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Working Group, Greenfire Law, Sierra Club, Parents for a Safer Environment, The Environmental Justice Coalition for Water, Central California Environmental Justice Network, CalPIRG, Asociacion de Gente Unida por el Agua, Center for Race, Poverty, and the Environment, Pesticide Action Network, Progressives United for Social Justice and Human Rights, El Quinto Sol de America, San Jerardo Cooperative, Inc., Food and Water Watch, Leadership Counsel for Justice and Accountability, Turtle Island Restoration Network, California Coastkeeper Alliance, Center for Environmental Health, Californians for Pesticide Reform, League of Women Voters of California, Central California Asthma Collaborative, Medical Advocates for Healthy Air, Friends of the Earth U.S., Californians for Alternatives to Toxics, Promotores Comunitarios del Desierto, Food Empowerment Project, Occidental Arts & Ecology Center, Lymphoma Foundation of America, Transition to Organics, Clean Water and Air Matter, Turning Green, California Latinas for Reproductive Justice, Alliance of Nurses for Healthy Environments, Beyond Toxics, Alaska Commnity Action on Toxics, Action Now, Klamath Forest Alliance, Environmental Protection Information Center, Courage Campaign, Wholly H2O, Dolores Huerta Foundation, Planting Justice, Center for Biological Diversity, GMO Free California, Safe Ag Safe Schools, Monterey Bay Central Labor Council, Physicians for Social Responsibility-Los Angeles, Environmental Action Committee of West Marin, and California Environmental Justice Alliance	
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- A Cost Recovery
- B Adopt 5 ppt
- C Groundwater Remediation
- D Compliance Plans
- E Blending
- F Non-detect as Zero
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- I No Grandfathering
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- L Operation and Implementation Concerns
- M ELAP
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- S Cost-Benefit Analysis

Commenter	Commenter	Comment	Category	Summarized Comment/	Response Summary
ID	Name/Organization	ID	0000001	Proposed Regulation Change	· ·
1	<u>Alexander Gouyet</u>	1	A - Cost Recovery	"allow water systems to recoup water treatment costs from the companies that sold the contaminated pesticides."	The State Water Board is aware that some public water systems have been able to successfully recover the cost of treatment from responsible parties. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations. Any action the State Water Board could take to assist in recouping costs of treatment for public water systems would be taken outside of this regulatory process, and is, therefore, outside of the scope of these regulations.
1	Alexander Gouyet	2	B - Adopt 5 ppt	"Please set the TCP drinking water standard at 5 ppt (the detection limit) to protect public health"	Thank you for your support.
				"choosing to allow greater cancer risk because of the economic factors benefits only the responsible parties" "In fact, setting the MCL at 5 ppt would expedite cost-recovery efforts"	The State Water Board is aware that some public water systems have been able to successfully recover the cost of treatment from responsible parties. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs,
2	California Rural Legal Assistance Foundation	1	A - Cost Recovery	"Because TCP is a synthetic, manufactured chemical that does not occur naturally, viable responsible parties have been identified, and affected water suppliers have available legal remedies to recoup water treatment costs. In fact, setting the MCL at 5 ppt would expedite cost-recovery efforts that have been pending for years, while providing strong health protection and limiting current and future medical costs."	that is not the intent of the State Water Board's actions in adopting the regulations.
2	California Rural Legal Assistance Foundation	2	B - Adopt 5 ppt	"the adoption of a 5 ppt MCL should not be delayed any further."	Thank you for your support and your comment. The State Water Board agrees and has therefore made adoption of the 1,2,3-TCP MCL one of its highest priorities.
2	California Rural Legal Assistance Foundation	3	P - Disproportionate Effect	"More than half of the state's contaminated wells are found in the agriculturally rich San Joaquin ValleyTCP is one of a number of pollutants impacting water supplies in these rural, lower-income communities where health and wellbeing of residents is also threatened by disproportionate exposure to air pollution, soil contamination and basic infrastructure deficiencies and lack the adequate resources to address these problems or the associated health problems."	The State Water Board is aware that some communities may be disproportionally affected by 1,2,3-TCP. The State Water Board's Division of Drinking Water District offices provide technical support to public water systems and funding opportunities are available through the Division of Financial Assistance through loans and grants.
