
North Coast Regional Water Quality Control Board

Response to Written Comments
Draft Monitoring and Reporting Program
Order No. R1-2020-0030
for the
City of Rohnert Park, Recycled Water Program
Regional Water Quality Control Board, North Coast Region
September 30, 2020

Comment Letter Received

The deadline for submittal of public comments regarding Monitoring and Reporting Program (MRP), Order No. R1-2020-0030, for the City of Rohnert Park (City or permittee) Recycled Water Program was September 4, 2020. Timely comments were received only from the City of Rohnert Park and the Russian River Watershed Protection Committee.

Regional Water Board staff met with the City on August 31, 2020 to discuss the City's comments. Responses to comments contained in this document are consistent with the discussion that occurred during those meetings.

In this document, comments from the City are summarized, followed by the Regional Water Board staff response. Text added to the Proposed MRP is identified by underline and text to be deleted from the Proposed MRP is identified by ~~strike-through~~ in this document. The term "Draft MRP" refers to the version of the Monitoring and Reporting Program (MRP) that was sent out for public comment. The term "Proposed MRP" refers to the version of the MRP that has been modified in response to comments and is being presented to the North Coast Regional Water Quality Control Board's Executive Officer for consideration.

Permittee Comments - City of Rohnert Park

Comment 1: The City requests modification of the annual calibration requirement (Section 1.4 of the MRP) for all flow measuring devices to specify that this is not applicable to customer water meters assigned to each user.

The MRP requires annual calibration of “all flow measurement devices,” which is a standard requirement in NPDES permits that applies to flow monitoring at wastewater treatment plants. The MRP should clearly state that this requirement should not be applicable to customer meters serving individual use areas. Industry standard practice for customer meters is to replace them when they are expected to be at the end of their useful life (typically 20 years or more), rather than to calibrate the meters.

The City further asks for this permit section to be amended with text to exclude customer meters.

Response 1:

The City’s request to exclude customer meters from the annual calibration requirement is reasonable, provided that these meters are inspected annually to document that they are in proper operational condition. Regional Water Board staff propose to update section 1.4 of the MRP to say:

“All monitoring instruments and devices used by the Administrator to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices (except customer meters) shall be calibrated no less than the manufacturer’s recommended intervals or one-year intervals, (whichever comes first) to ensure continued accuracy of the devices. Customer meters not requiring periodic calibration per the manufacturer, at a minimum, shall be visually inspected and documented to be in proper operational condition on an annual basis.”

Comment 2: The City requests removal of the groundwater monitoring requirement within the MRP.

The City provides an extensive request to remove the groundwater monitoring requirements from the MRP (Section 4.1), contending that their participation in the regional Salt and Nutrient Management Plan (SNMP) makes these requirements duplicative. The City states that they would support a reopener clause in the unlikely event that they suspend their participation in the regional work.

Response 2:

The Regional Water Board agrees with the City that ensuring the protection of groundwater may be achieved through the participation in a regional monitoring and reporting program, such as the Salt and Nutrient Monitoring Plan, would be an acceptable means to ensure that the overall impact of permitted water recycling projects

does not degrade groundwater resources. The Regional Water Board has modified the MRP language to specifically allow the City the option to use participation in a regional monitoring program to meet this requirement. Regardless of the chosen method, the City shall remain responsible for providing representative groundwater monitoring data that can be used to identify potential degradation resulting from recycled water application. Section 4.1 of the MRP has been modified as follows:

“4.1. Groundwater Monitoring

The Administrator shall monitor groundwater at ~~approved groundwater monitoring location as follows:~~ for potential impacts resulting from recycled water use. Compliance with this monitoring requirement is the Administrator’s responsibility and may be demonstrated in one of two methods as described below:

- 1 **Option 1.** The Administrator shall participate in a Regional Water Board approved salt and nutrient management plan and its associated groundwater monitoring and reporting plan to ensure that the overall impact of permitted water recycling projects does not degrade groundwater resources in a manner inconsistent with Findings 27 through 32 of the General Order, or;
- 2 **Option 2.** The Administrator shall monitor groundwater at approved groundwater monitoring locations as indicated in Table 1 and Section 4.1.1.”

