



## **SNMP Strawman Proposal: Revisions to Water Quality Objectives for Secondary MCLs**

### **Background**

In September of 2007, the Central Valley Regional Board issued Waste Discharge Requirements and a Master Reclamation Permit to the City of Lodi (Order No. R5-2007-0113; NPDES No. CA0079243). In October of 2007, the California Sportfishing Protection Alliance (CALSPA) filed a petition with the State Water Resources Control Board (SWRCB) seeking review of the aforementioned permit.

In June of 2009, the Regional Board submitted written comments to the SWRCB opposing CALSPA's claim that the Secondary Maximum Contaminant Levels (SMCLs) for drinking water must be applied as water quality objectives when developing Waste Discharge Requirements (WDRs) or effluent limits. The Regional Board noted that such an approach would be more stringent than and inconsistent with the manner in which the California Department of Health (CDPH) implements these same standards on drinking water systems. The Regional Board also stated that there should be some exception made when the natural background concentration of one or more constituents in the receiving water exceeds the SMCL.

In July of 2009, the State Water Resources Control Board (SWRCB) remanded the permit in part for failure to make findings necessary to demonstrate the permit complies with the Basin Plan objectives for certain chemical constituents including the SMCLs (WQO No. 2009-0005). The SWRCB noted that the Basin Plan incorporates only the numeric values specified in select tables from Title-22 but does not specifically reference the monitoring, reporting, waiver or other provisions that provide context for those tables. Consequently, the current Basin Plan allows little discretion when the Regional Board is developing waste discharge requirements to implement these particular objectives.

The proposed revisions to the Water Quality Objectives chapter of both Basin Plans will address the issues raised by the City of Lodi's permit and clarify the Regional Board's full range of authority to implement the SMCLs in a manner more consistent with the original purpose and intent of 22 CCR §64449.

## Justification for the Proposed Revisions:

- 1) When the SMCLs were incorporated by reference as water quality objectives, only Table 64449-A and Table 64449-B were explicitly referenced in the Basin Plan. Other relevant text from 22 CCR §64449 was not specifically referenced in the Basin Plan amendment. The inadvertent omission of this contextual information interferes with the Regional Board's ability to develop appropriate Waste Discharge Requirements (WDRs) based on the values enumerated in the two tables.

For example, the "Recommended" levels specified in Table 64449-B have been construed as "not-to-exceed" values in WDRs and NPDES permit limits. Such an approach is not consistent with the full text of §64449(d) which states:

*"For the constituents shown on Table 64449-B, no fixed consumer acceptance contaminant level has been established. (1) Constituent concentrations lower than the Recommended contaminant level are desirable for a higher degree of consumer acceptance. (2) Constituent concentrations ranging to the Upper contaminant level are acceptable if it is neither reasonable nor feasible to provide more suitable water." (emphasis added)*

The Regional Board should be authorized to consider the full range of "Consumer Acceptance Contaminant Levels" described in Table 64449-B when establishing reasonable and appropriate WDRs to protect water supplies that may be affected by the discharge.

- 2) Title 22 specifies that: "The secondary MCLs shown in Tables 64449-A and 64449-B shall not be exceeded in the water supplied to the public by community water systems."<sup>1</sup> Compliance is evaluated by requiring such systems to monitor their "groundwater sources or the distribution system entry points."<sup>2</sup> Revising the Basin Plan to incorporate a more complete reference to the full text of 22 CCR §64449 will allow the Regional Board to take into consideration any dilution or other attenuation that may occur between the point of discharge and any intake to a water supply system in order to develop appropriate WDRs for the SMCLs. However, the Regional Board is not necessarily obligated to authorize the full waste assimilation capacities of the receiving waters.<sup>3</sup> The proposed revision to the Basin Plan will preserve the Regional Board's discretion to regulate SMCL constituents based on what is necessary, reasonable and feasible to protect public water supplies.

