

## IV. IMPLEMENTATION

The Porter-Cologne Water Quality Control Act states that basin plans consist of beneficial uses, water quality objectives and a program of implementation for achieving their water quality objectives [Water Code Section 13050(j)]. The implementation program shall include, but not be limited to:

1. A description of the nature of actions which are necessary to achieve the objectives, including recommendations for appropriate action by any entity, public or private;
2. A time schedule for the actions to be taken; and,
3. A description of surveillance to be undertaken to determine compliance with the objectives (Water Code Section 13242).

In addition, State law requires that basin plans indicate estimates of the total cost and identify potential sources of funding of any agricultural water quality control program prior to its implementation. (Water Code Section 13141). This chapter of the Basin Plan responds to all but the surveillance requirement. That is described in Chapter V.

This chapter is organized as follows: The first section contains a general description of water quality concerns. These are organized by discharger type (e.g., agriculture, silviculture, mines, etc.). The second section lists programs, plans and policies which should result in the achievement of most of the water quality objectives in this plan. This section includes descriptions of State Water Board policies, statewide plans, statewide programs dealing with specific waste discharge problems (e.g., underground tanks, storm water, solid waste disposal sites, etc.), memoranda of understanding, management agency agreements, memoranda of agreement, Regional Water Board policies, a listing of Regional Water Board prohibition areas, and Regional Water Board guidelines addressing specific water quality problems. The third section contains recommendations for appropriate action by entities other than the Regional Water Board. The fourth section describes how; within the framework of the programs, plans and policies discussed in the second section; the Regional Water Board integrates water quality control activities into a continuing planning process. The fifth section identifies the current actions and the time schedule for future actions of the Regional Water Board to achieve compliance with water quality objectives where the programs, plans and policies in the second section are not adequate. The last section lists the estimated costs and funding sources for agricultural water quality control programs that are implemented by the Regional Water Board.

### Control Action Considerations of the Central Valley Regional Water Board

#### Policies and Plans

The following are the Regional Water Board's policies to protect water quality in the Central Valley:

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#### 13. *Variance Policy for Surface Waters*

As part of its state water quality standards program, states have the discretion to include variance policies. (40 C.F.R., §131.13.) This policy provides the Regional Water Board with the authority to grant a variance from application of water quality standards under certain circumstances.

##### I. Variations from Surface Water Quality Standards for Point Source Dischargers

- A. A permit applicant or permittee subject to an NPDES permit may apply to the Regional Water Board for a variance from a surface water quality standard for a specific constituent(s), as long as the constituent is not a priority toxic pollutant identified in 40 C.F.R., §131.38(b)(1). A permit applicant or permittee may not apply to the Regional Water Board for a variance from a surface water quality standard for temperature.

The application for such a variance shall be submitted in accordance with the requirements specified in section II of this Policy. The Central Valley Water Board may adopt variance programs that provide streamlined approval procedures for multiple dischargers that share the same challenges in achieving their water quality based effluent limitation(s) (WQBELs) for the same pollutant(s). The *Variance Program for Salinity Water Quality Standards* in section III, below, is a multiple discharger variance program. Permittees that qualify for the *Variance Program for Salinity Water Quality Standards* by meeting the criteria in section III.A. may submit a salinity variance application in accordance with the requirements specified in section III of this Policy.

B. The Regional Water Board may not grant a variance if:

- (1) Water quality standards addressed by the variance will be achieved by implementing technology-based effluent limitations required under sections 301(b) and 306 of the Clean Water Act, or
- (2) The variance would likely jeopardize the continued existence of any endangered species under section 4 of the Endangered Species Act or result in the destruction or adverse modification of such species' critical habitat.

