

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

**MONITORING AND REPORTING PROGRAM NO. R3-2011-0018**

**FOR  
DISCHARGERS**

**ENROLLED UNDER  
THE CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR  
DISCHARGES FROM IRRIGATED LANDS**

This Monitoring and Reporting Program (MRP) No. R3-2011-0018 supersedes and replaces MRP No. R3-2004-0117. This MRP describes monitoring and reporting requirements for all Dischargers enrolled under the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands Order No. R3-2004-0117 (Agricultural Order).

This MRP is issued pursuant to California Water Code (Water Code) sections 13267 and 13269, which authorize the California Regional Water Quality Control Board, Central Coast Region (hereafter Central Coast Water Board) to require preparation and submittal of technical and monitoring reports. Water Code section 13269 requires a waiver of waste discharge requirements to include as a condition, the performance of monitoring and the public availability of monitoring results. A summary of the requirements is shown below:

Part I. Monitoring and Reporting Requirements. Dischargers must elect a monitoring option when filing a Notice of Intent (NOI). Part I, Option 1, below, describes requirements for those who choose to participate in a cooperative monitoring program. Part I, Option 2, below, describes requirements for those who choose to conduct individual monitoring. Any discharger who has not identified and met the enrollment requirements of the cooperative monitoring program must commence individual monitoring. Any Discharger who has not elected either individual or cooperative monitoring is in violation of the conditions of the Agricultural Order. Dischargers may change monitoring options by updating the Notice of Intent.

Part II. Farm Plan and Management Practice Reporting Requirements. Dischargers must provide information to the Central Coast Water Board on Farm Water Quality Management Plan completion and management practice implementation.

Part III. General Monitoring and Reporting Requirements.

## **PART I. MONITORING AND REPORTING REQUIREMENTS**

### **OPTION 1. REQUIREMENTS FOR COOPERATIVE MONITORING**

Cooperative monitoring represents a watershed-based approach to meeting monitoring requirements. In general, sites are selected throughout the agricultural areas of the region, on main stems of rivers and on tributaries entering the rivers. These sites are monitored on a regular basis, to see whether implementation of management practices as the result of adoption of the Agricultural Order is improving water quality. In general, sites are selected in areas where the Central Coast Water Board's Central Coast Ambient Monitoring Program (CCAMP) and other data have identified water quality problems from nutrients, pesticides, and other constituents that are attributable to irrigated agriculture. The cooperative monitoring program allows Dischargers to pool resources in order to accomplish required monitoring at a lower cost than individual monitoring.

*Dischargers that elect the "Cooperative Monitoring" option on their Notice of Intent are subject to the following requirements:*

Dischargers participating in the cooperative monitoring option shall contribute to the cooperative monitoring program designed to determine whether water quality and associated beneficial uses are protected and/or improved as a result of the Agricultural Order. The cooperative monitoring program will submit the names of participating Dischargers to the Central Coast Water Board; this submittal and the Dischargers' continued full participation in and implementation of the cooperative monitoring program according to this MRP, satisfies water quality monitoring requirements for those participants. The cooperative monitoring program will develop a dues schedule or other mechanism for addressing the costs of implementing the cooperative monitoring program described below. In the development of any fee schedule, the Central Coast Water Board encourages Dischargers to scale the assessment of fees based on relative level of waste discharge and threat to water quality. The cooperative monitoring program will notify the Central Coast Water Board of any enrolled Dischargers who cease to comply with dues schedules or other enrollment requirements. Dischargers who cease to comply with the cooperative monitoring program dues schedules or other enrollment requirements must begin individual monitoring immediately.

### **SURFACE RECEIVING WATER MONITORING AND REPORTING REQUIREMENTS**

Monitoring and reporting requirements for surface receiving water identified in Part 1.A. and Part 1.B. apply to Dischargers that have elected to participate in a cooperative monitoring program. Surface receiving water refers to water flowing in

creeks and other surface waters of the State. Key monitoring and reporting requirements for surface receiving water are shown in Tables 1 and 2. Time schedules are shown in Table 6.