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<sup>1</sup> 22 CCR §64449(a)

<sup>2</sup> 22 CCR §64449(b)

<sup>33</sup> See §13263(b) of the California Water Code

- 3) Federal and state regulations do not require adoption of the SMCLs as formal water quality objectives. Several other Regional Water Quality Control Boards ( #3, #6, #7 and #9) have declined to do so. Instead, these Regions rely on narrative water quality objectives to regulate mineral concentrations where necessary to protect water supply systems that may be adversely affected by a given discharge. The values shown in Tables 64449-A and 64449-B, along with the surrounding text in §64449, are both used to inform the process of translating narrative objectives into appropriate WDRs.
- 4) The Maximum Contaminant Level Ranges for TDS and Specific Conductance in Table 64449-B are inconsistent with statewide Sources of Drinking Water Policy. SWRCB Res. No. 88-63 provides that all surface and ground waters should be considered suitable for municipal or domestic water supply until the TDS concentration exceeds 3,000 mg/L (5,000 uS/cm). Application of the SMCLs as formal water quality objectives creates considerable public confusion and regulatory uncertainty by declaring water quality to be both "suitable" and "impaired" at the same time.
- 5) The Secondary MCLs are primarily intended to address aesthetic qualities, such as taste and odor, not human health concerns. Consumer acceptance is highly subjective and complicated by factors such as the form and combination of specific constituents (e.g. sodium-sulfate vs. calcium-sulfate) and the presence or absence of other major anions and cations. The current numeric water quality objectives for SMCLs do not adequately account for the influence of these other variables. Revising the Basin Plan will afford the Regional Board more flexibility to consider all relevant factors that may affect consumer acceptance of these constituents.
- 6) The California Department of Health currently prohibits recycled water from being served directly through public water systems. And, CDPH frequently disallows the use of surface or ground water sources that receive significant influence from treated wastewater for reasons related to the potential presence of human pathogens not the concentration of SMCL constituents. The current water quality objectives for SMCLs imposes an obligation to meet drinking water standards on effluent discharges that cannot be used as a drinking water supply. This, in turn, results in additional and unnecessary wastewater treatment that provides no public benefit.
- 7) Water conservation and water recycling may increase the concentration of mineral salts. Using the lowest value from the range of consumer acceptance levels to establish numeric water quality objectives for TDS and Specific Conductance discourages dischargers (both point and non-point sources) from implementing more aggressive water conservation practices and increasing the use of recycled water. Moreover, such disincentives can occur even where the discharges may actually improve overall quality in the receiving water. The Regional Board should have the legal flexibility to develop waste discharge requirements that balance the public benefits of water conservation, water recycling and groundwater recharge against any potential impact on receiving water quality.