3	Armando Valdez	1	B - Adopt 5 ppt	"urge the State Water Resources Control Board to act quickly to adopt the most healthprotective maximum contaminant level ("MCL") of 5 parts per trillion."	Thank you for your support.
4	<u>Various (53 groups)</u>	1	A - Cost Recovery	only the responsible parties" "In fact, setting the MCL at 5 ppt would expedite cost-recovery efforts" "Because TCP is a synthetic, manufactured chemical that does not occur naturally,	The State Water Board is aware that some public water systems have been able to successfully recover the cost of treatment from responsible parties. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations. Any action the State Water Board could take to assist in recouping costs of treatment for public water systems would be taken outside of this regulatory process, and is, therefore, outside of the scope of these regulations.
4	Various (53 groups)	2	B - Adopt 5 ppt	"the adoption of a 5 ppt MCL should not be delayed any further."	Thank you for your support and your comment. The State Water Board agrees and has therefore made adoption of the 1,2,3-TCP MCL one of its highest priorities.

Commenter	Commenter	Comment	Category	Summarized Comment/	Response Summary
ID	Name/Organization	ID	Category	Proposed Regulation Change	· ·
4	<u>Various (53 groups)</u>	3	P - Disproportionate Effect	rich San Joaquin ValleyTCP is one of a number of pollutants impacting water	The State Water Board is aware that some communities may be disproportionally affected by 1,2,3-TCP. The State Water Board's Division of Drinking Water District offices provide technical support to public water systems and funding opportunities are available from the Division of Financial Assistance through loans and grants.
5	Del Rey Community Services District	1	B - Adopt 5 ppt	"Communities,like Del Rey, have a strong interest in seeing the MCL adopted as soon as possible."	Thank you for your support.
5	<u>Del Rey Community Services</u> <u>District</u>	2	I - Grandfathering	Supports the proposed grandfathering regulations. Early monitoring helped early efforts to plan for remediation in advance of the MCL adoption. "Incentivizing early monitoring is the right policy"	Thank you for your support. Substitution of samples encourages public water systems to monitor their drinking water sources in advance of drinking water standards; this early sampling helps public water systems with contaminated sources prepare for future compliance actions and begin planning well in advance of the effective date of the regulations. Not allowing substitution of results may discourage some public water systems from performing early sampling, leading to increased delays in reducing the amount of contamination in drinking water.
6	<u>City of Bakersfield/Duane</u> <u>Morris</u>	1	D - Compliance plans	"Bakersfield respectfully requests that the Water Board provide additional time to come into compliance with the new regulations. Bakersfield's request for additional time is necessary because of the number of significant capital improvement projects it will be required to undertake in order to install treatment systems on its TCP impacted wells to be in compliance with the proposed MCL."	O Granular activated carbon is neither a new nor a novel technology requiring extensive preliminary planning and design to implement. A compliance period to provide public water systems additional time to come into compliance with the MCL for 1,2,3-TCP is therefore not proposed as part of the regulations. Although public water systems may wish to avoid being declared noncompliant with the proposed MCL during the period between finding a source out of compliance and completing either installation of treatment or other activities which may bring the water system back into compliance, providing a compliance period is not necessary and not in the public interest. The State Water Board's Division of Financial Assistance has loan and grant programs that may offset the financial impact of the proposed regulation with loans and grants.