#### **A. Surface Receiving Water Quality Monitoring**

1. Dischargers that elect to participate in a cooperative monitoring program must identify that election on the Notice of Intent (NOI).
2. Dischargers are encouraged to choose participation in a cooperative monitoring program (e.g., the existing Cooperative Monitoring Program or a similar program) to comply with receiving water quality monitoring requirements. Dischargers not participating in a cooperative monitoring program must conduct individual monitoring described in Option 2.
3. Dischargers (through their participation in a cooperative monitoring program) must conduct surface receiving water quality monitoring to a) assess the impacts of waste discharges from irrigated lands to receiving water, b) assess the status of receiving water quality and beneficial use protection in impaired waterbodies dominated by irrigated agricultural activity, c) evaluate status, short term patterns and long term trends (five to ten years or more) in receiving water quality, d) evaluate water quality impacts resulting from agricultural discharges (including but not limited to tile drain discharges), e) evaluate stormwater quality, f) evaluate condition of existing perennial, intermittent, or ephemeral streams or riparian or wetland area habitat, including degradation resulting from erosion or agricultural discharges of waste, and g) assist in the identification of specific sources of water quality problems.

#### Surface Receiving Water Quality Sampling and Analysis Plan

4. **Within three months** of the effective date of this MRP, Dischargers (through their participation in a cooperative monitoring program) must submit a surface receiving water quality Sampling and Analysis Plan and Quality Assurance Project Plan (QAPP). Dischargers (through their participation in a cooperative monitoring program) must develop the Sampling and Analysis Plan to describe how the proposed monitoring will achieve the objectives of the MRP and evaluate compliance with the Order. The Sampling and Analysis Plan may propose alternative monitoring site locations, adjusted monitoring parameters, and other changes as necessary to assess the impacts of waste discharges from irrigated lands to receiving water.

5. The Sampling and Analysis Plan must include the following minimum required components:
  - a. Monitoring strategy to achieve objectives of the Order and MRP;
  - b. Map of monitoring sites with GIS coordinates;
  - c. Identification of known water quality impairments and impaired waterbodies per the 2010 Clean Water Act 303(d) List of Impaired Waterbodies (List of Impaired Waterbodies);
  - d. Identification of beneficial uses and applicable water quality standards;
  - e. Identification of applicable Total Maximum Daily Loads;
  - f. Monitoring parameters;
  - g. Monitoring schedule, including description and frequencies of monitoring events;
  - h. Description of data analysis methods;
  
6. The QAPP must include receiving water and site-specific information, project organization and responsibilities, and quality assurance components of the MRP. The QAPP must also include the laboratory and field requirements to be used for analyses and data evaluation. The QAPP must contain adequate detail for project and Water Board staff to identify and assess the technical and quality objectives, measurement and data acquisition methods, and limitations of the data generated under the surface receiving water quality monitoring. All sampling and laboratory methodologies and QAPP content must be consistent with U.S. EPA methods, State Water Board's Surface Water Ambient Monitoring Program (SWAMP) protocols and the Central Coast Water Board's Central Coast Ambient Monitoring Program (CCAMP). Following U.S. EPA guidelines<sup>1</sup> and SWAMP templates<sup>2</sup>, the receiving water quality monitoring QAPP must include the following minimum required components:
  - a. Project Management. This component addresses basic project management, including the project history and objectives, roles and responsibilities of the participants, and other aspects.
  - b. Data Generation and Acquisition. This component addresses all aspects of project design and implementation. Implementation of these elements ensures that appropriate methods for sampling, measurement and analysis, data collection or generation, data handling, and quality control activities are employed and are properly documented. Quality

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<sup>1</sup> USEPA. 2001 (2006) USEPA Requirements for Quality Assurance Project Plans (QA/R-5) Office of Environmental Information, Washington, D.C. USEPA QA/R-5

<sup>2</sup> [http://waterboards.ca.gov/water\\_issues/programs/swamp/tools.shtml#qa](http://waterboards.ca.gov/water_issues/programs/swamp/tools.shtml#qa)

- control requirements are applicable to all the constituents sampled as part of the MRP, as described in the appropriate method.
- c. Assessment and Oversight. This component addresses the activities for assessing the effectiveness of the implementation of the project and associated QA and QC activities. The purpose of the assessment is to provide project oversight that will ensure that the QA Project Plan is implemented as prescribed.
  - d. Data Validation and Usability. This component addresses the quality assurance activities that occur after the data collection, laboratory analysis and data generation phase of the project is completed. Implementation of these elements ensures that the data conform to the specified criteria, thus achieving the MRP objectives.
7. The Central Coast Water Board may conduct an audit of contracted laboratories at any time in order to evaluate compliance with the QAPP.
  8. The Sampling and Analysis Plan and QAPP, and any proposed revisions are subject to approval by the Executive Officer. The Executive Officer may also revise the Sampling and Analysis Plan, including adding, removing, or changing monitoring site locations, changing monitoring parameters, and other changes as necessary to assess the impacts of waste discharges from irrigated lands to receiving water.