C. The Regional Water Board may approve all or part of a requested variance, or modify and approve a requested variance, if the permit applicant demonstrates a variance is appropriate based on at least one of the six following factors:

- (1) Naturally occurring pollutant concentrations prevent the attainment of the surface water quality standard; or
- (2) Natural, ephemeral, intermittent, or low flow conditions or water levels prevent the attainment of the surface water quality standard, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating state water conservation requirements to enable surface water quality standards to be met; or
- (3) Human caused conditions or sources of pollution prevent the attainment of the surface water quality standard and cannot be remedied or would cause more environmental damage to correct than to leave in place; or
- (4) Dams, diversions, or other types of hydrologic modifications preclude the attainment of the surface water quality standard, and it is not feasible to restore the waterbody to its original condition or to operate such modification in a way that would result in the attainment of the surface water quality standard; or
- (5) Physical conditions related to the natural features of the waterbody, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality preclude attainment of aquatic life protection of surface water quality standards; or
- (6) Controls more stringent than those required by sections 301(b) and 306 of the Clean Water Act would result in substantial and widespread economic and social impact.

D. In making a determination on a variance application that is based on factor (3) in paragraph C above, the Regional Water Board may consider the following:

- (1) Information on the type and magnitude of adverse or beneficial environmental impacts, including the net impact on the receiving water, resulting from the proposed methodologies capable of attaining the adopted or proposed WQBEL.
- (2) Other relevant information requested by the Regional Water Board or supplied by the applicant or the public.

E. In making a determination on a variance application that is based on factor (6) in paragraph C. above, the Regional Water Board may consider the following:

- (1) The cost and cost-effectiveness of pollutant removal by implementing the methodology capable of attaining the adopted or proposed WQBEL for the specific constituent(s) for which a variance is being requested.

- (2) The reduction in concentrations and loadings of the pollutant(s) in question that is attainable by source control and pollution prevention efforts as compared to the reduction attainable by use of the methodology capable of attaining the adopted or proposed WQBEL.
- (3) The overall impact of attaining the adopted or proposed WQBEL and implementing the methodologies capable of attaining the adopted or proposed WQBEL.
- (4) The technical feasibility of installing or operating any of the available methodologies capable of attaining the WQBEL for which a variance is sought.
- (5) Other relevant information requested by the Regional Water Board or supplied by the applicant or the public.

F. A determination to grant or deny a requested variance shall be made in accordance with the procedures specified in section II, below. Procedures specified in section III, below, will be used for applicants that qualify for the *Variance Program for Salinity Water Quality Standards*.

G. A variance applies only to the permit applicant requesting the variance and only to the constituent(s) specified in the variance application.

H. A variance or any renewal thereof shall be for a time as short as feasible and shall not be granted for a term greater than ten years.

I. Neither the filing of a variance application nor the granting of a variance shall be grounds for the staying or dismissing of, or a defense in, a pending enforcement action. A variance shall be prospective only from the date the variance becomes effective.

J. A variance shall conform to the requirements of the State Water Board's *Antidegradation Policy* (State Water Board Resolution 68-16).

## II. Variance Application Requirements and Processes

A. An application for a variance from a surface water quality standard for a specific constituent(s) subject to this Policy may be submitted at any time after the permittee determines that it is unable to meet a WQBEL or proposed WQBEL based on a surface water quality standard, and/or an adopted wasteload allocation. The variance application may be submitted with the renewal application (i.e., report of waste discharge) for a NPDES permit. If the permittee is seeking to obtain a variance after a WQBEL has been adopted into a NPDES permit, the WQBEL shall remain in effect until such time that the Regional Water Board makes a determination on the variance application.

B. The granting of a variance by the Regional Water Board is a discretionary action subject to the requirements of the California Environmental Quality Act. As such, the Regional Water Board may require the variance applicant to prepare such documents as are necessary so that the Regional Water Board can ensure that its action complies with the requirements set forth in the California Environmental Quality Act, or the Regional Water Board may use any such documents that have been prepared and certified by another state or local agency that address the potential environmental impacts associated with the project and the granting of a variance.

