# NOTICE OF INTENT GUIDANCE
# TO COMPLY WITH THE SALT CONTROL PROGRAM

## PURPOSE

The Central Valley Regional Water Quality Control Board (Central Valley Water Board or Board) has established a Salt Control Program (Program) that requires all permitted salt dischargers (permittees) that received a Notice to Comply (NTC) to elect to be regulated under one of two compliance pathways:

Pathway 1: Conservative Salinity Permitting Approach

Pathway 2: Alternative Salinity Permitting Approach

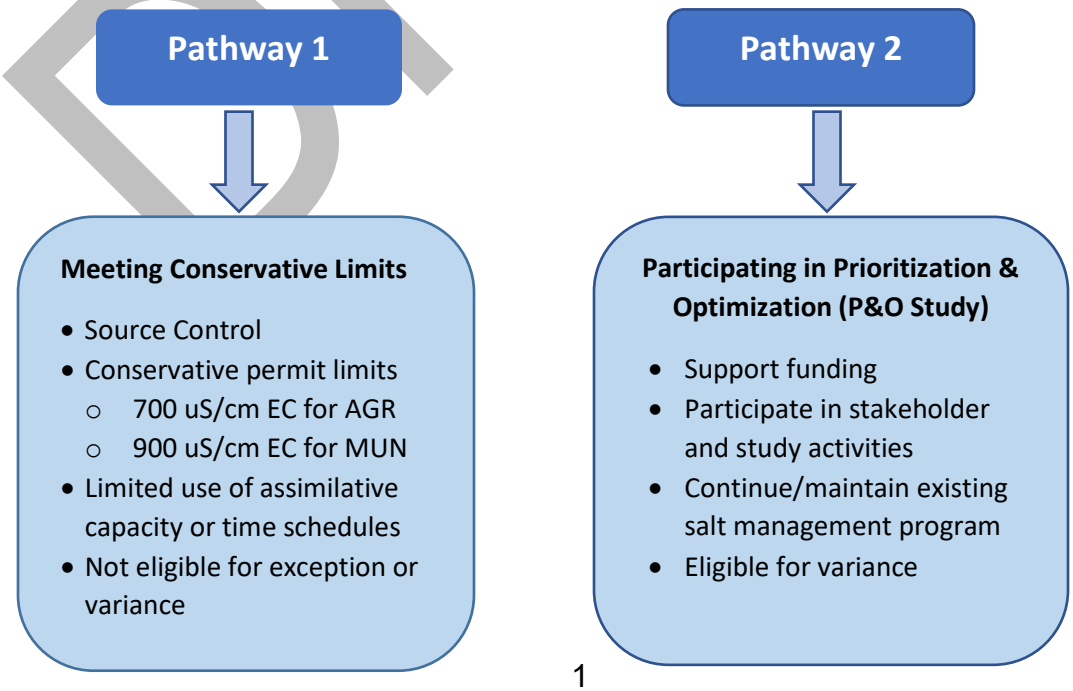
The purpose of this document is to provide guidance to permittees regarding what is necessary to demonstrate that the permittee's facility does comply with Pathway 1 or Pathway 2.

## TIMELINE

Within **6 months** of receiving the NTC (please refer to the specific date listed in your letter), permittees must submit their NOI and all necessary documentation to the Board.

## BEFORE CHOOSING A PATHWAY

Before permittees decide which pathway to choose, the Board recommends visiting the website cvsalts.info for information. Pathway 1 is designed to protect the most sensitive beneficial use and salinity permit limits will be based on conservative numerical values identified as protecting that use. Pathway 2 is designed to serve as alternative compliance for those who cannot meet those conservative limits. Below is an overview comparison of the two pathways.



**IF YOU CHOOSE PATHWAY 1**

Submit a Salinity Characterization Report that includes or considers all of the following:

**1. General Information (can be found on the cover page of your NTC)**

- CV-SALTS ID(s)
- Facility ID(s)
- Facility Name(s)

**2. Characterization of Discharge**

You must provide a characterization of discharge to surface water or groundwater.

