ATPs) upon approval of ATPs by the State Water Board.

6. At depth of Outlet Ports 1, 2a, 2b, 3a, 3b, 4a, and 4b.

7. At mid-depth; in the epilimnion approximately 2 m above the thermocline.

8. At approximately 1 m above solid bottom of the reservoir.

9. Sample shall be analyzed as specified in 40 CFR 136.

10. If exceedances of applicable receiving water limitations for *E. coli* specified in section V.B of the Order are observed at Monitoring Location EFF-002 ~~and~~ (Discharge Point No. 001) and ~~(~~at Monitoring Location RSW-003~~)~~, the Discharger shall increase the receiving water monitoring frequency at Monitoring Location RSW-003 for that parameter(s) to three times per week until the receiving water has demonstrated compliance at Monitoring Location RSW-003 with applicable receiving water limitations for that parameter(s) specified in section V.B of the Order for a minimum of one week or the Discharger demonstrates to the San Diego Water Board that Facility effluent is not a contributing source of that parameter(s) to the downstream receiving water exceedances at Monitoring Location RSW-003.

11. The Discharger shall monitor weekly at RSW-001, twice per month from April to October at RSW-002 and RSW-003, and once per month from November to March at RSW-002 and RSW-003. If there are visible signs of an algal bloom, the Discharger shall monitor at RSW-002 and RSW-003 once per week until the algal bloom is no longer visible. The Discharger shall collect samples throughout the entire water column from one foot below the surface to as close to the bottom as practicable and report results in one-meter intervals.

12. Monitoring shall occur at least one year before the North City Pure Water Facility (NCPWF) becomes operational and begins to discharge to Miramar Reservoir, and will continue after the discharge commences.

13. The Discharger shall measure dissolved oxygen, temperature, pH, and electrical conductivity continuously using the moored sensor string for at least 12 months prior to discharge to Miramar Reservoir, and for at least 20 months after the discharge to Miramar Reservoir commences. Measurements shall be taken at 0.3 m below the water surface of the reservoir, approximately 1 foot below the water surface, and at fixed elevations corresponding to the level of reservoir outlets ~~(approximately 1 foot below the water surface)~~.

14. The Discharger shall monitor twice per month from April to October and once per month from November to March. If there are visual signs of an algal bloom, the discharger shall monitor 1/week until the algal bloom is no longer visible.

15. Use approved EPA methods for detection of cyanotoxins in water or Solid Phase Adsorption Tracking Technology.

16. At mid-depth; 2 m below the thermocline.

17. PFAS shall be monitored using EPA Method 533.

1.7. **Comment – Delete References to "MF" (Table E-1 of Attachment E of the 2020 Order)**

The Discharger requested modification of the first Monitoring Location Description in Table E-1 to:

"…Membrane filtration feed (at each of the 12 membrane filtration ~~MF~~ units)…"

Please modify all references to MF within the permit to "membrane filtration" since the acronym has been removed.

Response

San Diego Water Board staff does not agree with the Discharger's comment. As recommended by DDW in its July 15, 2024, comment letter on the Tentative Order, "membrane filtration" or "MF" is deleted and replaced with "ultrafiltration" which is more representative of the NCPWF treatment train. "Membrane filtration" is a general term which includes common membrane classifications microfiltration (MF), ultrafiltration (UF), nanofiltration (NF), and reverse osmosis (RO), so using the term "ultrafiltration" is more appropriate.

Table E-1 has been modified as shown:

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
---	INT-005-A INT-005-B INT-005-C INT-005-D INT-005-E INT-005-F INT-005-G INT-005-H INT-005-I INT-005-J INT-005-K INT-005-L	Ultrafiltration ~~Membrane filtration Microfiltration (MF)~~ feed (at each of the 12 ultrafiltration ~~MF~~ units) - A point where effluent from the ~~membrane effluent~~ strainers to each membrane filtration unit can be monitored prior to the ultrafiltration ~~membrane filtration reverse osmosis (RO) treatment~~ process.

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
---	INT-006-A INT-006-B INT-006-C INT-006-D INT-006-E INT-006-F INT-006-G INT-006-H INT-006-I INT-006-J INT-006-K INT-006-L	Ultrafiltration ~~Membrane filtration~~ filtrate ~~MF permeate~~ (at each of the 12 ~~membrane filtration~~ ultrafiltration ~~MF~~ units) - A point where effluent from each ultrafiltration ~~membrane filtration~~ unit can be monitored prior to the RO feed tank.