C. A complete variance application must contain the following:

- (1) Identification of the specific constituent(s) and water quality standard(s) for which a variance is sought;
- (2) Identification of the receiving surface water, and any available information with respect to receiving water quality and downstream beneficial uses for the specific constituent;
- (3) Identification of the WQBEL(s) that is being considered for adoption, or has been adopted in the NPDES permit;
- (4) List of methods for removing or reducing the concentrations and loadings of the pollutants with an assessment of technical effectiveness and the costs and cost effectiveness of these methods. At a minimum, and to the extent feasible, the methods must include source control measures, pollution

- prevention measures, facility upgrades and end-of-pipe treatment technology. From this list, the applicant must identify the method(s) that will consistently attain the WQBELs and provide a detailed discussion of such methodologies;
- (5) Documentation of at least one of the following over the next ten years. Documentation that covers less than ten years will limit the maximum term that the Regional Water Board can consider for the variance:
    - (i) That naturally occurring pollutant concentrations prevent the attainment of the surface water quality standard or
    - (ii) That natural, ephemeral, intermittent, or low flow conditions or water levels prevent the attainment of the surface water quality standard, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges to enable surface water quality standards to be met; or
    - (iii) That human caused conditions or sources of pollution prevent the attainment of the surface water quality standard from which the WQBEL is based, and it is not feasible to remedy the conditions or sources of pollution; or
    - (iv) That dams, diversions, or other types of hydrologic modifications preclude the attainment of the surface water quality standard from which the WQBEL is based, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in attainment of the surface water quality standard; or
    - (v) Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection of surface water quality standards from which the WQBEL is based; or
    - (vi) That installation and operation of each of the available methodologies capable of attaining the WQBEL would result in substantial and widespread economic and social impact.
  - (6) Documentation that the permittee has reduced, or is in the process of reducing, to the maximum extent practicable, the discharge of the pollutant(s) for which a variance is sought through implementation of local pretreatment, source control, and pollution prevention efforts; and,
  - (7) A detailed discussion of a proposed interim discharge limitation(s) that represents the highest level of treatment that the permittee can consistently achieve during the term of the variance. Such discussion shall also identify and discuss any drought, water conservation, and/or water recycling efforts that may cause certain constituents in the effluent to increase, or efforts that will cause certain constituents in the effluent to decrease with a sufficient amount of certainty. When the permittee proposes an interim discharge limitation(s) that is higher than the current level of the constituent(s) in the effluent due to the need to account for drought, water conservation or water recycling efforts, the permittee must provide appropriate information to show that the increase in the level for the proposed interim discharge limitation(s) will not adversely affect beneficial uses, is consistent with state and federal antidegradation policies (State Water Board Resolution No. 68-16 and 40 C.F.R., § 131.12.), and is consistent with anti-backsliding provisions specified in section 402(o) of the Clean Water Act. If the permittee indicates that certain constituents in the effluent are likely to decrease during the term of the variance due to recycling efforts or management measures, then the proposed interim discharge limitation(s) shall account for such decreases.
  - (8) Copies of any documents prepared and certified by another state or local agency pursuant to Public Resources Code section 21080 et seq.; or, such documents as are necessary for the Regional Water Board to make its decision in compliance with Public Resources Code section 21080 et seq.

D. Within 60 days of the receipt of a variance application, the Regional Water Board shall determine that the variance application is complete, or specify in writing any additional relevant information, which is deemed necessary to make a determination on the variance request. Such additional information shall be submitted by the applicant within a time period agreed upon by the applicant and the Regional Water Board Executive Officer. Failure of an applicant to submit any additional relevant information requested by the Regional Water Board Executive Officer within the agreed upon time period may result in the denial of the variance application.

E. The Regional Water Board shall provide a copy of the variance application to USEPA Region 9 within 30 days of finding that the variance application is complete.

F. Within a reasonable time period after finding that the variance application is complete, the Regional Water Board shall provide public notice, request comment, and schedule and hold a public hearing on the variance application. When the variance application is submitted with the NPDES permit renewal application (i.e., report of waste discharge), the notice, request for comment and public hearing requirement on the variance application may be conducted in conjunction with the Regional Water Board's process for the renewal of the NPDES permit.