6	<u>City of Bakersfield/Duane</u> <u>Morris</u>	2	D - Compliance plans	"The California Safe Drinking Water Act provides for a public water system to seek an exemption from any MCL or treatment requirement from the Water Board provided that it satisfy certain requirements. (Health and Safety Code§ 116425(a).) With the granting of an exemption, the Board may set out a schedule for interim measures and compliance that will require compliance to be achieved within 12 months of the granting of the exemption. (Health and Safety Code§§ 116425(b) and (c).)	The State Water Board agrees that existing statutes in Health and Safety Code (HSC) section 116425 allow for some public water systems to apply and receive an exemption from an MCL. Therefore, no new exemption process needs to be included or made more specific in regulation.
6	<u>City of Bakersfield/Duane</u> <u>Morris</u>	3	D - Compliance plans	"for hexavalent chromium, the Water Board granted, pursuant to Section 116431, a longer period of time to achieve compliance with the primary drinking water standard in connection with and based on an approved compliance plan.	HSC section 116431 addresses significant cost, technology, and implementation issues unique to hexavalent chromium. GAC is a readily available and reliable technology, and similar cost and implementation issues are not anticipated with 1,2,3-TCP. Although public water systems may wish to avoid being declared noncompliant with the proposed MCL during the period between finding a source out of compliance and completing either installation of treatment or other activities which may bring the water system back into compliance, providing a compliance period is not necessary and not in the public interest.
7	Daniel Del Grande	3	C - Groundwater remediation	"Treatment technologies for groundwater that are available for remediation of chlorinated hydrocarbons include pump and treat, permeable reactive barriers, in situ chemical oxidation and bioremediation (reductive dechlorination) (Cal/EPA 2009)."	The proposed regulations are for drinking water served by public water systems. While groundwater remediation may result in improved source water, regulations pertaining to groundwater remediation are outside the scope of this regulation.

Commenter	Commenter	Comment	Category	Summarized Comment/	Response Summary
ID	Name/Organization	ID	Category	Proposed Regulation Change	, ,
7	Daniel Del Grande	1	A - Cost Recovery	"allow water systems to recoup water treatment costs from the companies that sold the contaminated pesticides."	The State Water Board is aware that some public water systems have been able to successfully recover from responsible parties for the cost of treatment. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations. Any action the State Water Board could take to assist in recouping costs of treatment for public water systems would be taken outside of this regulatory process, and is, therefore, outside of the scope of these regulations.
7	Daniel Del Grande	2	B - Adopt 5 ppt	" set the TCP drinking water standard at 5 ppt (the detection limit) to protect the public health"	Thank you for your support.
8	<u>Central Valley Clean Water</u> <u>Association</u>	1	O - Impacts on POTWs	"Adoption of New MCLs Must Comply with Water Code Section 13241" "Proposed Rulemaking Needs to Consider Economic Impact to POTWs and Others" "Statement of Results of the Standardized Regulatory Impact Assessment Is Flawed as It Fails to Consider Impacts to Dischargers"	The State Water Board disagrees that it must consider the factors specified in Water Code section 13241 when adopting maximum contaminant levels. HSC section 116365 sets forth the factors that must be considered in setting an MCL. To add to those requirements factors besides protection of public health, and technological and economic feasibility would change that analysis. Nonetheless, to the extent that the factors in Water Code section 13241 are relevant, they were considered when developing the MCL. CVCWA has not offered anything to substantiate its assertion that this regulation will have an impact on Publicly Owned Treatment Works (POTWs), and after reviewing the possibility, the State Water Board does not believe that this is a likely possibility and is too speculative of an impact to warrant further consideration.
9	<u>Dieter Jundt</u>	1	A - Cost Recovery	"allow water systems to recoup treatment costs from known polluters."	The State Water Board is aware that some public water systems have been able to successfully recover the cost of treatment from responsible parties. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations. Any action the State Water Board could take to assist in recouping costs of treatment for public water systems would be taken outside of this regulatory process, and is, therefore, outside of the scope of these regulations.
9	Dieter Jundt	2	B - Adopt 5 ppt	" set the TCP drinking water standard to a feasible level, e.g. at the 5ppt detection limit, to protect the public health"	Thank you for your support.