#### Surface Receiving Water Quality Monitoring Sites

9. The Sampling and Analysis Plan must, at a minimum, include monitoring sites to evaluate waterbodies identified in Table 1, unless otherwise approved by the Executive Officer. The Sampling and Analysis Plan must include sites to evaluate receiving water quality impacts most directly resulting from areas of agricultural discharge (including areas receiving tile drain discharges). Site selection must take into consideration the existence of any long term monitoring sites included in related monitoring programs (e.g., CCAMP and the existing CMP). Sites may be added or modified, subject to prior approval by the Executive Officer, to better assess the pollutant loading from individual sources or the impacts to receiving waters caused by individual Dischargers. Any modifications must consider sampling consistency for purposes of trend evaluation.

Surface Receiving Water Quality Monitoring Parameters

10. The Sampling and Analysis Plan must, at a minimum, include the following types of monitoring and evaluation parameters listed below and identified in Table 2:
  - a. Flow Monitoring;
  - b. Water Quality (physical parameters, metals, nutrients, pesticides);
  - c. Toxicity (water and sediment);
  - d. Assessment of Benthic Invertebrates;
11. All analyses must be conducted at a laboratory certified for such analyses by the State Department of Public Health (CDPH) or at laboratories approved by the Executive Officer. Unless otherwise noted, all sampling, sample preservation, and analyses must be performed in accordance with the latest edition of *Test Methods for Evaluating Solid Waste*, SW-846, U.S. EPA, and analyzed as specified herein by the above analytical methods and reporting limits indicated. Certified laboratories can be found at the web link:<http://www.cdph.ca.gov/certlic/labs/Documents/ELAPLablist.xls>
12. Water quality and flow monitoring is used to assess the sources, concentrations, and loads of waste discharges from individual farms/ranches and groups of Dischargers to surface waters, to evaluate impacts to water quality and beneficial uses, and to evaluate the short term patterns and long term trends in receiving water quality. Monitoring data must be compared to existing numeric and narrative water quality objectives.
13. Toxicity testing is to evaluate water quality relative to the narrative toxicity objective. Water column toxicity analyses must be conducted on 100% (undiluted) sample. At sites where persistent unresolved toxicity is found, the Executive Officer may require concurrent toxicity and chemical analyses and a Toxicity Identification Evaluation (TIE) to identify the individual discharges causing the toxicity.

Surface Receiving Water Quality Monitoring Frequency and Schedule

14. The Sampling and Analysis Plan must include a schedule for sampling. Timing, duration, and frequency of monitoring must be based on the land use, complexity, hydrology, and size of the waterbody. Table 2 includes minimum monitoring frequency and parameter lists. Agricultural parameters that are less common may be monitored less frequently. Modifications to the receiving water quality monitoring parameters, frequency, and schedule may be submitted for Executive Officer

consideration and approval. At a minimum, the Sampling and Analysis Plan schedule must consist of monthly monitoring of common agricultural parameters in major agricultural areas, including two major storm events during the wet season (October 1 – April 30).

15. Storm event monitoring must be conducted within 18 hours of storm events, preferably including the first flush run-off event that results in significant increase in stream flow. For purposes of this MRP, a storm event is defined as precipitation producing onsite runoff (surface water flow) capable of creating significant ponding, erosion or other water quality problem. A significant storm event will generally result in greater than 1-inch of rain within a 24-hour period.
16. **Within six months** of the effective date of this MRP, Dischargers (through their participation in a cooperative monitoring program) must initiate receiving water quality monitoring per the Sampling and Analysis Plan and QAPP approved by the Executive Officer.

## **B. Surface Receiving Water Quality Reporting**

### Surface Receiving Water Quality Data Submittal

1. **Within nine months** of the effective date of this MRP and quarterly thereafter (by January 1, April 1, July 1, and October 1), Dischargers (through their participation in a cooperative monitoring program) must submit water quality monitoring data to the Central Coast Water Board electronically, in a format specified by the Executive Officer and compatible with SWAMP/CCAMP electronic submittal guidelines, available at: <http://www.ccamp.info/ceden/index.html>.