1.8. **Comment – Add Footnote 3 to Certain Parameters in Table E-16 (Table E-16 of the 2020 Order)**

The Discharger requested the addition of Footnote 3 to turbidity and electrical conductivity for the "continuous profile" sample type. The Discharger is required to monitor for these parameters 24-months prior to discharge to the reservoir and 24-months after the onset of discharge to the reservoir under section 60320.226 of title 22 Calif. Code Regs.

Response

San Diego Water Board staff agree with the Discharger's comment (see changes in Table E-16 in response to comment 1.6).

1.9. **Comment – Apply Footnote 3 to Correct Sample Type for Certain Parameters in Table E-16 (Table E-16 of the 2020 Order)**

The Discharger requested to remove Footnote 3 in Table E-16 from temperature and dissolved oxygen when the sample type is "recorder" (i.e., the Automated In-Water Quality Monitoring System [AIWQMS] moored sensor) and instead apply it to the sample type "continuous profile."

Response

San Diego Water Board staff agree with the Discharger's comment. Footnote 3 was incorrectly applied to "recorder" sample type for temperature and dissolved oxygen. Footnote 3 has been removed from temperature and dissolved oxygen for the "recorder" sample type and applied to "continuous profile" sample type (see changes to Table E-16 in response to comment 1.6).

1.10. **Comment – Remove Footnote 9 from Certain Parameters in Table E-16 (Table E-16 of the 2020 Order)**

The Discharger requested to remove Footnote 9 in Table E-16 from parameters with the "recorder" (i.e., AIWQMS moored sensor) sample type. These are not listed in part 136 of the Code of Federal Regulations (40 CFR 136).

Response

San Diego Water Board staff agree with the Discharger's comment. Footnote 9 does not apply to parameters with the "recorder" field type because these are field parameters which are not required to be measured using 40 CFR 136 analytical methods. Footnote 9 has been removed from parameters in Table E-16 with the "recorder" sample type (see changes to Table E-16 in response to comment 1.6).

1.11. **Comment – Apply Footnote 13 to Correct Sample Type for Certain Parameters in Table E-16 (Table E-16 of the 2020 Order)**

The Discharger requested to remove Footnote 13 in Table E-16 from temperature and dissolved oxygen when the sample type is "continuous profile" and instead apply it to the sample type "recorder" (i.e., AIWQMS moored sensor).

Response

San Diego Water Board staff agree with the Discharger's comment. Footnote 13 was incorrectly applied to "continuous profile" sample type for temperature and dissolved oxygen. Footnote 13 has been removed from temperature and dissolved oxygen when the sample type is "continuous profile" and instead applied to the "recorder" sample type (see changes to Table E-16 in response to comment 1.6).

In addition, Footnote 13 has been removed from electrical conductivity and pH when the sample type is "continuous profile" and instead applied to the "recorder" sample type. Footnote 13 has also been removed for the continuous sample type for turbidity (see changes to Table E-16 in response to comment 1.6).

1.12. **Comment – Clarify Footnote 10 of Table E-16 (Table E-16 of the 2020 Order)**

The Discharger requested clarification of the language in Footnote 10 of Table E-16. Suggested language is as follows:

"If exceedances of applicable receiving water limitations for E. coli specified in section V.B of the Order are observed at Monitoring Location EFF-002 ~~and~~ (Discharge Point No. 001) and ~~(~~at Monitoring Location RSW-003~~)~~, the Discharger shall increase the receiving water monitoring frequency at Monitoring Location RSW-003…"

Response

San Diego Water Board staff agree with the Discharger's comment. Footnote 10 of Table E-16 has been modified as requested (see changes to footnote 10 of Table E-16 in response to comment 1.6).

1.13. **Comment – Clarify Footnote 13 in Table E-16 (Table E-16 of the 2020 Order)**

The Discharger requested clarification of the language in Footnote 13 of Table E-16. Suggested language is as follows:

"Measurements shall be taken at 0.3 m below the water surface of the reservoir (approximately 1 foot below the water surface) and at fixed elevations corresponding to the level of reservoir outlets ~~(approximately 1 foot below the water surface)~~."

Response

San Diego Water Board staff agree with the Discharger's comment. Footnote 13 of Table E-16 has been modified as requested (see changes to footnote 13 of Table E-16 in response to comment 1.6).