- 8) The Regional Board's on-going obligation to issue waste discharge requirements that are consistent with SWRCB Resolution No. 68-16 provides adequate protection against water quality degradation from constituents identified in Table 64449-A and 64449-B. Lowering water quality is only permissible where the Regional Board has determined, through the proscribed public process, that beneficial uses will not be unreasonably affected and best practicable treatment consistent with Maximum Benefit to the people of the state has been implemented. Revising the Basin Plan does not create a license to discharge the SMCL constituents at will or authorize public nuisance. It does, however, clarify the Regional Board's full range of authority to regulate these constituents in a manner that is consistent with the original purpose and intent of 22 CCR §64449.
- 9) Where waste discharges have the potential to affect source water quality in water supply intakes/wells for community water systems located downstream/downgradient, the Regional Board may require a discharger to develop a more detailed mass balance analysis prior to authorizing a permit. The purpose of this mass-balance analysis will be to determine how the permitted discharge affects the concentration of constituents identified in Tables 64449-A & B at water supply intakes or water supply wells.
- 10) Historically, compliance with the SMCLs identified in Table 64449-A has been determined using the Total Recoverable metals fraction. This approach is no longer necessary because federal law requires community water systems to filter surface water prior to delivery.<sup>4</sup> Continuing to rely on Total Recoverable metals to assess compliance with SMCLs in the receiving water overestimates the potential aesthetic impact on the actual quality of downstream drinking water. Mandatory filtration significantly reduces the concentration of total suspended solids (TSS), including aesthetically objectionable minerals such as iron, manganese, chloride, sulfate and aluminum, prior to reaching the tap. Therefore, it is appropriate to assess compliance with the metal constituents in Table 64449-A based on the dissolved concentrations.
- 11) The Basin Plans should be revised to authorize the Regional Board to consider a number of site-specific factors when developing appropriate WDRs designed to ensure that public water supply systems maintain compliance with 22 CCR §64449. These factors should include, but are not limited to: (a) the availability of assimilative capacity in the receiving water, (b) naturally occurring background concentrations that already exceed the SMCLs, (c) background concentrations that already exceed the SMCLs due to prior anthropogenic activities where it is not feasible or practicable to remediate the effect of these past discharges, (d) the net effect of discharges that improve receiving water quality, (e) the feasibility of achieving compliance with the SMCLs at the point-of-discharge, (f) the chemical form/species of these constituents, (h) the presence or absence of other minerals (e.g. anion-cation balance) that may mitigate or aggravate aesthetic acceptability, and (i) application of appropriate long-term averaging periods.

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<sup>4</sup> U.S. EPA. National Primary Drinking Water Regulations: Long Term 2 Enhanced Surface Water Treatment Rule. 71 FR 3, 654 (January 5, 2006).

## 12) Suggested Revisions to Current Basin Plan Text

- (A) Page III-3.00 of the Water Quality Control Plan (Basin Plan) for the Sacramento River Basin and the San Joaquin River Basin - Fourth Edition should be modified as follows:

### Chemical Constituents

At a minimum, surface water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum (MCLs) specified in the following provisions of Title 22 of the California Code of Regulations, which are incorporated by reference into this plan: Tables 64431-A (Inorganic Chemicals) and 64431-B (Fluoride) of Section 64431, Table 64444-A (Organic Chemicals) of Section 64444., ~~and Tables 64449-A (Secondary Maximum Contaminant Levels Consumer Acceptance Limits) and 64449-B (Secondary Maximum Contaminant Levels Ranges) and of Section 64449.~~ This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect...

In addition, discharges to surface waters designated MUN shall be regulated so as to ensure that the concentration of constituents identified in 22 CCR §64449 does not exceed the "maximum level" specified in Table 64449-A or the "upper level" specified in Table 64449-B at any downstream location where the SWRCB has authorized a permit to withdraw surface water for use as a domestic or municipal supply except as provided in 22 CCR §64449 or where the California Department of Public Health has prohibited such use for reasons unrelated to the actual concentration of these specific constituents. Where receiving water quality is better than the highest levels specified in Tables 64449-A or 64449-B, the Regional Board shall continue to regulate discharges to these receiving waters in accordance with SWRCB Resolution No. 68-16. In cases where the natural background concentration of a particular constituent exceeds the highest level specified in Table 64449-A or Table 64449-B, discharges shall be regulated to avoid increasing the average concentration of that constituent in the receiving water.

*Note: additions to the existing text are indicated by underline (underline) and deletion of existing text are indicated by strike-through (~~strikeout~~).*

- (B) Page III-10.00 of the Water Quality Control Plan (Basin Plan) for the Sacramento River Basin and the San Joaquin River Basin - Fourth Edition should be modified as follows:

### **Chemical Constituents**

At a minimum, ground waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum (MCLs) specified in the following provisions of Title 22 of the California Code of Regulations, which are incorporated by reference into this plan: Tables 64431-A (Inorganic Chemicals) and 64431-B (Fluoride) of Section 64431, Table 64444-A (Organic Chemicals) of Section 64444., ~~and Tables 64449-A (Secondary Maximum Contaminant Levels - Consumer Acceptance Limits) and 64449-B (Secondary Maximum Contaminant Levels - Ranges) of Section 64449.~~ This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect...