10	California Manufacturers & Technology Association/American Chemical Council	1	S - Cost-Benefit Analysis	The State Water Board has the responsibility of setting drinking water standards that are both technologically feasible and economically feasible. The Board has carefully considered technological feasibility of its proposed 5 ppt MCL for 1,2,3 trichloropropane (TCP), it has not performed a similar analysis of economic feasibility. Given the limited information disclosed by the Board, its proposed standard clearly is not economically feasible. The State Water Board's proposal has serious procedural defects, including conflicting information about the Board's cost-benefit analysis: • The Board says it did not perform a cost-benefit analysis to determine that the proposed MCL is economically feasible. However, it is impossible to determine economic feasibility without performing a cost-benefit analysis.	Many of the comments throughout the CMTA letter are based on the assumption that a cost-benefit analysis of a specific type was required. The commenter also implied that the State Water Board should have developed the regulations using methods that the United State Environmental Protection Agency (U.S. EPA) uses, including measuring the benefit of the regulation by setting a monetary value for a statistical life. Section 116365 of the California Health and Safety Code (HSC) requires the State Water Board to set primary drinking water standards "at a level that is as close as feasible to the corresponding public health goal placing primary emphasis on the protection of public health" but giving due consideration to technical and economic feasibility. The State Water Board disagrees with the assertion that economic feasibility is impossible to determine without performing a cost-benefit analysis. HSC section 116365 specifies the costs to be considered in determining economic feasibility. HSC 116365 directs the State Water Board to "[determine] economic feasibility. HSC 116365 directs the State Water Board to sufficient and addition, and other affected parties with the proposed primary drinking water standard, including the cost per customer and aggregate cost of compliance, using best available technology." As documented in the regulation package, the State Water Board considered all of those elements when determining economic feasibility.

Commenter	Commenter	Comment	Category	Summarized Comment/	Response Summary
ID	Name/Organization	ID	Category	Proposed Regulation Change	. ,
					In setting the MCL, the State Water Board is governed by HSC 116365, whereas the U.S. EPA follows the federal Safe Drinking Water Act when setting federal drinking water standards. The federal SDWA requires the U.S. EPA to prepare a health risk reduction and cost analysis in support of any national primary drinking water regulation (42 USC 300g-1(b)(3)(C)(i)(I) and (II)). There is no similar requirement in HSC 116365. Therefore, the comparison of what U.S. EPA considers when assessing risk is not relevant.
10	<u>California Manufacturers &</u> <u>Technology</u> <u>Association/American</u> <u>Chemical Council</u>	2	S - Cost-Benefit Analysis	 The Board provided documents to peer reviewers clearly indicating that the Board performed a "full cost-benefit analysis." However, the Board did not disclose this analysis to the peer reviewers and has not disclosed it to the public. 	CMTA/ACC Response 2: The State Water Board did perform an analysis of costs and benefits. The commenter refers to several locations where the State Water Board used the term "cost-benefit analysis", but what was done was not a cost-benefit analysis as the commenter uses the term. The commenter is correct that the State Water Board did not perform a purely monetary cost-benefit analysis such as that described by the commenter; therefore, there is no such analysis to disclose. The economic feasibility analysis that the State Water Board did perform included consideration of all costs of compliance described in HSC 116365[b](3). The analysis of benefits was considered generally, consistent with Government Code section 11346.5, and included protection of public health. Information on the compliance cost and health benefit analysis is provided in both the Initial Statement of Reasons and the Final Statement of Reasons.