2. **Comments from DDW**

DDW provided comments and requested revisions to the Amending Order as described below:

2.1. **Comment – Applicability of Filtration Rate Requirement (Section 3 of the Tentative Order and Section VI.C.2.c.viii of the 2020 Order)**

In section VI.C.2.c.viii Filtration Rates, DDW **does not** find the proposed change to only apply the high filtration rate requirements to the production of non-potable recycled water acceptable. Upon review of the North City Pure Water Project Final Draft Title 22 Engineering Report (Engineering Report) dated April 2019, the Engineering Report does not specifically indicate that the filter loading rate is only intended for the production of non-potable recycled water. Therefore, DDW's conditional acceptance letter dated July 12, 2019, applies the high filtration rate conditions to both the production of recycled water for non-potable reuse and the production of feed water for the advanced treatment facility. Please note that the recycled water produced by the NCWRP is the same recycled water that is used for both non-potable reuse and as feed water to the NCPWF.

Response

San Diego Water Board staff agree with DDW's comment. The proposed change to apply the high filtration rate requirement to production of non-potable recycled water has been deleted from section 3 of the Tentative Order as recommended by DDW (see response to comment 1.5).

2.2. **Comment – Remove References to "Membrane Filtration" or "MF" (Multiple Sections)**

The Tentative Order's use of abbreviation "MF" to stand for "Microfiltration" replacing "Membrane filtration" results in unclear descriptions of the treatment technology. "Membrane filtration" is a general term which includes common membrane classifications microfiltration (MF), ultrafiltration (UF), nanofiltration (NF), and reverse osmosis (RO). If specificity of the treatment technology is preferred by the City of San Diego and the San Diego Regional Board, DDW does not object to replacing "Microfiltration (MF)" with "Ultrafiltration (UF)" throughout the Tentative Order, which is reflective of the NCPWF treatment train.

Response

San Diego Water Board staff agree with DDW's comment (see response to comment 1.7).

2.3. **Comment – Apply Footnote 3 to Correct Sample Type for Certain Parameters in Table E-16 of the 2020 Order**

In Table E-16, footnote 3 for temperature and dissolved oxygen needs to be applied to the continuous profile "Sample Type" not the recorder "Sample Type," which is only conducted at sampling location RSW-001.

Response

San Diego Water Board staff agree with DDW's comment (see changes to Table E-16 in response to comment 1.6).

2.4. **Comment – Add Footnote 3 to Turbidity in Table E-16 of the 2020 Order**

In Table E-16, please add footnote 3 to turbidity, which has a secondary maximum contaminant level (MCL) and is required to be sampled pursuant to section 60320.326(b) of title 22 of the CCR.

Response

San Diego Water Board staff agree with DDW's comment (see changes to Table E-16 in response to comment 1.6).

2.5. **Comment – Add Appropriate Footnotes to Chlorophyll-a in Table E-16 of Order No. R9-2020-0001**

In Table E-16, chlorophyll-a biomass is required to be sampled pursuant to section 60320.326(b) at the monitoring locations established pursuant to section 60320.326(a) of title 22 of the CCR. Therefore, please add footnotes 6, 7, and 8 to monitoring location RSW-001 and add footnotes 7 and 8 to monitoring location RSW-003.

Response

San Diego Water Board staff agree with DDW's comment (see changes to Table E-16 in response to comment 1.6).

2.6. **Comment – Add Footnote 3 to Electrical Conductivity in Table E-16 of the 2020 Order**

In Table E-16, please add footnote 3 to electrical conductivity continuous profile Sample Type," which has a secondary MCL.

Response

San Diego Water Board staff agree with DDW's comment (see changes to Table E-16 in response to comment 1.6).

2.7. **Comment – Add Footnote 3 to Per-and Polyfluoroalkyl Substances (PFAS) in Table E-16 of the 2020 Order**

In Table E-16, please add footnote 3 to PFAS, which DDW specified pursuant to

section 60320.326 (b) of title 22 of the CCR.

Response

San Diego Water Board staff agree with DDW's comment (see changes to Table E-16 in response to comment 1.6).

2.8. **Comment – Reword Footnote 5 in Table E-16 of the 2020 Order**

In footnote 5 of Table E-16, please consider rewording the footnote as shown below in underline and strikeout to be consistent with footnote 5 of Table E-3, footnote 6 of Table E-4, and footnote 2 of Table E-5:

"Samples shall be collected on the same day and analyzed within acceptable method holding times using both a Clean Water Act method specified in 40 CFR part 136 and a drinking water method approved by the State Water Board for the contaminant pursuant to section 60320.304 of title 22 of the CCR ~~for the contaminant~~ and by a laboratory accredited by the State Water Board Environmental Laboratory Accreditation Program (ELAP) for the analytical method used. Results of both analyses shall be included in monitoring reports required by this MRP. Analyses using the Clean Water Act methods are not required if the equivalent drinking water methods are more sensitive. Samples can be analyzed using Alternative Test Procedures (ATPs) upon approval of ATPs by the State Water Board."