In addition, discharges to ground waters designated MUN shall be regulated so as to ensure that the concentration of constituents identified in 22 CCR §64449 does not exceed the "maximum level" specified in Table 64449-A or the "upper level" specified in Table 64449-B at any downgradient well location where groundwater is pumped for use as a domestic or municipal supply except as provided in 22 CCR §64449 or where the California Department of Public Health has prohibited such use for reasons unrelated to the actual concentration of these specific constituents. Where receiving water quality is better than the highest levels specified in Tables 64449-A or 64449-B, the Regional Board shall continue to regulate discharges to these receiving waters in accordance with SWRCB Resolution No. 68-16. In cases where the natural background concentration of a particular constituent exceeds the highest level specified in Table 64449-A or Table 64449-B, discharges shall be regulated to avoid increasing the average concentration of that constituent in the receiving water.

*Note: additions to the existing text are indicated by underline (underline) and deletion of existing text are indicated by strike-through (~~strikeout~~).*

- (C) Page III-3 of the Water Quality Control Plan (Basin Plan) for the Tulare Lake Basin - Second Edition should be modified as follows:

### **Chemical Constituents**

At a minimum, surface water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum (MCLs) specified in the following provisions of Title 22 of the California Code of Regulations, which are incorporated by reference into this plan: Tables 64431-A (Inorganic Chemicals) and 64431-B (Fluoride) of Section 64431, Table 64444-A (Organic Chemicals) of Section 64444, ~~and Tables 64449-A (Secondary Maximum Contaminant Levels-Consumer Acceptance Limits) and 64449-B (Secondary Maximum Contaminant Levels-Ranges) of Section 64449.~~ This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect...

In addition, discharges to surface waters designated MUN shall be regulated so as to ensure that the concentration of constituents identified in 22 CCR §64449 does not exceed the "maximum level" specified in Table 64449-A or the "upper level" specified in Table 64449-B at any downstream location where the SWRCB has authorized a permit to withdraw surface water for use as a domestic or municipal supply except as provided in 22 CCR §64449 or where the California Department of Public Health has prohibited such use for reasons unrelated to the actual concentration of these specific constituents. Where receiving water quality is better than the highest levels specified in Tables 64449-A or 64449-B, the Regional Board shall continue to regulate discharges to these receiving waters in accordance with SWRCB Resolution No. 68-16. In cases where the natural background concentration of a particular constituent exceeds the highest level specified in Table 64449-A or Table 64449-B, discharges shall be regulated to avoid increasing the average concentration of that constituent in the receiving water.

*Note: additions to the existing text are indicated by underline (underline) and deletion of existing text are indicated by strike-through (~~strikeout~~).*

- (D) Page III-7 of the Water Quality Control Plan (Basin Plan) for the Tulare Lake Basin - Second Edition should be modified as follows:

### **Chemical Constituents**

At a minimum, ground waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum (MCLs) specified in the following provisions of Title 22 of the California Code of Regulations, which are incorporated by reference into this plan: Tables 64431-A (Inorganic Chemicals) and 64431-B (Fluoride) of Section 64431, Table 64444-A (Organic Chemicals) of Section 64444, ~~and Tables 64449-A (Secondary Maximum Contaminant Levels - Consumer Acceptance Limits) and 64449-B (Secondary Maximum Contaminant Levels - Ranges) of Section 64449.~~ This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect...

In addition, discharges to ground waters designated MUN shall be regulated so as to ensure that the concentration of constituents identified in 22 CCR §64449 does not exceed the "maximum level" specified in Table 64449-A or the "upper level" specified in Table 64449-B at any downgradient well location where groundwater is pumped for use as a domestic or municipal supply except as provided in 22 CCR §64449 or where the California Department of Public Health has prohibited such use for reasons unrelated to the actual concentration of these specific constituents. Where receiving water quality is better than the highest levels specified in Tables 64449-A or 64449-B, the Regional Board shall continue to regulate discharges to these receiving waters in accordance with SWRCB Resolution No. 68-16. In cases where the natural background concentration of a particular constituent exceeds the highest level specified in Table 64449-A or Table 64449-B, discharges shall be regulated to avoid increasing the average concentration of that constituent in the receiving water.