- *Constituent(s) to Analyze* – Characterize the discharge by using electrical conductivity (EC) data. If EC data is not available, total dissolved solids (TDS) data may be used, but prior to analysis, the TDS results should be transformed to EC values using the following standard conversion:

  **TDS/0.64 = EC**

  If you want to use a site-specific conversion method for converting TDS data to EC, the technical justification for the alternative conversion factor should be attached to the end of the report as an appendix.

- *Locations of Permitted Discharge* – List all discharge points and include a map with labels indicating locations of discharge points. Describe and indicate on the map the predominate direction of water flow through the area. For discharge to groundwater, indicate on the map the basin/sub-basin name and boundary.

- *Period of Record for Discharge Data Analysis* – Data from at least two years prior to the date of the NTC should be utilized for the analysis. Historical data (within the past 5-10 years) and/or regional data may be used if local or current data is not available. If historical data is used, explain how historical data is representative of current discharge.

  The frequency of water quality analysis used should be sufficient to characterize any variability or trends in the discharge quality. There should be no significant gaps within the data. You should also be able to calculate monthly and annual averages from the data. Include or consider the following:

  - Provide a table summarizing monthly and annual average calculations.
  - Provide justification for any historical data used.
  - Provide sources of data.
  - Include all data utilized at the end of the report as an appendix. Data should include name of discharge point, constituent analyzed, unit, and date.

## 3. Characterization of Receiving Water

Surface Water Characterization

If your receiving water is surface water, you must characterize the ambient water quality around discharge locations.

- *Constituent(s) to Analyze* – Characterize the receiving surface water by using electrical conductivity (EC) data. If EC data is not available, total dissolved solids (TDS) data may be used, but prior to analysis, the TDS results should be transformed to EC using the following standard conversion:

  **TDS/0.64 = EC**

  If you want to use a site-specific conversion method for converting TDS data to EC, the technical justification for the alternative conversion factor should be attached to the end of the report as an appendix.

  The surface water characterization should provide a justification for the selection of the surface water locations used to characterize the receiving water.

- *Locations of Receiving Surface Water Stations* – For each discharge point to receiving water, data must be provided from three locations that are representative of ambient water quality:

  - Upstream of discharge point(s);
  - Downstream of the facility but relatively close to discharge point(s); and
  - Downstream of the facility at a location where discharge is fully mixed with receiving water.

  The characterization should provide a justification for the selection of the surface water monitoring stations used to characterize the receiving water.

  List all receiving water bodies and water monitoring stations where data was collected. Include a map with labels identifying locations of receiving water bodies and the monitoring stations. Describe and indicate on the map the predominate direction of surface water flow through the area.

- *Period of Record for Receiving Surface Water Data Analysis* – Data from at least two years prior to the date of the NTC should be utilized for the analysis. Historical data (within the past 5-10 years) and/or regional data may be used if local or current data is not available. If historical data is used, explain how historical data is representative of current ambient water quality.

  The frequency of water quality analysis used should be sufficient to characterize any variability or trends in the receiving water such as flow conditions that may be

affected by water year type. There should be no significant gaps within the data. You should also be able to calculate monthly and annual averages from the data. Include or consider the following:

- Provide a table summarizing monthly and annual average calculations.
- Provide justification for any historical data used.
- Provide sources of data.
- Include all data utilized at the end of the report as an appendix. Data should include name of monitoring station, constituent analyzed, unit, and date.

Groundwater Characterization

If your receiving water is groundwater, you must characterize quality of groundwater within your area of contribution to the underlying basin/sub-basin groundwater quality.

- *Constituent(s) to Analyze* – Characterize the receiving groundwater by using electrical conductivity (EC) data. If EC data is not available, total dissolved solids (TDS) data may be used, but prior to analysis, the TDS results should be transformed to EC values using the following standard conversion:

  **TDS/0.64 = EC**

  If you want to use a site-specific conversion method for converting TDS data to EC, the technical justification for the alternative conversion factor should be attached to the end of the report as an appendix.

