

## **CONDITIONAL WAIVER NO. 4 – DISCHARGES FROM AGRICULTURAL AND NURSERY OPERATIONS**

Conditional Waiver No. 4 is for discharges from commercial agricultural and nursery operations, which contain pollutants that can percolate to groundwater or runoff to surface waters. Discharges from agricultural and nursery operations include discharges resulting from growing operations, irrigation return flows, and storm water runoff which can also transport pollutants from agricultural and nursery operations to surface waters and groundwater.

"Commercial agricultural and nursery operations" are defined as being commercial agricultural and nursery operations which generate gross sales of at least \$1,000 per average year. An average year is defined as the average gross sales for the prior three calendar years. Agricultural and nursery operations that generate gross sales of less than \$1,000 per average year are not required to comply with the requirements of Conditional Waiver No. 4 unless directed by the Executive Officer or San Diego Water Board."

The following types of discharge not regulated or authorized under waste discharge requirements (WDRs) may be eligible for Conditional Waiver No. 4:

- Discharges of plant crop residues to land
- Discharges of storm water runoff
- Discharge/application of amendments or mulches to soil
- Discharges of agricultural irrigation return water
- Discharges of nursery irrigation return water

In order to be eligible for Conditional Waiver No. 4, discharges must comply with certain conditions to be protective of water quality. Waiver conditions applicable to discharges from agricultural and nursery operations include the following:

- 4.I.A. General Facility Design and Management Waiver Conditions
- 4.I.B. General Enrollment and Education Waiver Conditions
- 4.I.C. General Waiver Conditions for Application of Compost as a Fertilizer, Amendment, or Mulch to Soil
- 4.I.D. General Waiver Conditions for Application of Products Used in Agricultural and Nursery Operations
- 4.I.E. General Inspection and Reporting Requirements
- 4.II.A. Specific Waiver Conditions for Agricultural Operations
- 4.II.B. Specific Waiver Conditions for Nursery Operations

Discharges from agricultural and nursery operations that comply with the general and specific waiver conditions in Conditional Waiver No. 4 are not expected to pose a threat to the quality of waters of the state.

**4.1.A. General Facility Design and Management Waiver Conditions**

1. Agricultural and nursery operations must comply with any local, state, and federal ordinances and regulations and obtain any required approvals, permits, certifications, and/or licenses.
2. Agricultural and nursery operations must implement management measures (MMs) and/or best management practices (BMPs) to minimize or eliminate the discharge of pollutants that may adversely impact the quality or beneficial uses of waters of the state. Recommended MMs/BMPs are available in the State Water Board's Nonpoint Source (NPS) Program Plan and/or available from University of California Cooperative Extension (UCCE), Natural Resources Conservation Service (NRCS), and/or regional resource conservation districts (RCDs).

**4.1.B. General Enrollment and Education Waiver Conditions**

1. Agricultural and nursery operators must perform a self assessment to identify the pollutants present on the site and assess the potential for runoff and/or infiltration to adversely affect the quality or beneficial uses of the waters of the state. Annual self assessments must be available on site for inspection. If an agricultural or nursery operator does not have proof available during an inspection, the operator must submit proof to the inspecting agency and the San Diego Water Board within 45 days from the date of inspection. Self assessment questionnaires are available from the UCCE.
2. Agricultural and nursery operators must complete at least 2 hours of water quality management related training annually. Training may include formal classroom training or meetings with a training component. Proof of training must be available on site for inspection. Agricultural and nursery operators who do not have proof available during an inspection must submit proof to the inspecting agency and the San Diego Water Board within 45 days from the date of inspection.
3. Agricultural and nursery operators must be in regular contact with the local Farm Bureau, UCCE, NRCS, and/or regional RCDs so they can be informed of the latest MMs/BMPs and developments with water quality issues. Proof of contact (e.g., newsletter addressed to facility, NRCS conservation plan, UCCE self assessment) must be available on site for inspection. Agricultural and nursery operators who do not have proof available during an inspection must submit proof to the inspecting agency and the San Diego Water Board within 45 days from the date of inspection.
4. Agricultural and nursery operations must implement MMs/BMPs to minimize or eliminate the discharge of pollutants that may adversely impact the quality or beneficial uses of waters of the state. Recommended MMs/BMPs are available in the State Water Board's NPS Program Plan and/or available from UCCE, NRCS, and/or regional RCDs.