Comment 3: The City requests that the agronomic rate requirements in Table 3 be changed from monthly to annual.

The City indicates that there is little variation in the irrigated acreage and effluent nitrogen from month to month, and an annual nitrogen application calculation would be sufficient to address these items. Furthermore, the City indicates that an annual calculation is consistent with the default MRP in the General Order.

Response 3:

The City’s request to change the observation frequency for acreage applied, application rate, and total nitrogen application rate is reasonable. The indicated frequency for these parameters was mistakenly listed as monthly in the draft MRP and was intended to be listed as Annually. Table 3 has been updated to reflect a Minimum Sampling/Observation Frequency of Annually for the requested parameters.

Table 3. Recycled Water Use Area Requirements ⁽¹⁾

Parameter	Units	Sample Type	Minimum Sampling/ Observation Frequency ⁽²⁾
Recycled Water User	---	---	---
Recycled Water Flow ⁽³⁾	gpd ⁽⁴⁾	Meter ⁽⁵⁾	Monthly
Acreage Applied ⁽⁶⁾	Acres	Calculated	Monthly <u>Annually</u>
Application Rate (hydraulic)	Inches/acre/year	Calculated	Monthly <u>Annually</u>
Total Nitrogen Application Rate ^(7,8)	Lbs/acre/month	Calculated	Monthly <u>Annually</u>
Soil Saturation/Ponding	---	Observation	Monthly
Discharge off-Site	---	Observation	Monthly
Nuisance Odors/Vectors	---	Observation	Monthly
Notification Signs ⁽⁹⁾	---	Observation	Monthly
Rainfall	Inches	Gage	Daily
Maximum Allowable Hydraulic Agronomic Rate ⁽¹⁰⁾	Inches	Calculation	Annually

Table Notes

1. Recycled water production and use area monitoring shall be reported with the annual report (section 6.2 of this MRP). Non-compliance incidents shall be reported as specified in section 6.3 of this MRP.
1. Or less frequently if approved by the Regional Water Board Executive Office through the modification of this MRP.
2. Estimation of recycled water shall not include other potable or non-potable "make-up" water used in conjunction with recycled water use.
3. gpd denotes gallons per day.
4. Meter requires meter reading, a pump run time meter, or other approved method of flow monitoring.
5. Acreage applied denotes the acreage to which recycled water is applied.
6. The source of the total nitrogen data used for the nitrogen application rate calculation shall be noted in the Administrator's annual recycled water report. The Administrator may use total nitrogen concentrations provided by the City of Santa Rosa or collect its own samples.

Parameter	Units	Sample Type	Minimum Sampling/ Observation Frequency ⁽²⁾
<p>7. Nitrogen concentrations shall be calculated and reported “as N”. For example, nitrate-nitrogen = 27 mg/l as NO₃ shall be converted and reported as nitrate-nitrogen = 6.1 mg/L as N using a conversion factor of 14.067 (N)/62.0049 (NO₃).</p> <p>8. Notification signs shall be consistent with the requirements of Title 22, section 60310(g).</p> <p>9. Maximum allowable hydraulic agronomic rate for each recycled water use site will be calculated as follows: $[ETo-EP] \times [LFh = (LFm \times 0.6)] \times [Total Area] \times CF$ where:</p> <ul style="list-style-type: none"> • ETo (Reference Evapotranspiration) = Evapotranspiration is defined as the amount of water used by the plants (transpiration) and evaporated from the soil (evaporation). It is measured in inches by the Santa Rosa Irrigation Management System’s weather station (CIMIS Station #83). Reference evapotranspiration is a standard measurement of evapotranspiration for cool-season turf. • EP (Effective Precipitation) = The depth of rainfall, measured in inches by Santa Rosa CIMIS weather station #83, that offsets ETo. Effective precipitation is assumed to be a third of the actual measured precipitation. • LFh (Landscape fraction high) = fraction of site’s landscape area consisting of high-water use plants or uses. High water use plants include turfgrass, ornamental water features, annuals, plants in containers, and agricultural customers irrigating pastures, fodder crops, vegetable crops, or other high-water use crops. • LFm (Landscape fraction medium) = fraction of site’s landscape area consisting of moderate and low water use plants such as trees, shrubs, and vines. The size of these landscaped areas is multiplied by a factor of 0.6 to account for their proportionately lower water use. • Total Area = total size of recycled water use area, in square feet. • CF (Conversion Factor) = 0.623, the number that converts the volumetric unit (square feet x inches) to gallons. 			