- *Locations of Receiving Groundwater Wells* – Characterize groundwater within and around area of contribution. This characterization should be conducted at first encountered groundwater without any volume-weighted averaging. For the purpose of the Salinity Characterization Report, first encountered groundwater is defined as water that is first encountered when drilling underground whether it is sufficient to supply a well or not.

  To determine first encountered groundwater depth, you should use drilling methods or tools such as Piezometers or Direct Push Drilling. Other types of drilling methods or tools may be necessary if depth of first encounter groundwater is beyond shallow zone. To ensure certainty in determining direction of groundwater flow, these tools should be installed in a set of three in a triangular manner for each of the following locations:

  - Upgradient of the area of contribution;
  - Within the area of contribution; and
  - Downgradient of the area of contribution.

  Provide method and sources used to determine first encounter groundwater depth. Include graphs of depth measurements and meter readings along with a geologic

log. The Board highly recommends that a Licensed Professional Geologist perform these analyses.

Once first encountered groundwater depth has been determined, data that is representative of groundwater quality must be provided for each location. The characterization should provide a justification for the selection of the well locations used to characterize groundwater within and around the area of contribution. Well data should represent the depth of first encountered groundwater. Data from drinking water wells would not be representative because they are located in the lower aquifer system.

List all basin/sub-basin(s) and monitoring well stations where data was collected. Include a map with labels identifying name and boundary of basin/sub-basins and location of monitoring well stations. Describe and indicate on the map the predominate direction of groundwater flow through the area.

- *Period of Record for Receiving Groundwater Data Analysis* – Data from at least two years prior to the date of the NTC should be utilized for the analysis. Historical data (within the past 5-10 years) and/or regional data may be used if local or current data is not available. If historical data is used, explain how historical data is representative of current underlying groundwater quality within and around area of contribution.

  The frequency of water quality analysis used should be sufficient to characterize any variability or trends in groundwater quality such as drier and wetter than normal hydrology. The analysis should make best efforts to project the area of contribution over a 20-year horizon. There should be no significant gaps within the data. You should also be able to calculate monthly and annual averages from the data. Include or consider the following:

  - Provide a table summarizing monthly and annual average calculations.
  - Provide justification for any historical data used.
  - Provide sources of data.
  - Include all data utilized at the end of the report as an appendix. Data should include name of groundwater monitoring well, well location, well type, well depth, constituent analyzed, unit, and date.

**4. Evaluation of Beneficial Use(s)**

You must evaluate the beneficial use(s) applicable to the receiving water(s) named in your permit.

Pathway 1 identifies conservative numeric values that are protective of the salt-sensitive Agricultural Supply (AGR) and Municipal or Domestic Supply (MUN) beneficial uses. The following values apply:

AGR Beneficial Use – 700 uS/cm EC, as a monthly average

MUN Beneficial Use – 900 uS/cm EC, as an annual average

Unless the receiving water has a site-specific numeric water quality objective for salinity, the evaluation should rely on the above values. Fill out the table within III.A.2. of the Notice of Intent (NOI).

## 5. Evaluation of Discharge Contribution to Receiving Water(s)

Using findings from 2 through 4, you must determine if your discharge causes or contributes to an exceedance of the applicable numeric values in the receiving water or an overall increase in salinity concentrations in the receiving water.

Surface Water

Compare discharge and receiving water data. Provide a table summarizing the results and indicate whether the discharge is causing or contributing degradation of receiving water quality. Consider the following to determine degradation:

- If monthly or annual discharge averages exceed applicable conservative numeric values respective to AGR or MUN beneficial uses, there is degradation.
- If monthly or annual discharge averages do not exceed applicable conservative numeric values respective to AGR or MUN beneficial uses but exceeds the receiving water averages, there is degradation.