10	California Manufacturers & Technology Association/American Chemical Council	3	S - Cost-Benefit Analysis	 The Board apparently knows how much every household affected would have to pay but has disclosed only average costs by system size for each MCL. This is misleading. Many households would pay more than the average, and the public deserves to know how much more they would pay. This could be substantial, for even the limited information disclosed by the Board indicates that some households served by small systems may have to pay over \$8,000 per year. 	CMTA/ACC Response 3: The State Water Board did not attempt to determine the cost of compliance for every household. The State Water Board developed estimated costs using the procedures described in the Initial Statement of Reasons (ISOR). The estimates provided average costs over a group of water systems. The cost estimation process included evenly distributing a population served over the number of active sources rather than by actual usage of the sources, using that population to estimate a flow rate from a source rather than the actual flow rate of the source, and ultimately averaging the cost over every service connection rather than considering different behaviors from each service connection (e.g., a single-family home versus an apartment complex versus a restaurant). The estimates were not designed to be used to evaluate potential costs for individual systems or individual users within a specific system. The final cost estimates used in the evaluation were sufficient for the purposes of determining economic feasibility as required by HSC 116365, but would not be accurate for a household estimating their particular water costs. The commenter appears to have based some conclusions on an assumption that every service connection represents "a household". For some public water systems (specifically non-transient non-community water systems), a single service connection may represent a place of business or school which serves a large population rather than a single household. Thus, a cost estimate for a single connection serving numerous individuals, would not be borne by a single household.

Commenter	Commenter	Comment	Category	Summarized Comment/	Response Summary
ID	Name/Organization	ID	eatego.,	Proposed Regulation Change	· ·
				 The State Water Board's determination of economic feasibility is inconsistent with an economic interpretation of this statutory term: Any economic determination of economic feasibility would take account of the actual benefits obtained from treatment. 	CMTA/ACC Response 4: The State Water Board has determined that HSC 116365 does not require a cost-benefit analysis. Instead, in setting the MCL as close as feasible to the PHG as is economically feasible, the State Water Board looked at the costs associated with sampling and treating for 1,2,3-TCP, and determined, based on that cost and other factors that would affect the cost of implementation (e.g., opportunities for public water systems to obtain loans and grants, additional time for compliance under HSC 116425, and reduced expenses related to purchase of bottled water), that the regulation is economically feasible for public water systems. The State Water Board recognizes that some public water systems are so disadvantaged that any new or increased drinking water standards will be difficult for those water systems to comply with. But limiting new or revised drinking water standards to only what is affordable to the most disadvantaged public water systems would likely result in no new or increased standards ever being developed, despite the fact that the majority of Californians are served by larger systems that are able to spread the cost of treatment over a larger number of individuals. The result would be that affordability for a small percentage of the population would be driving health protections for the majority of the population.
10	California Manufacturers & Technology Association/American Chemical Council	4	S - Cost-Benefit Analysis		There is nothing in statute or regulation that mandates that economic feasibility be determined via a cost-benefit analysis, and at least one federal court in looking at what is required to demonstrate economic feasibility has stated that economic feasibility is not required to be established in a particular way. (United Steel Workers of America v. Marshall, 647 F2d 1189 (CADC 1980)). In that case the court found that to determine economic feasibility, OSHA was required to construct "a reasonable estimate of compliance costs and demonstrate a reasonable likelihood that these costs will not threaten the existence or competitive structure of an industry, even if it does spell disaste for some marginal firms." (Id. at 1272.) The State Water Board, when proposing a standard, does not consider at which point the reduction of risk or value of a life is outweighed by the costs of implementing the regulation, but instead only whether an MCC is economically and technologically feasible, and that the MCL avoids any significant risk to public health. Some MCLs may be set at the PHG, if doing so is economically and technological and economic limitations.
					The State Water Board's interpretation of what is required by HSC 116365 is entitled to great weight unless that interpretation is either 'arbitrary, capricious or without rational basis' or is 'clearly erroneous or unauthorized.' (Yamaha Corp. of America v. State Board o Equalization (1998) 18 Cal. 4th 1, 6-7.) An MCL is "a quasi-legislative regulation adopted by [the Water Board] to which the Legislature has confided the power to 'make law,' and which, if authorized by the enabling legislation, bindcourts as firmly as statutes themselves." (Id. at 7.) See also response to Commenter 10, Comment 1.