Response

San Diego Water Board staff agree with DDW's comment and modified footnote 5 of Table E-3, footnote 6 of Table E-4, and footnote 2 of Table E-5 as shown:

Samples shall be collected ~~analyzed~~ on the same day and analyzed ~~using both~~ within acceptable method holding times using both a Clean Water Act method~~s~~ specified in 40 CFR part 136 and a drinking water method~~s~~ ~~specified in 40 CFR 141, and results of both analyses shall be included in monitoring reports required by this MRP~~ approved by the State Water Board for the contaminant pursuant to section 60320.304 of title 22 of the CCR ~~approved by the State Water Board for the contaminant~~ and by a laboratory accredited by the State Water Board Environmental Laboratory Accreditation Program (ELAP) for the analytical method used. Results of both analyses shall be included in monitoring reports required by this MRP. Analyses using the Clean Water Act methods are not required if the equivalent drinking water methods are more sensitive. Samples can be analyzed using Alternative Test Procedures (ATPs) upon approval of ATPs by the State Water Board.

2.9. **Comment – Reword Footnote 5 in Table E-3, footnote 6 of Table E-4, and footnote 2 of Table E-5 of the 2020 Order**

In footnote 5 of Table E-3, footnote 6 of Table E-4, and footnote 2 of Table E-5 please delete the duplicate phrase as shown below in strikeout:

"Samples shall be collected on the same day and analyzed within acceptable method holding times using both a Clean Water Act method specified in 40 CFR

part 136 and a drinking water method approved by the State Water Board for the contaminant pursuant to section 60320.304 of title 22 of the CCR ~~approved by the State Water Board for the contaminant~~ and by a laboratory accredited by the State Water Board Environmental Laboratory Accreditation Program (ELAP) for the analytical method used. Results of both analyses shall be included in monitoring reports required by this MRP. Analyses using the Clean Water Act methods are not required if the equivalent drinking water methods are more sensitive. Samples can be analyzed using Alternative Test Procedures (ATPs) upon approval of ATPs by the State Water Board".

Response

San Diego Water Board staff agree with DDW's comment and made the requested changes (see response to comment 2.8 above).

2.10. **Comment – Revise sections VI.C.5.e and VI.C.5.f of the 2020 Order**

As stated previously, the NCPWF approved treatment train provides ultrafiltration. Therefore, please revise sections VI.C.5.e. and VI.C.5.f of Attachment E – Monitoring and Reporting Program as shown below in underline and strikeout:

e. The NCPWF ~~microfiltration~~ ultrafiltration ~~(M~~UF~~)~~ membrane effluent at each ultrafiltration ~~MF~~ rack must be continuously monitored for turbidity as an indirect integrity test at monitoring locations INT-006 A through L. The turbidity must be measured continuously (at least every 15 minutes), and if two consecutive readings are greater than 0.15 NTU for a period exceeding 15 minutes, a pressure decay test (PDT) must be initiated on the rack with the potential integrity breach.

f. Membrane integrity testing (MIT) (aka PDT) must be performed on each of the ultrafiltration ~~M~~UF membrane racks at the NCPWF a minimum of once every 24 hours of operation. A MIT verification program must be submitted to DDW for review and approval. A copy of the MIT verification program must also be submitted to the San Diego Water Board.

Response

San Diego Water Board staff agree with DDW's comment. "Microfiltration" has been replaced with "ultrafiltration", however, the acronym "UF" was not added and is not used in the 2020 Order. Sections VI.C.5.e and VI.C.5.f are modified as shown:

e. The NCPWF ~~microfiltration~~ ultrafiltration ~~(MF)~~ membrane effluent at each ultrafiltration ~~MF~~ rack must be continuously monitored for turbidity as an indirect integrity test at monitoring locations INT-006 A through L. The turbidity must be measured continuously (at least every 15 minutes), and if two consecutive readings are greater than 0.15 NTU for a period exceeding 15 minutes, a pressure decay test (PDT) must be initiated on the rack with the potential integrity breach.

f. Membrane integrity testing (MIT) (aka PDT) must be performed on each of

the ultrafiltration ~~MF~~ membrane racks at the NCPWF a minimum of once every 24 hours of operation. A MIT verification program must be submitted to DDW for review and approval. A copy of the MIT verification program must also be submitted to the San Diego Water Board.