### Surface Receiving Water Quality Monitoring Annual Report

2. **Within one year** of the effective date of this MRP and annually thereafter by January 1, Dischargers (through their participation in a cooperative monitoring program)) must submit an Annual Report electronically, in a format specified by the Executive Officer, including the following minimum elements:
  - a. Signed Transmittal Letter;
  - b. Title Page;
  - c. Table of Contents;
  - d. Executive Summary;
  - e. Summary of Exceedance Reports submitted during the reporting period;
  - f. Monitoring objectives and design;

- g. Monitoring site descriptions and rainfall records for the time period covered;
- h. Location of monitoring sites and map(s);
- i. Tabulated results of all analyses arranged in tabular form so that the required information is readily discernible;
- j. Summary of water quality data for any sites monitored as part of related monitoring programs, and used to evaluate receiving water as described in the Sampling and Analysis Plan.
- k. Discussion of data to clearly illustrate compliance with the Order and water quality standards;
- l. Discussion of short term patterns and long term trends in receiving water quality and beneficial use protection;
- m. Evaluation of pesticide and toxicity analyses results, and recommendation of candidate sites for Toxicity Identification Evaluations (TIEs);
- n. Identification of the location of any agricultural discharges observed discharging directly to surface receiving water;
- o. Electronic data submitted in a SWAMP/CCAMP comparable format;
- p. Sampling and analytical methods used;
- q. Copy of chain-of-custody forms;
- r. Field data sheets, signed laboratory reports, laboratory raw data;
- s. Associated laboratory and field quality control samples results;
- t. Summary of Quality Assurance Evaluation results;
- u. Specify the method used to obtain flow at each monitoring site during each monitoring event;
- v. Electronic or hard copies of photos obtained from all monitoring sites, clearly labeled with site ID and date;
- w. Conclusions.

**Table 1. Major Waterbodies in Agricultural Areas<sup>1</sup>**

Hydrologic SubArea	Waterbody Name	Hydrologic SubArea	Waterbody Name
		30920	Natividad Creek
30510	Pajaro River	30920	Quail Creek
30510	Salsipuedes Creek	30920	Salinas Reclamation Canal
30510	Watsonville Slough	31022	Chorro Creek
30510	Watsonville Creek <sup>2</sup>	31023	Los Osos Creek
30530	Carnadero Creek	31023	Warden Creek
		31024	San Luis Obispo Creek
30530	Llagas Creek	31024	Prefumo Creek
30530	Furlong Creek <sup>2</sup>	31031	Arroyo Grande Creek
30530	San Juan Creek	31031	Los Berros Creek
30530	Tesquisquita Slough	31210	Bradley Canyon Creek
30530	Miller's Canal	31210	Bradley Channel
30600	Moro Cojo Slough	31210	Green Valley Creek
30910	Alisal Slough	31210	Main Street Canal
30910	Beach Road Ditch <sup>2</sup>	31210	Orcutt Solomon Creek
30910	Blanco Drain	31210	Oso Flaco Creek
30910	Old Salinas River	31210	Little Oso Flaco Creek
30910	Salinas River (below Gonzales Rd.)	31210	Santa Maria River
30920	Salinas River above Gonzales Rd. and below Nacimiento R.)	31310	San Antonio Creek <sup>2</sup>
30910	Tembladero Slough	31410	Santa Ynez River
30910	Santa Rita Creek <sup>2</sup>	31531	Bell Creek
30920	Alisal Creek	31531	Glenn Annie Creek
30920	Chualar Creek	31531	Los Carneros Creek <sup>2</sup>
30920	Espinosa Slough	31534	Arroyo Paredon Creek
30920	Gabilan Creek	31534	Franklin Creek

<sup>1</sup> At a minimum, sites must be included for these waterbodies in agricultural areas, unless otherwise approved by the Executive Officer. Sites may be proposed for addition or modification to better assess the impacts of waste discharges from irrigated lands to surface water. <sup>2</sup> These creeks are included because they are newly listed waterbodies on the 2010 303(d) list of Impaired Waters that are associated with areas of agricultural discharge.