Comment 4: The City requests that the cross-connection testing requirement is only for dual-plumbed sites.

The City requests the additional text to clarify that all new sites receive a cross-connection test prior to initiating service, but only dual-plumbed sites receive routine testing every four years.

Response 4:

The City’s request is reasonable. Note 2 of Table 4 has been updated to provide clarification.

Table 4. Cross-Connection and Backflow Monitoring Requirements

Parameter	Sampling Frequency	Required Frequency
Cross-connection inspection ⁽¹⁾	Annually	Annually
Cross-connection testing	Four Years ⁽²⁾	30 days/Annually ⁽³⁾
Backflow Incident	Continuous	24 hours from discovery
Backflow Prevention Device Testing and Maintenance	Annually ⁽⁴⁾	Annually

Table Notes

1. The Administrator shall ensure that the dual plumbed recycled water system (indoor and outdoor) is inspected for possible cross connection with the potable water system.
2. Testing of dual plumbed recycled water systems shall be performed prior to initiating recycled water service and at least every four years, or more frequently at the discretion of DDW. Testing results shall be maintained by the Administrator and submitted annually.
3. Cross-connection testing shall be reported pursuant to title 22 section 60314. The report shall be submitted to DDW within 30 days and included in the annual report to the Regional Water Board.
4. Backflow prevention device testing and maintenance shall be tested by a qualified person as described in title 17, section 7605.

Comment 5: The City requests that the due date for Annual Reports should be modified to April 1st.

The City requests the annual report to be submitted by April 1st of each year rather than March 1st. This request is consistent with the default MRP in the General Order.

Response 5:

The City's request is reasonable and the annual report's due date has been modified to April 1st. Section 6.2 of the MRP has been modified as follows:

“6.2. Annual Report

The Administrator shall submit an annual report to the Regional Water Board for each calendar year through the CIWQS Program Web site. The annual report shall be submitted by ~~March 1st~~ April 1st following the monitoring year.”

Comment 6: The City requests that the Annual Report require less detail about individual recycled water use permits.

Specific information about individual user permits is not required in the default MRP in the General Order, and past reporting by the City has not included this level of detail. The City requests removal of this requirement.

Response 6:

The Recycled Water User Permits issued by the City contain the conditions of use for each site and the requirements for users to follow the rules and regulations set forth under city code and the Recycled Water User's Guide. The Regional Water Board believes that this is a critical tool for the City's recycled water program, and it is appropriate for the Regional Water Board to have the City track and report the current status of each User's permit. Section 6.2.4 of the MRP has been modified as follows:

"6.2.4 A summary table of all recycled water users, the status of the Recycled Water Use Permit for each user ~~date and term of recycled water user agreements~~, and use areas shall be provided. Maps may be included to identify use areas. Newly permitted recycled water Users and use areas shall be clearly identified. The Administrator shall maintain all Recycled Water User Agreements on file."

Comment 7: The City requests that the requirement to obtain DDW pre-approval for changes to the Recycled Water User's Guide (Section 6.5 of the MRP) to be removed from the MRP.

The City indicates that they are open to providing a courtesy copy of changes to the Recycled Water User's Guide, or obtaining pre-approval for certain specific portions of the Recycled Water User's Guide, but that this is not part of the Title 22 Engineering Report that requires separate authorization by the Regional Water Board or DDW. The City further indicates that they acknowledge that DDW's February 12, 2020 conditional acceptance letter noted that new types of uses must be approved by DDW, but that the letter does not indicate that DDW plans to review future versions of the User's Guide for other types of program changes.