Groundwater

Compare discharge and receiving water data while making best effort to project the area of contribution over a 20-year horizon considering all hydrologic conditions. Provide a table summarizing the results and indicate whether the discharge is causing or contributing degradation of receiving water quality. The technical basis for a finding of no degradation now or in the future (e.g., findings from application of numerical models) must be attached to the end of the report as an appendix. Consider the following to determine degradation:

- If monthly or annual discharge averages exceed applicable conservative numeric values respective to AGR or MUN beneficial uses, there is degradation.
- If monthly or annual discharge averages do not exceed applicable conservative numeric values respective to AGR or MUN beneficial uses but exceeds the receiving water averages, there is degradation.

## 6. Assessment of Compliance

Using findings from Section 5 above, you must determine your ability to achieve compliance with water quality objectives or conservative numeric limits.

The compliance assessment must be based solely on existing treatment controls and not include any planned changes in the facilities treatment controls or source of water. If planned modifications to the facility will allow the facility to comply with the conservative

permitting requirements in the future, see Section 7 ("Ability to Comply with Conservative Effluent Limits in the Future") below.

Note that the Conservative Pathway limits the availability of the use of compliance tools to achieve compliance over the long term, including:

- A time schedule order to meet a salinity–related effluent limit or waste discharge requirement; or
- A new or expanded allocation of assimilative capacity or mixing zone (if it exists).

Approval of either of these compliance tools is very limited and subject to the discretion of the Board. If the findings from Section 5 indicate that the facility cannot comply with Pathway 1 except through the use of one of these compliance tools, you must contact the Board regarding the potential to receive approval of a request for allocation of any available assimilative capacity, mixing zone, or a time schedule order.

If Board staff considers application for use of compliance tools, you should complete any additional technical analyses and documentation requested to support the application. Alternatively, you can consider selecting Pathway 2 to comply with the Program and evaluate the potential to change your permitting approach at a later date (see 7 below).

If your existing permit already has an approved allocation of assimilative capacity or mixing zone, supported by a previously accepted antidegradation study or analysis, the Board may consider continuing previously approved assimilative capacity.

A modification to the facility's current operation that improves effluent quality through changes in blending of source waters may be considered, if it can be demonstrated that the facility has the authority and capability to implement that change at the time this assessment is submitted to the Central Valley Water Board.

## 7. Ability to Comply with Conservative Effluent Limits in the Future

You may find that it is not possible to demonstrate an ability to comply with the conservative numeric limits applicable to Pathway 1 within the time frame allowed to submit the NOI. Reasons may include:

- Lack of sufficient data to adequately characterize a receiving water or facility's effluent (which could be remedied with additional data collection in the future).

- Planned facility modifications that will result in compliance with the conservative effluent limits will not be completed in a timely manner.

Under these scenarios or others, you should consider selecting Pathway 2 when submitting an NOI. At a later date, you have the option to revisit the selected permitting approach. Specifically, the Program states:

*Permittees may switch from one approach to another by submitting a written request to the Executive Officer of the Central Valley Water Board to change its selected compliance pathway. This request must include documentation regarding how the permittee will comply with the requirements applicable to the compliance pathway it is now requesting to be permitted under and the basis for the change. If the permittee requests to change from the Alternative to the Conservative Permitting Approach, the permittee must demonstrate to the Board that it has complied with all provisions associated with the Alternative Permitting Approach, including financial support to the P&O study, up through the time of permit revision to incorporate requirements for the Conservative Permitting Approach.*

Permittees that decide to implement this provision of the Program will need to submit the information that is required in the assessment, as described in 1 through 6. At the time of submittal of a request to change the permitting approach and until the Board approves the change, you must continue to comply with the Pathway 2 requirements.

**IF YOU CHOOSE PATHWAY 2**

You must contact the lead entity of the P&O Study which is Central Valley Salinity Coalition (CVSC) through cvsalts.info to determine the minimum level of financial support required to participate in the P&O Study. Once you provide the appropriate level of financial support, CVSC will provide you with documentation to submit with the NOI.