

Central Coast Regional Water Quality Control Board

AGRICULTURAL REGULATORY PROGRAM

**RESOURCES FOR GROWERS
TIER 3 - INDIVIDUAL SURFACE WATER DISCHARGE MONITORING
February 7, 2013**

This document provides a general overview of the Tier 3 individual surface water discharge monitoring and reporting requirements that apply to Tier 3 farms/ranches enrolled in the Agricultural Regulatory Program. Agricultural Order No. R3-2012-0011 and the related Tier 3 Monitoring and Reporting Program (MRP) requires Tier 3 growers that have a discharge to receiving water (irrigation runoff, stormwater runoff, or tailwater pond) to conduct individual surface water discharge monitoring and reporting.

Tier 3 Farms/Ranches that do not have a discharge to receiving water are not required to conduct individual surface water discharge monitoring. Detailed information about the individual surface water discharge monitoring requirements is available on the Water Board’s website at the link below (see Tier 3 MRP, p.15-17):

http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/index.shtml

The purpose of Tier 3 individual surface water discharge monitoring is to a) evaluate the quality of individual waste discharges, including concentration and load of waste for appropriate parameters, b) evaluate effects of waste discharge on water quality and beneficial uses, and c) evaluate progress towards compliance with water quality improvement milestones in the Order.

Key requirements and due dates for Tier 3 individual surface water discharge monitoring and reporting requirements are shown below:

| TIER 3 REQUIREMENT | DUE DATE |
|---|---|
| Submit individual surface water discharge Sampling and Analysis Plan (SAP) and Quality Assurance Project Plan (QAPP). | March 15, 2013 |
| Initiate individual surface water discharge monitoring | October 1, 2013 |
| Submit individual surface water discharge monitoring data | March 15, 2014; October 1, 2014; and annually thereafter by October 1 |

Sampling and Analysis Plan (SAP)/Quality Assurance Project Plan (QAPP)

Prior to sampling, Tier 3 growers must prepare a plan that describes sampling details, such as methods, timeframe, and quality assurance protocols. A template to assist Tier 3 Farms/Ranches in the preparation of the Individual Surface Water Discharge SAP/QAPP is available on the Water Board’s website, under the heading “Grower Workshops and

Resources”. Sample maps and forms are included in the template, as well as instructions for taking flow measurements. The template is intended to provide guidance to the grower and will also facilitate more efficient review by the Water Board. However, the use of this template is not required. Growers can use any format to provide the required information identified in the Tier 3 Monitoring and Reporting Program R3-2012-0011-03. The Sampling and Analysis Plan and QAPP, and any proposed revisions are subject to approval by the Executive Officer. The Executive Officer may require modifications to the Sampling and Analysis Plan or Tier 3 Dischargers may propose Sampling and Analysis Plan modifications for Executive Officer approval, when modifications are justified to accomplish the objectives of the MRP.

Finding a Laboratory

The Agricultural Order requires that Tier 3 farms/ranches include specific parameters in the individual surface water discharge monitoring. It is important for growers to select a laboratory that can provide the necessary laboratory analytical methods and achieve specific detection and reporting limits. Prior to sampling, growers should confirm that the selected laboratory can conduct the laboratory analytical methods identified in Table 1 below.

Table 1. Required analytical methods for Tier 3 individual surface water discharge monitoring.

| Parameter | Analytical Method | Reporting Limit ² | Units |
|--|-----------------------------|------------------------------|-------------|
| Discharge Flow or Volume | Field Measure | --- | cfs |
| Approximate Duration of Flow | Field Measure/Calculation | --- | hours/month |
| Pond Volume | Field Measure/Calculation | --- | Gallons |
| Temperature (water) | Field Measure | NA | ° Celsius |
| pH | Field Measure | NA | pH units |
| Electrical Conductivity | Field or Laboratory Measure | 100 | µS/cm |
| Turbidity | Field or Laboratory Measure | 1 | NTUs |
| Nitrate + Nitrite (as N) | EPA 300.1 or EPA 353.2 | 0.1 | mg/L |
| Total Ammonia as N | SM 4500 NH3 or EPA 350.3 | 0.1 | mg/L |
| Chlorpyrifos ¹ | EPA 8141A or EPA 614 | 0.02 | ug/L |
| Diazinon ¹ | | | |
| <i>Ceriodaphnia</i> Toxicity (96-hr acute) | EPA-821-R-02-012 | NA | % Survival |
| <i>Hyalella</i> Toxicity in Water (10-day) | EPA-821-R-02-013 | NA | % Survival |

¹Only required, if chlorpyrifos or diazinon is applied on the farm/ranch

²Reporting limit (RL) is interpreted here as the lowest level for quantification of the concentration

RL – Reporting Limit; mg/L – milligrams/ liter; ug/L – micrograms/liter; cfs – Cubic feet per second; NTU – Nephelometric turbidity unit; µS/cm– microSiemens/centimeter; NA – Not applicable

For more information about the Agricultural Regulatory Program, including additional resources and guidance for growers, please visit the Water Board’s Internet site at:

http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/index.shtml

If you have questions regarding the Agricultural Regulatory Program or need additional assistance, please contact the Water Board at (805) 549-3147.