**Table 2. Surface Receiving Water Quality Monitoring Parameters**

Parameters and Tests	RL <sup>3</sup>	Monitoring Frequency <sup>1</sup>
<b>Photo Monitoring</b>		
Upstream and downstream photographs at monitoring location		With every monitoring event
<b><i>WATER COLUMN SAMPLING</i></b>		
<b>Physical Parameters and General Chemistry</b>		
Flow (field measure) (CFS) following SWAMP field SOP <sup>9</sup>	.25	Monthly, including 2 stormwater events
pH (field measure)	0.1	"
Electrical Conductivity (field measure) (uS/cm)	2.5	"
Dissolved Oxygen (field measure) (mg/L)	0.1	"
Temperature (field measure) (°C)	0.1	"
Turbidity (NTU)	0.5	"
Total Dissolved Solids (mg/L)	10	"
Total Suspended Solids (mg/L)	0.5	"
<b>Nutrients</b>		
Total Nitrogen (mg/L)	0.5	Monthly, including 2 stormwater events
Nitrate + Nitrite (as N) (mg/L)	0.1	"
Total Ammonia (mg/L)	0.1	"
Unionized Ammonia (calculated value, mg/L)		"
Total Phosphorus (as P) (mg/L)	-	"
Soluble Orthophosphate (mg/L)	0.01	"
Water column chlorophyll a (mg/L)	0.002	"
Algae cover, Floating Mats, % coverage	-	"
Algae cover, Attached, % coverage	-	"
<b>Water Column Toxicity Test</b>		
Algae - <i>Selenastrum capricornutum</i> , 4 day	-	Twice in dry season, twice in wet season
Water Flea – <i>Ceriodaphnia</i> (7-day chronic)	-	"
Fathead Minnow - <i>Pimephales promelas</i> (7-day chronic)	-	"
Toxicity Identification Evaluation (TIE)	-	As directed by Executive Officer
<b>Pesticides<sup>2</sup> (ug/L)</b>		
<b>Carbamates</b>		
Aldicarb	0.05	4 times, concurrent with water toxicity monitoring, in second year of Order term
Carbaryl	0.05	"

Parameters and Tests	RL <sup>3</sup>	Monitoring Frequency <sup>1</sup>
Carbofuran	0.05	"
Methiocarb	0.05	"
Methomyl	0.05	"
Oxamyl	0.05	"
<b>Organophosphate Pesticides</b>		
Azinphos-methyl	0.02	"
Chlorpyrifos	0.005	"
Diazinon	0.005	"
Dichlorvos	0.01	"
Dimethoate	0.01	"
Dimeton-s	0.005	"
Disulfoton (Disyton)	0.005	"
Malathion	0.005	"
Methamidophos	0.02	"
Methidathion	0.02	"
Parathion-methyl	0.02	"
Phorate	0.01	"
Phosmet	0.02	"
<b>Herbicides</b>		
Atrazine	0.05	"
Cyanazine	0.20	"
Diuron	0.05	"
Glyphosate	2.0	"
Linuron	0.1	"
Paraquat dichloride	4	"
Simazine	0.05	"
Trifluralin	0.05	"
<b>Metals (ug/L)</b>		
Arsenic (total) <sup>5,7</sup>	0.3	4 times, concurrent with water toxicity monitoring, in second year of Order term
Boron (total) <sup>6,7</sup>	10	"
Cadmium (total & dissolved) <sup>4,5,7</sup>	0.01	"
Copper (total and dissolved) <sup>4,7</sup>	0.01	"
Lead (total and dissolved) <sup>4,7</sup>	0.01	"
Nickel (total and dissolved) <sup>4,7</sup>	0.02	"
Molybdenum (total) <sup>7</sup>	1	"
Selenium (total) <sup>7</sup>	0.30	"
Zinc (total and dissolved) <sup>4,5,7</sup>	0.10	"
<b>Other (ug/L)</b>		
Total Phenolic Compounds <sup>8</sup>	10	4 times, concurrent with water toxicity monitoring, in second year of Order term
Hardness (mg/L as CaCO3)	1	"
Total Organic Carbon (ug/L)	0.6	"

Parameters and Tests	RL <sup>3</sup>	Monitoring Frequency <sup>1</sup>
<b><u>SEDIMENT SAMPLING</u></b>		
Sediment Toxicity - Hyalella azteca 10-day		Annually
Benthic Invertebrate and associated Physical Habitat Assessment	SWAMP SOP	Once during the second year of Order concurrent with sediment toxicity sampling
<b>Pyrethroid Pesticides in Sediment (ug/kg)</b>		
Gamma-cyhalothrin	2	Once during second year of Order, concurrent with sediment toxicity sampling
Lambda-cyhalothrin	2	
Bifenthrin	2	"
Beta-cyfluthrin	2	"
Cyfluthrin	2	"
Esfenvalerate	2	"
Permethrin	2	"
Cypermethrin	2	"
Danitol	2	"
Fenvalerate	2	"
Fluvalinate	2	"
<b>Organochlorine Pesticides in Sediment</b>		
DCPA	10	"
Dicofol	2	"
<b>Other Monitoring in Sediment</b>		
Chlorpyrifos (ug/kg)	2	"
Total Organic Carbon	0.01%	"
Sulfide		"
Sediment Grain Size Analysis	1%	"

<sup>1</sup>Monitoring is ongoing unless otherwise specified. Monitoring frequency may be used as a guide for developing alternative Sampling and Analysis Plan.