	California Manufacturers &			At the proposed MCL, the average household bears more in cost than it receives	s See responses to Commenter 10, Comments 1 and 4.

	California Manufacturers &			 At the proposed MCL, the average household bears more in cost than it receives See responses to Commenter 10, Comments 1 and 4.
40	Technology	5	S - Cost-Benefit Analysis	in potential value even from theoretical risk reductions. Excess cost would be
10	Association/American			substantially greater if the Board had properly estimated risk reduction
	Chemical Council			objectively.

Commenter	Commenter	Comment	Category	Summarized Comment/	Response Summary
ID	Name/Organization	ID	Category	Proposed Regulation Change	Response Summary
10	California Manufacturers & Technology Association/American Chemical Council	6	S - Cost-Benefit Analysis	A simple and straightforward methodology can be used to apply economic reasoning to determine economic feasibility. The Board produced all the information needed to apply economic reasoning, then chose not to do so: • For small systems, the Board's estimated cost for the proposed MCL is \$97 million per theoretical cancer case averted. This is 10 times the maximum value that the U.S. Environmental Protection Agency routinely uses as its upper bound valuation for averting an actual premature mortality. Even at 150 ppt – the highest MCL considered –the Board's estimated cost is \$21 million per theoretical cancer case averted. • For large systems, the Board's estimated cost for the proposed MCL is \$14 million per theoretical cancer case averted. This is almost 2 times the USEPA upper-bound for averting an actual premature mortality. The lowest MCL considered by the Board that is less than the USEPA upper-bound for averting an actual premature mortality as ppt.	See response to Commenter 10, Comment 1.
10	California Manufacturers & Technology Association/American Chemical Council	7	S - Cost-Benefit Analysis	 When the incremental effects of adjacent MCLs are considered, the evidence against economic feasibility gets even stronger: For small systems: The incremental cost of proposing 5 ppt over 7 ppt is \$394 million per theoretical cancer case averted. The incremental cost of proposing 7 ppt over 15 ppt is \$412 million per theoretical cancer case averted. The incremental cost of proposing 15 ppt over 35 ppt is \$99 million per theoretical cancer case averted. The incremental cost of proposing 35 ppt over 70 ppt is \$48 million per theoretical cancer case averted. The incremental cost of proposing 70 ppt over 150 ppt is \$104 million per theoretical cancer case averted. The incremental cost of proposing 70 ppt over 70 ppt is \$104 million per theoretical cancer case averted. For large systems: The incremental cost of proposing 5 ppt over 7 ppt is \$196 million per theoretical cancer case averted. For large systems: The incremental cost of proposing 7 ppt over 150 ppt is \$196 million per theoretical cancer case averted. The incremental cost of proposing 7 ppt over 35 ppt is \$48 million per theoretical cancer case averted. The incremental cost of proposing 15 ppt over 35 ppt is \$48 million per theoretical cancer case averted. The incremental cost of proposing 35 ppt over 70 ppt is \$27 million per theoretical cancer case averted. The incremental cost of proposing 70 ppt over 150 ppt is \$15 million per theoretical cancer case averted. The incremental cost of proposing 70 ppt over 150 ppt is \$15 million per theoretical cancer case averted. The incremental cost of proposing 70 ppt over 150 ppt is \$15 million per theoretical cancer case averted. The incremental cost of proposing 70 ppt over 150 ppt is \$15 million per theoretical cancer case averted. The incremental cost of proposing 70 ppt over 150 ppt is \$15 million per theoretical cancer case averted.	Note that the incremental increases are due to the fact that when the MCL is lowered, more systems have to treat, not due to an increased cost of the treatment itself. The costs of treatment are largely unchanged whether the MCL is set at a low level, such as 5 ppb, or at a less stringent level. See also response to Commenter 10, Comment 4.