G. The Regional Water Board may approve the variance, either as requested, or as modified by the Regional Water Board. The Regional Water Board may take action to approve a variance and renew and/or modify an existing NPDES permit as part of the same Board meeting. The permit shall contain all conditions needed to implement the variance, including, at a minimum, all of the following:

- (1) An interim effluent limitation for the constituent(s) for which the variance is sought. The interim effluent limitation(s) must be consistent with the current level of the constituent(s) in the effluent and may be lower based on anticipated improvement in effluent quality. The Regional Water Board may consider granting an interim effluent limitation(s) that is higher than the current level if the permittee has demonstrated that drought, water conservation, and/or water recycling efforts will cause the quality of the effluent to be higher than the current level and that the higher interim effluent limitation will not adversely affect beneficial uses. When the duration of the variance is shorter than the duration of the permit, compliance with effluent limitations sufficient to meet the water quality criterion upon the expiration of the variance shall be required;
- (2) A requirement to prepare and implement a pollution prevention plan pursuant to Water Code section 13263.3 to address the constituent(s) for which the variance is sought;
- (3) Any additional monitoring that is determined to be necessary by the Regional Water Board to evaluate the effects on the receiving water body of the variance from water quality standards;
- (4) A provision allowing the Regional Water Board to reopen and modify the permit based on any revision to the variance made by the Regional Water Board during the next revision of the water quality standards or by EPA upon review of the variance; and
- (5) Other conditions that the Regional Water Board determines to be necessary to implement the terms of the variance.

H. The variance, as adopted by the Regional Water Board in section G, is not in effect until it is approved by U.S. EPA.

I. Permit limitations for a constituent(s) contained in the applicant's permit that are in effect at the time of the variance application shall remain in effect during the consideration of a variance application for that particular constituent(s).

J. The permittee may request a renewal of a variance in accordance with the provisions contained in paragraphs A, B and C and this section. For variances with terms greater than the term of the permit, an application for renewal of the variance may be submitted with the renewal application for the NPDES permit in order to have the term of the variance begin concurrent with the term of the permit. The renewal application shall also contain information concerning its compliance with the conditions incorporated into its permit as part of the original variance and shall include information to explain why a renewal of the variance is necessary. As part of its renewal application, a permittee shall also identify all efforts the permittee has made, and/or intends to make, towards meeting the standard(s). Renewal of a variance may be denied if the permittee did not comply with any of the conditions of the original variance.

K. All variances and supporting information shall be submitted by the Regional Water Board to the U.S. EPA Regional Administrator within 30 days of the date of the Regional Water Board's final variance decision for approval and shall include the following:

- (1) The variance application and any additional information submitted to the Regional Water Board;

- (2) Any public notices, public comments, and records of any public hearings held in conjunction with the request for the variance;
- (3) The Regional Water Board's final decision; and
- (4) Any changes to NPDES permits to include the variance.

L. All variances shall be reviewed during the Regional Water Board's triennial review process of this Basin Plan. For variances with terms that are greater than the term of the permit, the Regional Water Board may also review the variance upon consideration of the permit renewal.

### III. Variance Program for Salinity Water Quality Standards

The State Water Board and the Regional Water Board recognize that salt is impacting beneficial uses in the Central Valley and management of salinity in surface and ground waters is a major challenge for dischargers. The Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) is a stakeholder that developed a comprehensive salt and nitrate management plan (SNMP) that documents salt and nitrate conditions in surface and ground water in the Central Valley, and identifies implementation measures and monitoring strategies to ensure environmental and economic sustainability. The SNMP recommends a long-term salinity management strategy that is phased over time. The first phase (Phase I) consists of developing a Prioritization and Optimization Study for long-term salinity management which is intended to be a feasibility study that identifies appropriate regional and sub-regional projects, including location, routing and implementation and operations of salt management projects. Phase II will consist of environmental permitting, obtaining funding, and engineering and design. Phase III would then consist of construction of physical projects as identified in the previous phases. Because the salinity management strategy is phased over time, there is a need for an interim salinity permitting approach to be implemented during Phase I and while transitioning from Phase I to Phase II. The interim salinity permitting approach is anticipated to require 15 years and will be re-evaluated prior to implementation of Phase II. Only permittees that are participating in the Prioritization and Optimization Study may apply for a variance under this *Salinity Variance Program*.