<sup>2</sup>Pesticide list may be modified based on specific pesticide use in Central Coast Region. Analytes on this list must be reported, at a minimum.

<sup>3</sup>Reporting Limit, taken from SWAMP where applicable.

<sup>4</sup>Holmgren, Meyer, Cheney and Daniels. 1993. Cadmium, Lead, Zinc, Copper and Nickel in Agricultural Soils of the United States. J. of Environ. Quality 22:335-348.

<sup>5</sup>Sax and Lewis, ed. 1987. Hawley's Condensed Chemical Dictionary. 11<sup>th</sup> ed. New York: Van Nostrand Reinhold Co., 1987. Zinc arsenate is an insecticide.

<sup>6</sup><http://www.coastalagro.com/products/labels/9%25BORON.pdf>; Boron is applied directly or as a component of fertilizers as a plant nutrient.

<sup>7</sup>Madramootoo, Johnston, Willardson, eds. 1997. Management of Agricultural Drainage Water Quality. International Commission on Irrigation and Drainage. U.N. FAO. SBN 92-6-104058.3.

<sup>8</sup><http://cat.inist.fr/?aModele=afficheN&cpsid=14074525>; Phenols are breakdown products of herbicides and pesticides. Phenols can be directly toxic and cause endocrine disruption.

<sup>9</sup>See SWAMP field measures SOP, p. 17

mg/L – milligrams per liter; ug/L – micrograms per liter; ug/kg – micrograms per kilogram;  
NTU – Nephelometric Turbidity Units; CFS – cubic feet per second;

**OPTION 2. REQUIREMENTS FOR INDIVIDUAL MONITORING**

*Dischargers that elect the “Individual Monitoring” option on their Notice of Intent to enroll are subject to the following requirements:*

Dischargers, that elect Individual Monitoring on their Notice of Intent, are required to monitor any discharges to surface or groundwater, including discharges to streams, discharges to tailwater ponds, and stormwater runoff. Monitoring of tailwater, tile drain discharge and stormwater shall be conducted according to the schedule described in Tables 3, 4, and 5. Tailwater and tile drain waters that discharge to surface waters shall be monitored for general constituents and for toxicity twice during the irrigation season as described in Table 3. Tailwater contained in tailwater ponds shall be monitored for nitrate as described in Table 4. Stormwater is to be monitored twice annually for general constituents and toxicity during or shortly after runoff events, including the first event that results in discharge, as described in Table 5. More than one site may be necessary to adequately monitor discharges from the property. Site(s) should be identified in a Quality Assurance Program Plan.

In the event that toxicity is detected in at least two samples, the discharger shall develop and implement a plan for elimination of the toxicity or, prior to development of such a plan, conduct an evaluation to identify the source of the toxicity.

**Table 3. Tailwater and Tile Drain Discharge Monitoring**

Constituent	Units	Sample Type	Reporting Limit	Minimum Frequency of Sampling and Analysis
Nitrate as N	mg/L	Grab	0.1 mg/L	Four times per year, with two of these samples taken coincident with toxicity monitoring
Total ammonia	mg/L	“	0.1 mg/L	“
Orthophosphate as P	mg/L	“	0.01 mg/L	“
Total dissolved solids	mg/L	“	10 mg/L	“
pH	pH units	“		“
Temperature	°C	“		“
Turbidity	NTUs	“	0.5 NTU	“
Flow	CFS			“
Water toxicity <sup>3</sup> <i>Ceriodaphnia dubia</i> (U.S. EPA Method 1002.0 7-day chronic survival and reproduction test)				Twice per year during irrigation season

<sup>3</sup> USEPA. 2002. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition. Office of Water, Washington, D.C. EPA-821-R-02-013.

