

**STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

SUPPLEMENTAL SHEET FOR REGULAR MEETING OF MARCH 7-9, 2017

Prepared on March 3, 2017

ITEM NUMBER: 16

SUBJECT: Waste Discharge Requirements and Water Reclamation Requirements for the Pure Water Monterey Advanced Water Purification Project, Monterey Regional Water Pollution Control Agency, Monterey County

KEY INFORMATION: Staff did not receive a comment letter dated January 12, 2017, from the Seaside Basin Watermaster until February 22, 2017. The Watermaster contacted staff when the agenda material on this matter did not contain their comment letter in the associated documents. This supplemental sheet contains the Watermaster's comments and Water Board staff's responses. This supplemental also contains staff-proposed changes requested by the Discharger subsequent to their comment letter and typo corrections.

Seaside Basin Watermaster Comments and Water Board Staff Responses

1. In Section V of the Findings, paragraph number 30 states that the storage capacity of the "subbasin" is estimated to be 1,000,000 acre-feet (af). Our consultants have estimated that the storage capacity of the adjudicated Seaside Basin is approximately 52,000 af. The storage volume stated in the WDR appears to be significantly overstated.

Staff Response: California Groundwater Bulletin 118 for the Salinas Valley Groundwater Basin, Seaside Area Subbasin states in relevant part: "The storage capacity of the subbasin was estimated to be 1,000,000 af based on the storage of 630,000 af of groundwater in the southern half of the subbasin (Muir 1982)." No changes will be made to the Order.

2. In Section V of the Findings, paragraph number 31 states that the Seaside Groundwater Basin Salt and Nutrient Management Plan was submitted to the RWQCB by the Monterey Peninsula Water Management District in 2014, but has still not been adopted by the RWQCB. Please explain what is preventing adoption of that Plan and what additional information or steps will be needed in order for it to be adopted.

Staff Response: The draft Seaside basin SNMP lacks measurable objectives and specific implementation actions that would result in tangible water quality protection or improvement over time. The SNMP incorrectly states that native groundwater quality is not a high-quality water resource per antidegradation policy and incorrectly concludes that an antidegradation analysis is not required. Water Board staff does not intend to recommend that the Water Board adopt the Seaside SNMP because the plan does not meet the intent of the Recycled Water Policy. However, we will use information included in the SNMP as appropriate when permitting projects.

- Many of the Water Quality Goals listed in Table 1 (page 8) of the WDR are missing from the list of constituents in the Recycled Water ReInjection Discharge Limits in Table 4 (page 15) of the WDR. All of the goals should be included in that table, or required elsewhere in the WDR.

Staff Response: Staff revised Table 1 to more closely match Table 4. The pollutants now listed in Table 1 either have effluent limits associated with them or are metals of concern due to high concentrations in existing groundwater (see Table 2). Advanced treatment systems such as the one proposed do an excellent job at removing metals, and staff therefore proposes that no effluent limits are needed for those metals. It is not necessary to list in the order the water quality goal for every possible pollutant.

Seaside Basin Watermaster Requests

- That the WDR include language stating that all of the reports required under the Monitoring and Reporting Program (in Section I thereof) also be sent to the Watermaster at the same time they are sent to the RWQCB. Sending them directly to the Watermaster, rather than relying on other blanket forms of notification, will ensure that important information contained in those reports is not missed or delayed in receipt, so that the Watermaster can take response actions, if appropriate.

Staff Response: While we agree that MRWPCA should send monitoring reports directly to the Watermaster, the Water Board does not have the authority to require that monitoring reports be sent to outside entities. The Watermaster should make this request to directly to MRWPCA.

- That a description of the monitoring program protocols required under Section II.3 of the Monitoring and Reporting Program also be sent to the Watermaster, for our use in preparing various reports and in compiling other information for our Annual Report to the Court.

Staff Response: The Water Board does not have the authority to require that MRWPCA provide the written groundwater sampling protocols referenced in MRP section II (3) to the basin Watermaster. The Watermaster should make this request to directly to MRWPCA.

Discharger-Requested Changes Agreed to by Water Board and DDW Staff

- Table 1 (Page 8)

| | WQG | Units | CA Primary MCL | CA Secondary MCL | CA Public Health Goal for Drinking Water | Water Quality for Agriculture (Basin Plan) |
|---------------------|------|-------|----------------|------------------|--|--|
| Chromium (total VI) | 0.02 | µg/L | | | X | |

- Permit Provision, VI.18 (Page 21)
MRWPCA must submit a draft of the Operation Optimization Plan prior to completion of construction and commissioning. This draft Operation Optimization Plan can be amended and finalized after the completion of full-scale commissioning and startup testing. A final

Operation and Optimization Plan must be submitted to DDW 90 days after completion of startup operations.

- Table M-14 (Page MRP-24)
Radioactivity, Minimum Frequency of Analysis – ~~Monthly~~ Quarterly
Regulated Organics, Minimum Frequency of Analysis – ~~Monthly or~~ Quarterly
Table M-15 (Page MRP-24)
Radioactivity, Groundwater Monitoring Frequency – ~~Monthly~~ Quarterly
Table M-15 (Page MRP-25)
Volatile Organic Chemicals, Groundwater Monitoring Frequency – ~~Monthly~~ Quarterly

- Table M-2. (Page MRP-13)

| Constituent/Parameters | Units | Type of Sample | Minimum Frequency of Analysis |
|------------------------|-------|----------------|-------------------------------------|
| UV Transmittance | % | grab | Continuous <u>Weekly</u> |

- Table M-3. (Page MRP-14)

| Constituent/Parameters | Units | Type of Sample | Minimum Frequency of Analysis | Reference Table Number |
|-------------------------------|-------|----------------|-------------------------------|------------------------|
| UV Transmittance ⁸ | % | Metered | Continuous | -- |

⁸ Samples shall be collected at the influent point to the UV system.