5. Agricultural and nursery operators shall maintain records pertaining to the water quality management efforts for the operation. The records shall include the following information:
  - a) Site map showing locations of MMs/BMPs and nearby surface water bodies and/or water wells
  - b) List of hazardous materials kept on the property
  - c) Location and amount of waste materials (e.g., green wastes, trash) generated and composted and/or reused on site, or disposed of off site
  - d) Pesticide use reports and records
  - e) Fertilizer, soil amendment, and mulch use records
  - f) Irrigation management records (i.e., water use, irrigation system, irrigation schedule, etc.)
  - g) Equipment maintenance records
  - h) List of MMs/BMPs implemented to minimize and/or eliminate runoff to surface waters and/or infiltration to groundwater
  - i) Owner, operator, and employee education and training records
  - j) Inspection reports
  - k) Self assessments
  - l) Contacts with Farm Bureau, UCCE, NRCS, regional RCDs, and/or other organizations
  - m) Copies of any permits, licenses, and certifications required for the operation
  - n) Water quality monitoring data (if any)

Recommended water quality record keeping documentation is available from the UCCE. Water quality management records must be available on site for inspection.
6. **No later than December 31, 2010**, agricultural and nursery operations must form or join a monitoring group. The function of the monitoring group is to perform water quality monitoring and report the results to the San Diego Water Board. Monitoring groups will be allowed to divide the costs associated with the water quality monitoring and reporting requirements in 4.I.F among its members. Individual operations not in a monitoring group will be solely responsible for the costs associated with the water quality monitoring and reporting requirements in 4.I.F. Growers who claim exemption from the requirements of Conditional Waiver No. 4 based on average gross receipts of less than \$1,000 per year must submit a certification form that substantiates the claim of exemption if the San Diego Water Board requests this form.
7. **No later than January 1, 2011**, owners/operators of agricultural and nursery operations must file a Notice of Intent, as either an individual operation or as part of a monitoring group, with the San Diego Water Board.
8. A Notice of Intent submitted by a monitoring group on behalf of its members must contain the following information:
  - a) Identify the representative(s) authorized to sign reports submitted on behalf of the group.
  - b) An electronic list of landowners and/or operators participating in the monitoring group including: (a) assessor parcel number(s), (b) parcel size, (c) parcel owner or operator name, (d) types of crops grown on each

parcel, (e) number of irrigated acres, and (f) parcel owner or operator mailing address.

- c) A detailed map of the area included within the monitoring group, preferably in GIS format, identifying individual parcels and/or districts that are participating in the monitoring group.
- d) A detailed description of irrigation, storm water runoff, nutrient, pesticide, erosion control, composting, and other site-specific MMs/BMPs that have been implemented by each participant in the monitoring group, which must be provided as a written description, on a map, and/or using pictures.

Monitoring group members are not eligible for this waiver until a complete Notice of Intent is filed. The monitoring group must inform the San Diego Water Board when any member ceases to participate in the monitoring group within 30 days of the cessation of participation. Any member who ceases to participate in a monitoring group must file a Notice of Intent as an individual agricultural or nursery operation, in accordance with waiver condition 4.I.B.9, within 30 days of ceasing to participate in the monitoring group.

- 9. A Notice of Intent filed by an individual agricultural or nursery operation must contain the following information:
  - a) Information about the agricultural or nursery operation including: (a) assessor parcel number(s), (b) parcel size, (c) parcel owner and operator name(s), (d) types of crops grown on each parcel, (e) number of irrigated acres, and (f) parcel owner and operator mailing address(es).
  - b) A detailed map of the operation, preferably in GIS format, with locations of operation boundaries, nearby surface waters and water wells.
  - c) A detailed description of irrigation, storm water runoff, nutrient, pesticide, erosion control, composting, and other site-specific MMs/BMPs that have been implemented by the operation, which must be provided as a written description, on a map, and/or using pictures.

An individual agricultural or nursery operation is not eligible for this waiver until a complete Notice of Intent is filed.

#### **4.I.C. General Waiver Conditions for Application of Compost as a Fertilizer, Amendment, or Mulch to Soil**

- 1. Prevent the direct or indirect discharge of amendments or mulches to any surface waters of the state (including ephemeral streams and vernal pools).
- 2. Plant crop residues may be utilized as soil amendment or mulch.
- 3. Amendments or mulches applied to soil cannot include any of the following additives, unless sufficient information is provided to demonstrate that the waste does not pose a potential threat to water quality: (a) municipal solid wastes; (b) sludges, including sewage sludge, water treatment sludge, and industrial sludge; (c) septage; (d) liquid wastes; (e) oil and grease; and (f) hazardous, designated, and any other wastes determined by the San Diego Water Board to pose a potential threat to water quality.
- 4. The amount of soil amendment or mulch materials that can be applied to soil must be reasonable for the crop or plant, soil, climate, special local situations, management system, and type of soil amendment or mulch. Application rates must take into account storm events during the rainy season (October-May). Application rates must not allow soil amendment or mulch materials to be

transported off the property in storm water runoff during the rainy season. Resources are available from the NRCS, UCCE, and other organizations. A copy of the calculations and/or estimate of the application rate must be available on site for inspection.

5. Apply amendment or mulch materials to soil at site-specific rates appropriate to the season (i.e., dry vs. rainy).
6. Implement MMs/BMPs in areas with soil amendment or mulch materials to minimize or eliminate runoff and leachate to surface waters and groundwater.