<i>Pimephales promelas</i> (U.S. EPA Method 1001.0 7-day chronic survival and development test) <i>Selenastrum capricornutum</i> (U.S. EPA (Method 1003.0) 96-hour growth)				
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**Table 4. Tailwater Pond**

Constituent	Units	Sample Type	Reporting Limit	Minimum Frequency of Sampling and Analysis
Nitrate as N	mg/L	Grab	0.1 mg/L	Monthly in holding ponds

**Table 5. Stormwater Monitoring**

Constituent	Units	Sample Type	Reporting Limit	Minimum Frequency of Sampling and Analysis
Nitrate as N	mg/L	Grab	0.1 mg/L	Twice in stormwater during wet season (Oct 15-March 15)
Total ammonia	mg/L	"	0.1 mg/L	"
pH	pH units	"		"
Temperature	°C	"		"
Orthophosphate as P	mg/L	"	0.01 mg/L	"
Total dissolved solids	mg/L	"	10 mg/L	"
Turbidity	NTUs	"	0.5 NTU	"
Water toxicity <sup>4</sup> <i>Ceriodaphnia dubia</i> (U.S. EPA Method 1002.0 7-day chronic survival and reproduction test) <i>Pimephales promelas</i> (U.S. EPA Method 1001.0 7-day chronic survival and development test) <i>Selenastrum capricornutum</i> (U.S. EPA (Method 1003.0) 96-hour growth)				"

<sup>4</sup> USEPA. 2002. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition. Office of Water, Washington, D.C. EPA-821-R-02-013.

### **Quality Assurance Project Plan (QAPP)**

Dischargers must have a Quality Assurance Project Plan (QAPP) that describes how data will be collected and analyzed to ensure that data is consistent with State and Regional Board monitoring programs and is of high quality. Dischargers shall develop a Quality Assurance Program Plan (QAPP), consistent with the State's Surface Water Ambient Monitoring Program (SWAMP) and approved by the Central Coast Water Board's Quality Assurance Officer. A QAPP template QAPP is available at: [http://www.waterboards.ca.gov/water\\_issues/programs/swamp/docs/swampqapp\\_template032404.doc](http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/swampqapp_template032404.doc).

All data collection shall be conducted utilizing field techniques consistent with SWAMP. All laboratory analysis shall be conducted by a laboratory certified by the state Department of Public Health (CDPH). The QAPP will include location of sample site(s), description of analytical techniques, data quality objectives, and other standard quality assurance information. Certified laboratories can be found at the web link:<http://www.cdph.ca.gov/certlic/labs/Documents/ELAPLablist.xls>

### **Data Reporting**

A time schedule of key monitoring and reporting activities is shown in Table 6. Monitoring data shall be submitted to the Regional Board electronically. Electronic data shall be reported according to Central Coast Water Board/SWAMP electronic submittal formats, available at <http://www.ccamp.info/ceden/index.html>. Electronic reporting of monitoring data shall be conducted at least quarterly.

## **PART II. FARM WATER QUALITY MANAGEMENT PLAN AND MANAGEMENT PRACTICE REPORTING REQUIREMENTS**

### **Management Practice Checklist**

- A. On or before **January 1, 2013, and every two years thereafter**, Dischargers must submit a completed Management Practice Checklist that identifies currently implemented and planned management practices. A template for the checklist will be available from the Central Coast Water Board and must be submitted electronically, in a format specified by the Executive Officer.

### **Farm Water Quality Management Plan**

- B. Dischargers must maintain on-site at all times a completed Farm Water Quality Management Plan for the operation and individual farm/ranch that identifies, at a minimum, appropriate management practices for irrigation management, nutrient management, pesticide management, and erosion control.

Management practices must be designed and implemented to achieve improvements in water quality and compliance with the conditions of the Agricultural Order and the State and Regional Board Plans and Policies. Where appropriate, the Farm Water Quality Management Plan must identify future actions necessary to improve and protect water quality.

**Table 6. Time Schedule for Key Monitoring and Reporting Requirements**

REQUIREMENT	TIME SCHEDULE <sup>1</sup>
Submit Quality Assurance Project Plan and Sampling And Analysis Plan for Surface Receiving Water Quality Monitoring ( <i>Dischargers electing to participate in a cooperative monitoring program</i> )	Within three months
Submit Quality Assurance Project Plan for Individual Monitoring ( <i>Dischargers electing to conduct individual monitoring</i> )	Within three months
Initiate surface receiving water quality monitoring ( <i>Dischargers electing to participate in a cooperative monitoring program</i> )	Within six months
Initiate individual monitoring ( <i>Dischargers electing to conduct individual monitoring</i> )	Within six months
Submit water quality monitoring data ( <i>individually or through cooperative monitoring program</i> )	Within nine months, quarterly thereafter (January 1, April 1, July 1, and October 1)
Submit surface receiving water quality Annual Monitoring Report ( <i>Dischargers electing to participate in a cooperative monitoring program</i> )	Within one year, annually thereafter by January 1
Submit Management Practice Checklist ( <i>All Dischargers</i> )	January 1, 2013, and every two years thereafter.