- MRP, IV.1. (Page MRP-13)
...Influent samples shall be obtained on the same day that stabilized advanced treated RO recycled water samples are obtained. The date and time ...
- *MRP, IV.2.d. (Page MRP-21)*
ii. Advanced Oxidation Process (AOP) – (UV and hydrogen peroxide at the AWPF): For each day of operation, MRWPCA shall report the calculated daily peroxide dose (based on the peroxide pump speed and bulk feed concentration), ~~percent reduction based on daily average of chloramine (via total residual chlorine) measured upstream and downstream of the AOP, and the applied UV power shall be reported...~~

- Table M-14 (Page MRP-24)

| Constituent/Parameters | Units | Type of Sample | Minimum Frequency of Analysis | Reference Table Number |
|------------------------|-------|----------------|--|------------------------|
| Radioactivity | Pci/L | Grab | Monthly <u>Quarterly</u> | M-15 |
| Regulated Organics | µg/L | Grab | Monthly or <u>Quarterly</u> | M-15 |

- Table M-15 (Page MRP-24 to 25)

| Constituent | Frequency |
|--|-------------------------------------|
| Radioactivity | |
| Gross Alpha Particle Activity (including Radium-226 but excluding radon and uranium) | Monthly <u>Quarterly</u> |
| Gross Beta Particle Activity | Monthly <u>Quarterly</u> |
| Radium-226 | Monthly <u>Quarterly</u> |
| Radium-226 & Radium-228 (Combined) | Monthly <u>Quarterly</u> |

| | |
|---------------------------------------|-------------------|
| Radium-228 | Monthly Quarterly |
| Strontium-90 | Monthly Quarterly |
| Tritium | Monthly Quarterly |
| Uranium | Monthly Quarterly |
| (a) Volatile Organic Chemicals | |
| 1,1,1-Trichloroethane | Monthly Quarterly |
| 1,1,2,2-Tetrachloroethane | Monthly Quarterly |
| 1,1,2-Trichlor-1,2,2-trifluoroethane | Monthly Quarterly |
| 1,2,2-Trifluoroethane | Monthly Quarterly |
| 1,1,2-Trichloroethane | Monthly Quarterly |
| 1,1-Dichloroethane | Monthly Quarterly |
| 1,1-Dichloroethene (1,1 DCE) | Monthly Quarterly |
| 1,2,4-Trichlorobenzene | Monthly Quarterly |
| 1,2-Dichlorobenzene | Monthly Quarterly |
| 1,2-Dichloroethane (1,2 DCA) | Monthly Quarterly |
| 1,2-Dichloropropane | Monthly Quarterly |
| 1,3-Dichloropropene | Monthly Quarterly |
| 1,4-Dichlorobenzene | Monthly Quarterly |
| Benzene | Monthly Quarterly |
| Carbon Tetrachloride (CTC) | Monthly Quarterly |
| cis-1,2-Dichloroethylene | Monthly Quarterly |
| Dichloromethane | Monthly Quarterly |
| Ethylbenzene | Monthly Quarterly |
| Methyl-tert-butyl-ether (MTBE) | Monthly Quarterly |
| Monochlorobenzene | Monthly Quarterly |
| Styrene | Monthly Quarterly |
| Tetrachloroethylene (PCE) | Monthly Quarterly |
| Toluene | Monthly Quarterly |
| Trans-1,2-Dichloroethylene | Monthly Quarterly |
| Trichloroethylene (TCE) | Monthly Quarterly |
| Trichlorofluoro-methane | Monthly Quarterly |
| Vinyl Chloride | Monthly Quarterly |
| Xylenes (m,p) | Monthly Quarterly |

- MRP, IV.4. (Page MRP-21 to 22)
 - a. As required by Title 22, Section 60320.226,
 - (a) Prior to operating any injection well, a-MRWPCA shall site and construct at least two monitoring wells downgradient of the injection well, such that:
 - (1) at least one monitoring well is located;
 - (A) no less than two weeks but no more than six months of travel time from the injection wells, and
 - (B) at least 30 days upgradient of the nearest drinking water well;
 - (2) in addition the well(s) in paragraph (1) and after consultation with DDW, at least two monitoring wells will be located between the injection wells and the nearest downgradient drinking water well; and
 - (3) samples from the monitoring wells in paragraphs (1) and (2) can be;
 - (A) obtained independently from each aquifer, initially receiving the water used as a source of drinking water supply, that will receive the injection wells recharge water, and
 - (B) validated as receiving recharge water from the injection well.
 - (b) In addition to the monitoring required pursuant to section 60320.420220 from each monitoring well in subsection (a)(1), and each monitoring well in subsection (a)(2) that has

recharge water located within one year travel time of the well(s), MRWPCA shall collect two samples prior to injection well operation and at least one sample each quarter after operation begins. Each sample shall be analyzed for total nitrogen, nitrate, nitrite and constituents with secondary MCLs

Typos

The following non-substantive typos should be corrected in the Monitoring and Reporting Program :

- Page MRP-3, I(1.) "AWPFAWPF" should read AWPF and the subsequent numbering subset corrected to begin with "a."
- Page MRP-9, near the bottom of the page, the 3rd bullet will be removed