**4.1.D. General Waiver Conditions for Application of Products Used in Agricultural and Nursery Operations**

1. Prevent the direct or indirect discharge of products used in agricultural or nursery operations to any surface waters of the state (including ephemeral streams and vernal pools).
2. The application of any products used in agricultural or nursery operations that contain pollutants that may be transported in surface runoff to surface waters or may infiltrate to groundwater must be applied in accordance with manufacturer instructions and guidelines, and must not have an adverse effect on the quality of any waters of the state.
3. Excessive amounts of any products used in agricultural or nursery operations spilled to land must be contained and properly disposed.
4. Any products used in agricultural or nursery operations applied to land must not adversely impact the quality or beneficial uses of groundwater in any water wells.

**4.1.E. General Inspection and Reporting Waiver Conditions**

1. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
2. Owners/operators must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.
3. **By March 31, 2011**, each monitoring group and each individual operation not participating in a monitoring group must contact the San Diego Water Board to begin developing a Monitoring and Reporting Program Plan (MRPP) and a Quality Assurance Project Plan (QAPP).
4. **By January 1, 2012**, each monitoring group and each individual operation not in a monitoring group must submit one MRPP/QAPP to the San Diego Water Board. The MRPP/QAPP must include the monitoring locations, frequency of monitoring, constituents of concern to be monitored, documentation of monitoring protocols, and sufficient information about the agricultural and/or nursery operations to demonstrate that the proposed MRPP/QAPP will adequately document water quality and pollutant loadings, and demonstrate compliance with waiver conditions.
5. **By December 31, 2012**, each monitoring group and each individual operation not participating in a monitoring group must submit one Monitoring Program Report (MRP) to the San Diego Water Board consistent with the MRPP/QAPP.

#### **4.II.A. Specific Waiver Conditions for Agricultural Operations**

1. Minimize or eliminate the discharge of any pollutants that could adversely affect the quality or beneficial uses of any waters of the state.
2. Agricultural operators cannot alter surface waters of the state on or off the property, unless the proposed alteration has received a Clean Water Act section 401 Water Quality Certification, individual WDRs, or individual waiver from the San Diego Water Board.

#### **4.II.B. Specific Waiver Conditions for Nursery Operations**

1. Prevent the direct or indirect discharge of nursery irrigation return water to any surface waters of the United States.
2. Nursery operations must minimize or eliminate the discharge of any pollutants that could adversely affect the quality or beneficial uses of any waters of the state.
3. Nursery operators cannot alter surface waters of the state on or off the property, unless the proposed alteration has received a Clean Water Act section 401 Water Quality Certification, individual WDRs, or individual waiver from the San Diego Water Board.

#### **List of References**

The following list of references provides additional information that is available regarding appropriate MMs/BMPs for minimizing pollutants in runoff and other discharges from agricultural and nursery operations.

1. Industrial Storm Water Program, State Water Resources Control Board  
<http://www.swrcb.ca.gov/stormwtr/industrial.html>
2. Construction Storm Water Permit, State Water Resources Control Board  
[http://www.swrcb.ca.gov/stormwtr/gen\\_const.html](http://www.swrcb.ca.gov/stormwtr/gen_const.html)
3. Agricultural Management Measures, State Water Resources Control Board  
<http://www.swrcb.ca.gov/nps/docs/guidance/agricmms.pdf>
4. California Nonpoint Source Encyclopedia, State Water Resource Control Board  
<http://www.swrcb.ca.gov/nps/docs/encyclopedia/agriculture.pdf>
5. Developing a Management Plan for Irrigation Runoff, Dept. of Horticultural Sciences, Texas A&M University <http://aggie-horticulture.tamu.edu/greenhouse/nursery/envIRON/wmplan1.html>
6. Management Options for Nonpoint Source Pollution for Greenhouse and Container Crops, UC Cooperative Extension, San Diego  
<http://commserv.ucdavis.edu/CESanDiego/Stormwater/index.htm>
7. BMPs Nurseries And Greenhouses, County of Orange  
[http://www.ocwatershed.com/StormWater/documents\\_bmp\\_existing\\_development.asp#ind](http://www.ocwatershed.com/StormWater/documents_bmp_existing_development.asp#ind)
8. Electronic Field Office Technical Guide (eFOTG), Natural Resources Conservation Service <http://www.nrcs.usda.gov/technical/efotg/>
9. Grower Resources (including self assessment questionnaires and water quality record keeping notebook), San Diego County University of California Cooperative Extension [http://cesandiego.ucdavis.edu/Clean%5FWater/Grower\\_Resources.htm](http://cesandiego.ucdavis.edu/Clean%5FWater/Grower_Resources.htm)

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10. USDA, National Agricultural Statistics Service, "Minimum Criteria for "FARM" Definition, 1840–Present and Enumeration of Apiaries and Fur Farms" pp. 15-16, Farms and Land in Farms, 2004.)