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**Article 14. Treatment Techniques**

**§64448. Treatment Technique Requirements.**

(a) A public water system which uses acrylamide and/or epichlorohydrin in drinking water treatment shall certify annually in writing to the Department that the combination of dose and monomer does not exceed the following levels:

(1) Acrylamide: 0.05% monomer in polyacrylamide dosed at 1 mg/L, or equivalent.

(2) Epichlorohydrin: 0.01% residual of epichlorohydrin dosed at 20 mg/L, or equivalent.

**Article 16. Secondary Drinking Water Standards**

**§64449. Secondary Maximum Contaminant Levels and Compliance.**

(a) The secondary MCLs shown in Tables 64449-A and 64449-B shall not be exceeded in the water supplied to the public by community water systems.

**Table 64449-A  
Secondary Maximum Contaminant Levels  
“Consumer Acceptance Contaminant Levels”**

<i>Constituents</i>	<i>Maximum Contaminant Levels/Units</i>
Aluminum	0.2 mg/L
Color	15 Units
Copper	1.0 mg/L
Foaming Agents (MBAS)	0.5 mg/L
Iron	0.3 mg/L
Manganese	0.05 mg/L
Methyl- <i>tert</i> -butyl ether (MTBE)	0.005 mg/L
Odor—Threshold	3 Units
Silver	0.1 mg/L
Thiobencarb	0.001 mg/L
Turbidity	5 Units
Zinc	5.0 mg/L

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**Table 64449-B**  
**Secondary Maximum Contaminant Levels**  
**“Consumer Acceptance Contaminant Level Ranges”**

<i>Maximum Contaminant Level Ranges</i>			
<i>Constituent, Units</i>	<i>Recommended</i>	<i>Upper</i>	<i>Short Term</i>
Total Dissolved Solids, mg/L or	500	1,000	1,500
Specific Conductance, µS/cm	900	1,600	2,200
Chloride, mg/L	250	500	600
Sulfate, mg/L	250	500	600

(b) Each community water system shall monitor its groundwater sources or distribution system entry points representative of the effluent of source treatment every three years and its approved surface water sources or distribution system entry points representative of the effluent of source treatment annually for the following:

- (1) Secondary MCLs listed in Tables 64449-A and 64449-B; and
- (2) Bicarbonate, carbonate, and hydroxide alkalinity, calcium, magnesium, sodium, pH, and total hardness.

(c) If the level of any constituent in Table 64449-A exceeds an MCL, the community water system shall proceed as follows:

- (1) If monitoring quarterly, determine compliance by a running annual average of four quarterly samples;
- (2) If monitoring less than quarterly, initiate quarterly monitoring and determine compliance on the basis of an average of the initial sample and the next three consecutive quarterly samples collected;
- (3) If a violation has occurred (average of four consecutive quarterly samples exceeds an MCL), inform the Department when reporting pursuant to Section 64469;
- (4) After one year of quarterly monitoring during which all the results are below the MCL and the results do not indicate any trend toward exceeding the MCL, the system may request the Department to allow a reduced monitoring frequency.

(d) For the constituents shown on Table 64449-B, no fixed consumer acceptance contaminant level has been established.

- (1) Constituent concentrations lower than the Recommended contaminant level are desirable for a higher degree of consumer acceptance.
- (2) Constituent concentrations ranging to the Upper contaminant level are acceptable if it is neither reasonable nor feasible to provide more suitable waters.

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(3) Constituent concentrations ranging to the short term contaminant level are acceptable only for existing community water systems on a temporary basis pending construction of treatment facilities or development of acceptable new water sources.