A. During the development of the Prioritization and Optimization Study, permittees who qualify may apply for a variance from salinity water quality standards if they have or will have WQBELs for salinity that they are unable to meet by submitting a salinity variance application. The *Salinity Variance Program* as described specifically herein is for municipal and domestic wastewater dischargers that have or will implement local pretreatment, source control, and pollution prevention efforts to reduce the effluent concentrations of salinity constituents and are now faced with replacing the municipal water supply with a better quality water or installing costly improvements, such as membrane filtration treatment technology, such that widespread social and economic impacts are expected consistent with the justification provided for the case study cities in the *Staff Report for the Amendments to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins and the Water Quality Control Plan for the Tulare Lake Basin to add Policies for Variances from Surface Water Quality Standards for Point Source Dischargers, Variance Program for Salinity, and Exception from Implementation of Water Quality Objectives for Salinity, June 2014*. Consistent with the planned development of the Prioritization and Optimization Study, no salinity variance under this section shall be approved after [15 years from effective date of these amendments]. For the purposes of the Salinity Variance Program, salinity water quality standards are defined to only include water quality standards for the following constituents: electrical conductivity, total dissolved solids, chloride, sulfate and sodium.

B. An application for a variance for a specific salinity water quality standard may be submitted at any time after the permittee determines that it is unable to meet a WQBEL or proposed WQBEL based on a salinity water quality standard. Preferably, the salinity variance application should be submitted with the renewal application (i.e., report of waste discharge) for a NPDES permit. If the permittee is seeking to obtain a variance after a WQBEL has been adopted into a NPDES permit, the WQBEL shall remain in effect until such time that the Regional Water Board makes a determination on the variance application. For dischargers that are participating in the same prioritization and optimization study, i.e. a study that covers their watershed or their groundwater basin, the dischargers may submit a joint application as long as

the joint application contains all the information identified in paragraph C with individual discharger information provided for paragraphs C.7. through C.10.

C. An application for variance from QBELs based on a salinity water quality standard must contain the following:

- (1) Identification of the salinity constituents for which the variance is sought;
- (2) Identification of the receiving surface water, and any available information with respect to receiving water quality and downstream beneficial uses for the specific constituent;
- (3) Identification of the QBEL that is being considered for adoption, or has been adopted in the NPDES permit;
- (4) A description of salinity reduction/elimination measures that have been undertaken as of the application date, if any;
- (5) A Salinity Reduction Study Work Plan, which at a minimum must include the following:
  - (i) Data on current influent and effluent salinity concentrations,
  - (ii) Identification of known salinity sources,
  - (iii) Description of current plans to reduce/eliminate known salinity sources,
  - (iv) Preliminary identification of other potential sources,
  - (v) A proposed schedule for evaluating sources,
  - (vi) A proposed schedule for identifying and evaluating potential reduction, elimination, and prevention methods.
- (6) An explanation of the basis for concluding that there are no readily available or cost-effective methodologies available to consistently attain the QBELs for salinity.
- (7) A detailed discussion explaining why the permittee's situation is similar to or comparable with the case studies supporting the *Salinity Variance Program* identified in the *Staff Report for the Amendments to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins and the Water Quality Control Plan for the Tulare Lake Basin to add Policies for Variances from Surface Water Quality Standards for Point Source Dischargers, Variance Program for Salinity, and Exception from Implementation of Water Quality Objectives for Salinity, June 2014*.
- (8) A detailed discussion of proposed interim discharge limitation(s) that represents the highest level of treatment that the permittee can consistently achieve during the term of the variance. If the permittee indicates that certain constituents in the effluent are likely to decrease during the term of the variance due to efforts, then the proposed interim discharge limitation(s) shall account for such decreases.
- (9) Documentation of the applicant's active participation in the development of the Prioritization and Optimization Study.
- (10) A detailed plan of how the applicant will continue to participate in development of the Prioritization and Optimization Study.