Response 7:

DDW specifically indicates in their March 13, 2020 conditional acceptance letter that "Subsequent updates to the Recycled Water User's Guide must be reviewed and accepted by DDW prior to implementation by the City's program." The February 12, 2020 letter referenced to by the City is the DDW conditional acceptance letter for the City of Santa Rosa and not Rohnert Park. The Engineering Report's description of the City's program heavily relies on the content of the Recycled Water User's Guide. Any changes to the Recycled Water User's Guide that translates to changes in operations, program management, or implementation must be reviewed and accepted by DDW and the Regional Board prior to the change.

In advance of making any such changes, the City may consult with the Regional Board and DDW to waive such review requirement for minor and non-substantive changes.

Section 6.5.1 has been modified as follows:

“6.5.1. Updates to the Recycled Water User’s Guide must be reviewed by Regional Water Board and DDW staff and accepted by DDW prior to implementation by the Administrator’s program. The Administrator may consult with the Regional Water Board to waive the aforementioned requirement for minor and non-substantive changes. The Regional Water Board shall communicate with DDW when necessary to determine if a waiver request is appropriate.”

Public Comments – Russian River Watershed Protection Committee

The Russian River Watershed Protection Committee (RRWPC) was disappointed that they did not have more time to prepare a response to this public notice; indicating that COVID-19 and evacuations resulting from the current fires have interrupted their normal ability to speak to these items. They were able to provide a brief e-mail that discussed several items of concern that they wanted to address. The issues raised were summarized and responded to below:

Comment 1: The RRWPC indicated that are concerned with recycled water application.

The RRWPC indicated that they have a concern with the setback requirement for recycled water use in relation to streets and sidewalks, including irrigation head placement, spray pressure and reach.

Response 1:

Currently no recycled water regulation provides for a minimum setback to streets or sidewalks, irrigation head placement, or spray pressure and reach. Regulations do however require that irrigation runoff be confined to the recycled water use area (Title 22, Section 60310). While the correct application of these subject concerns may be critical for a recycled water irrigation site to maintain compliance, they are ultimately addressed through the existing no runoff provision.

No changes were made to the Proposed MRP in response to this comment.

Comment 2: The RRWPC indicated that they are concerned with the frequency of inspections performed by Regional Water Board staff.

The RRWPC indicated that they have a concern with the inspection frequency by Regional Water Board Staff.

Response 2:

The Regional Water Board understands RRWPC's concern for infrequent inspections and will continue to perform inspections of recycled water use sites as resources allow. Additionally, the Administrator of each recycled water program is required to monitor their use sites and correct any observed non-compliance issues. The Regional Water Board recognized the need for more frequent inspections due to public concern and included a more frequent site inspection requirement in the site specific MRP (monthly instead of quarterly).

No changes were made to the Proposed MRP in response to this comment.

Comment 3: *The RRWPC suggests that further analysis of water use be included.*

RRWPC suggests that through the analysis of water use we may learn how much water is wasted, what path it may travel, and perhaps ending up in streams.

Response 3:

Over the past few years, Regional Water Board staff have worked cooperatively with the City to ensure compliance with the requirements to minimize or prevent irrigation runoff and to ensure protection of public health and the environment. As discussed in RRWPC comment 2, the Regional Water Board recognized the need for more frequent inspections due to public concern and increased the required frequency of site inspections. The MRP requires that any non-compliance events be summarized in the annual recycled water report, including any corrective actions resulting from these observations. Regional Water Board staff will prioritize inspections of recycled water use sites where incidental runoff or reports of incidental runoff have been or appear to be most frequent.

No changes were made to the Proposed MRP in response to this comment.

Comment 4: *The RRWPC indicated their concern that no improvements have to be made to existing recycled water use sites.*

RRWPC indicates that they believe that no improvements have to be made to older recycled water systems, but only when they plan new ones. Their concern is that if this is the case, it may be many years before compliance is achieved.

Response 4:

All recycled water use sites must be operated in a fashion to prevent violation of Title 22 requirements. The Recycled Water General Order requires that the Administrator to take whatever actions are necessary, including termination of delivery of recycled water to the User, to correct any User violations. These requirements apply to existing sites, as well as new and redeveloped sites.

No changes were made to the Proposed MRP in response to this comment.