(e) New services from community water systems serving water which carries constituent concentrations between the Upper and Short Term contaminant levels shall be approved only:

(1) If adequate progress is being demonstrated toward providing water of improved mineral quality.

(2) For other compelling reasons approved by the Department.

(f) A community water system may apply to the Department for a waiver from the monitoring frequencies specified in subsection (b), if the system has conducted at least three rounds of monitoring (three periods for groundwater sources or three years for approved surface water sources) and these analytical results are less than the MCLs. The water system shall specify the basis for its request. A system with a waiver shall collect a minimum of one sample per source while the waiver is in effect and the term of the waiver shall not exceed one compliance cycle (i.e., nine years).

(g) Nontransient-noncommunity and transient-noncommunity water systems shall monitor their sources or distribution system entry points representative of the effluent of source treatment for bicarbonate, carbonate, and hydroxide alkalinity, calcium, iron, magnesium, manganese, pH, specific conductance, sodium, and total hardness at least once. In addition, nontransient-noncommunity water systems shall monitor for the constituents in Tables 64449-A and B at least once.

#### **§64449.2. Waivers for Secondary MCL Compliance.**

(a) If the average of four consecutive quarters of sample results for a constituent that does not have a primary MCL is not greater than three times the secondary MCL or greater than the State Notification Level, an existing community water system is eligible to apply for a nine-year waiver of a secondary MCL in Table 64449-A, for the following:

(1) An existing source; or

(2) A new source that is being added to the existing water system, as long as:

(A) The source is not being added to expand system capacity for further development; and

(B) The concentration of the constituent of concern in the new source would not cause the average value of the constituent's concentration at any point in the water delivered by the system to increase by more than 20%.

(b) To apply for a waiver of a secondary MCL, the community water system shall conduct and submit a study to the Department within one year of violating the MCL that includes the following:

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(1) The water system complaint log, maintained pursuant to section 64470(a), along with any other evidence of customer dissatisfaction, such as a log of calls to the county health Department;

(2) An engineering report, prepared by an engineer registered in California with experience in drinking water treatment, that evaluates all reasonable alternatives and costs for bringing the water system into MCL compliance and includes a recommendation for the most cost-effective and feasible approach;

(3) The results of a customer survey distributed to all the water system's billed customers that has first been approved by the Department based on whether it includes:

(A) Estimated costs to individual customers of the most cost-effective alternatives presented in the engineering report that are acceptable to the Department based on its review of their effectiveness and feasibility;

(B) The query: "Are you willing to pay for (*identify constituent*) reduction treatment?";

(C) The query: "Do you prefer to avoid the cost of treatment and live with the current water quality situation?"

(D) The statement: "If you do not respond to this survey, (*insert system name*) will assume that you are in support of the reduction treatment recommended by the engineering report."

(4) A brief report (agenda, list of attendees, and transcript) of a public meeting held by the water system to which customers were invited, and at which both the tabulated results of the customer survey and the engineering report were presented with a request for input from the public.

(c) A community water system may apply for a waiver for iron and/or manganese if, in addition to meeting the requirements in Subsection (b), an average of four consecutive quarter results for the source has not exceeded a State Notification Level for iron and/or manganese. In addition, the system shall include sequestering, as follows:

(1) As one of the alternatives evaluated in the Engineering Report;

(2) In the customer survey as a query: "Are you willing to pay for iron and/or manganese sequestering treatment?"

(d) Unless 50% or more of the billed customers respond to the survey, the community water system shall conduct another survey pursuant to Subsections (b) or (c) within three months from the date of the survey by sending the survey out to either all the customers again, or only the customers that did not respond to the survey. The water system shall not be eligible for a waiver until it achieves at least a 50% response rate on the survey.