D. After the receipt of a variance application for salinity, the Regional Water Board shall determine whether the variance application is complete and whether the permittee qualifies for consideration of the variance, or specify in writing any additional relevant information that is deemed necessary to make a determination on the salinity variance request. Such additional information shall be submitted by the applicant within a time period agreed upon by the applicant and the Regional Water Board Executive Officer. Failure of an applicant to submit any additional relevant information requested by the Regional Water Board Executive Officer within the time period specified by the Executive Officer may result in the denial of the variance application for salinity.

E. After determining that the variance application for salinity is complete, the Regional Water Board shall provide notice, request comment, and schedule and hold a public hearing on the variance application for salinity. When the variance application is submitted with the NPDES permit renewal application (i.e., report of waste discharge), the notice, request for comment and public hearing requirement on the variance application may be conducted in conjunction with the Regional Water Board's process for the renewal of the NPDES permit.

F. The Regional Water Board may approve a salinity variance, either as requested, or as modified by the Regional Water Board, after finding that the permittee qualifies for the salinity variance, the attainment of the WQBEL is not feasible consistent with the demonstrations based on the case studies identified in the *Staff Report for the Amendments to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins and the Water Quality Control Plan for the Tulare Lake Basin to add Policies for Variances from Surface Water Quality Standards for Point Source Dischargers, Variance Program for Salinity, and Exception from Implementation of Water Quality Objectives for Salinity, June 2014*, the permittee has implemented or will implement feasible salinity reduction/elimination measures and the permittee continues to participate in the development of the prioritization and optimization studies for long-term salinity management. The Regional Water Board may take action to approve a variance and issue a new, or reissue or modify an existing NPDES permit as part of the same Board meeting. The permit shall contain all conditions needed to implement the variance, including, at a minimum, all of the following:

- (1) The interim effluent limitation(s) that are determined to be attainable during the term of the variance. When the duration of the variance is shorter than the duration of the permit, compliance with effluent limitations sufficient to meet the water quality criterion upon the expiration of the variance shall be required;
- (2) A requirement to implement the Salinity Reduction Study Work Plan submitted with the variance application as required by paragraph C.5, above;
- (3) A requirement to participate in the development of the Prioritization and Optimization Study in accordance with the plan required by paragraph C.10, above.
- (4) Any additional monitoring that is determined to be necessary to evaluate the effects on the receiving water body of the variance from water quality standards;
- (5) A provision allowing the Regional Water Board to reopen and modify the permit based on any revision to the variance made by the Regional Water Board during the next revision of the water quality standards;
- (6) Other conditions that the Regional Water Board determines to be necessary to implement the terms of the variance.

G. Permit limitations for a substance contained in the applicant's permit that are in effect at the time of the variance application shall remain in effect during the consideration of the variance application for that particular substance.

H. The permittee may request a renewal of a salinity variance in accordance with the provisions contained in paragraphs B and C of this section. For variances with terms greater than the term of the permit, an application for renewal of the salinity variance may be submitted with the renewal application for the NPDES permit in order to have the term of the variance begin concurrent with the term of the permit. The renewal application shall also contain information concerning its compliance with the conditions incorporated into its permit as part of the original variance, and shall include information to explain why a renewal of the variance is necessary. As part of its renewal application, a permittee shall also identify all efforts the permittee has made, and/or intends to make, towards meeting the standard. Renewal of a variance may be denied if the permittee did not comply with the conditions of the original variance.

I. All variances shall be reviewed during the Regional Water Board's triennial review process of this Basin Plan. For variances with terms that are greater than the term of the permit, the Regional Water Board may also review the variance upon consideration of the permit renewal.