<sup>1</sup> Dates are relative to the effective date of the MRP, unless otherwise specified

**Part III. GENERAL MONITORING AND REPORTING PROVISIONS**

**A. Submittal of Technical Reports**

1. Water quality monitoring reports and data shall be submitted electronically in a format specified by the Executive Officer, to the Central Coast Water Board per the schedule in Table 6.
2. Monitoring reports may be required more frequently as deemed necessary by the Executive Officer, based on review of the Notice of Intent and other specific information.

3. The Discharger or cooperative monitoring program shall assure that records of all monitoring data are maintained and accessible for a period of at least five years from the date of the sample. This period of retention shall be extended during the course of any unresolved proceedings regarding the discharge or by the request of the Executive Officer. Records of monitoring information shall include:
  - a. The date, exact place, and time of sampling or measurements;
  - b. The individual(s) who performed the sampling, and/or measurements;
  - c. The date(s) analyses were performed;
  - d. The individual(s) who performed the analyses;
  - e. The analytical techniques or methods used;
  - f. All sampling and analytical results;
  - g. All monitoring equipment calibration and maintenance records.
  
4. Dischargers must submit reports in a format specified by the Executive Officer. A transmittal letter must accompany each report, containing the following penalty of perjury statement signed by the Discharger or the Discharger's authorized agent:

*"In compliance with Water Code §13267, I certify under penalty of perjury that this document and all attachments were prepared by me, or under my direction or supervision following a system designed to assure that qualified personnel properly gather and evaluate the information submitted. To the best of my knowledge and belief, this document and all attachments are true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment".*
  
5. If the Discharger asserts that all or a portion of a report submitted pursuant to this MRP is subject to an exemption from public disclosure (e.g. trade secrets or secret processes), the Discharger must provide an explanation of how those portions of the reports are exempt from public disclosure. The Discharger must clearly indicate on the cover of the report (typically an electronic submittal) that the Discharger asserts that all or a portion of the report is exempt from public disclosure, submit a complete report with those portions that are asserted to be exempt in redacted form, submit separately (in a separate electronic file) unredacted pages (to be maintained separately by staff). The Central Coast Water Board staff will determine whether any such report or portion of a report qualifies for an exemption from public disclosure. If the Central Coast Water Board staff disagrees with the asserted exemption from public disclosure, the Central Coast Water Board staff will notify the Discharger prior to making such report or portions of such report available for public inspection.

## B. Enforcement and Violations

Monitoring reports are required pursuant to Section 13267 of the California Water Code. Pursuant to Section 13268 of the Water Code, a violation of a request made pursuant to Section 13267 may subject you to civil liability assessment of up to \$1000 per day.

## C. Executive Officer Authority

The Executive Officer may revise this MRP as necessary, and Dischargers must comply with the MRP as revised by the Executive Officer. Specifically, the Executive Officer may increase monitoring and reporting requirements where monitoring results, pesticide use patterns, or other indicators suggest that the increase is warranted due to an increased threat to water quality. Additionally, the Executive Officer can reduce monitoring and reporting requirements, including adjusting time schedules, where growers are coordinating efforts at watershed or subwatershed scales or where regional treatment facilities are implemented, or other indicators suggest that the reduction is warranted due to a reduced threat to water quality.

## D. Legal Provisions

The Central Coast Water Board needs the monitoring and reports required by this MRP to evaluate the effects of discharges of waste from irrigated agricultural operations and individual farms/ranches on waters of the state and to determine compliance with the Agricultural Order. The required monitoring and reports will indicate the general conditions of waters receiving irrigated agricultural discharges and whether compliance with the conditions in the Agricultural Order are improving water quality. Any person affected by this action of the Water Board may petition the State Water Resources Control Board (State Board) to review the action in accordance with Section 13320 of the California Water Code and Title 23, California Code of Regulations, Section 2050. The petition must be received by the State Board, Office of Chief Counsel, P.O. Box 100, Sacramento, CA, 95812 within 30 days of the date of this order. Copies of the law and regulations applicable to filing petitions will be provided upon request.



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Roger W. Briggs  
Executive Officer

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9-30-11

Date