(e) If the customer survey indicates that the percentage of billed customers that voted for constituent reduction treatment and the number of billed customers that did not respond to the survey at all exceeds 50% of the total number of billed customers, the community water system shall install treatment, except as provided in Subsection (f), within three years from the date the system completed the customer survey, pursuant to a schedule established by the Department.

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(f) For iron and/or manganese MCL waiver applications, if the percentage of survey respondents that voted for constituent reduction treatment plus the percentage of survey respondents that voted for sequestering exceeds the percentage that voted to avoid the cost and maintain the current water quality situation, the community water system shall implement either constituent reduction treatment or sequestering, on the basis of which was associated with the higher percentage result. If the highest percentage result is for sequestering, the system shall submit a sequestering implementation and assessment plan to the Department that includes:

- (1) A description of the pilot testing or other type of evaluation performed to determine the most effective sequestering agent for use in the system's water;
- (2) The sequestering agent feed rate and the equipment to be used to insure that the rate is maintained for each source;
- (3) An operations plan; and
- (4) The projected cost of sequestering including capital, operations and maintenance costs.

(g) To apply for renewal of a waiver for a subsequent nine years, the system shall request approval from the Department at least six months prior to the end of the current waiver period. The renewal request shall include all monitoring and treatment operations data for the constituent for which the waiver had been granted and any related customer complaints submitted to the water system. Based on its review of the data and customer complaints, the Department may require the water system to conduct another customer survey pursuant to this section before making a determination on the waiver renewal.

**§64449.4. Use of Sources that Exceed a Secondary MCL and Do Not Have a Waiver.**

A source that exceeds one or more of the secondary MCLs in Table 64449-A and does not have a waiver may be used only if the source meets the requirements in Section 64414, and the community water system:

(a) Meters the source's monthly production and submits the results to the Department by the 10th day of the next month;

(b) Counts any part of a day as a full day for purposes of determining compliance with Section 64414(c);

(c) As a minimum, conducts public notification by including information on the source's use (dates, constituent levels, and reasons) in the Consumer Confidence Report (Sections 64480 through 64483);

(d) Provides public notice prior to use of the source by electronic media, publication in a local newspaper, and/or information in the customer billing, if the situation is such that the water system can anticipate the use of the source (e.g., to perform water system maintenance); and

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(e) Takes corrective measures such as flushing after the source is used to minimize any residual levels of the constituent in the water distribution system.

**§64449.5. Distribution System Physical Water Quality.**

(a) The water supplier shall determine the physical water quality in the distribution system. This determination shall be based on one or more of the following:

- (1) Main flushing operations and flushing records.
- (2) Consumer complaint records showing location, nature and duration of the physical water quality problem.
- (3) Other pertinent data relative to physical water quality in the distribution system.

(b) If the Department determines that a water system does not have sufficient data on physical water quality in the distribution system to make the determination required in paragraph (a), the water supplier shall collect samples for the following general physical analyses: color, odor, and turbidity. Samples shall be collected from representative points in the distribution system:

- (1) For community water systems with 200 to 1,000 service connections: one sample per month.
- (2) For community water systems with greater than 1,000 service connections: one sample for every four bacteriological samples required per month.
- (3) For community water systems with less than 200 service connections: as established by the local health officer or the Department.

(c) Odor samples required as a part of general physical analyses may be examined in the field as per Section 64415(b).

(d) The distribution system water of public water systems shall be free from significant amounts of particulate matter.

***Article 18. Notification of Water Consumers and the Department***

**§64463. General Public Notification Requirements.**

(a) Each public (community, nontransient-noncommunity and transient-noncommunity) water system shall give public notice to persons served by the water system pursuant to this article.

(b) Each water system required to give public notice shall submit the notice to the Department for approval prior to distribution or posting, unless otherwise directed by the Department.

(c) Each wholesaler shall give public notice to the owner or operator of each of its retailer systems. A retailer is responsible for providing public notice to the persons it serves. If the retailer arranges for the wholesaler to provide the notification, the retailer shall notify the Department prior to the notice being given.