Commenter	Commenter	Comment		Summarized Comment/	
ID	Name/Organization	ID	Category	Proposed Regulation Change	Response Summary
10	<u>California Manufacturers &</u> <u>Technology</u> <u>Association/American</u> Chemical Council	8	S - Cost-Benefit Analysis	The California Safe Drinking Water Act, HSC § 116365, sets forth a complex, multi- part scheme for setting primary drinking water standards. The statute requires separate determinations of technological feasibility and economic feasibility. Technical feasibility may vary by system size, type of source, coincident contaminants or treatment trains in place, and other factors. A treatment technology need not be technologically feasible in every case to be technologically feasible in some cases. Technological feasibility is strictly an engineering question; either a standard can be achieved through a particular treatment method, at the scope and scale required, or it cannot. If the standard cannot be reliably achieved, it cannot be technologically feasible.	See responses to Commenter 10, Comments 1 and 4.
				Technological feasibility is a prerequisite for economic feasibility. It is easy to imagine technologies that could achieve a given standard at a cost that everyone agrees is exorbitant. What's needed is a rational, consistent and transparent way to determine when treatment cost is "too high." When economic principles are relied upon, a rational, consistent and transparent determination is the result.	
10	<u>California Manufacturers &</u> <u>Technology</u> <u>Association/American</u> <u>Chemical Council</u>	9	S - Cost-Benefit Analysis	The State Water Board considered six alternative MCLs: 0.000005, 0.00007, 0.000015, 0.000035, 0.00007, and 0.00015 mg/l (5, 7, 15, 35, 70 and 150 ppt). However, there is evidence that the Board seriously considered only 5 and 15 ppt. ¹ Determining the economic feasibility of each alternative MCL requires comparing the cost of compliance with the value of risk reduction that is reasonably expected to be achieved. The generally accepted method multiplies the number of cases avoided by an appropriate valuation factor. For premature mortality, this is called the Value of a Statistical Life (VSL), and it is routinely used by the U.S. Environmental Protection Agency (USEPA). ² The VSL is essential because risk reductions must be monetized to be compared with costs.	The State Water Board equally considered and evaluated the economic and technological feasibility of all of the MCLs described in the ISOR. The information provided to the Department of Finance for their purposes does not require that the Economic and Fiscal Impact Statement include every option or alternative evaluated in the course of proposing a regulation. For purposes of the Economic and Fiscal Impact Statement the inclusion of two options was required, along with the inclusion of the "no action" alternative. The State Water Board included two options, along with the "no action" alternative in the Economic and Fiscal Impact Statement. As described in responses to Commenter 10, Comments 1 and 4, the State Water Board disagrees with the need to monetize risk reduction in order to compare it to the costs of treatment. The State Water Board disagrees with the need to state and disagrees with the need to compare the cost and the benefits in the way described by the commenter. HSC 116365 does not mandate that type of comparison. It instead directs the State Water Board to perform the evaluation described in the response to Commenter 10, Comment 4.

The Board attempts to compare benefits and costs, but gets mired in confusion:

show some costs savings when the MCL is set at a higher level, those costs savings per service connection are relatively insignificant. Therefore, choosing an MCL at a higher level would be inconsistent with HSC section result in significant cost savings.³

The State Water Board did not subordinate economic feasibility to technological feasibility, nor, as the commenter claims, did the State Water Board attempt to compare benefits and costs. Economic feasibility of an evaluated MCL was compared to all of the other Tables 2-4 set out the costs associated with each alternative, and while they evaluated MCLs, and technological feasibility of an evaluated MCL was compared to all of the other MCLs. The results of the comparisons were then used to determine how close to the PHG the MCL could be set. As noted in the quoted text above, setting the MCL at a less stringent level would not significantly change costs for treatment for an individual 116365, would be somewhat less protective of public health, and would not system. See also responses to Commenter 10, Comments 1 and 4. Additionally, see page 22 of the ISOR for discussion supporting the economic feasibility of the proposed MCL.

Commenter	Commenter	Comment	•	Summarized Comment/	
ID	Name/Organization	ID	Category	Proposed Regulation Change	Response Summary
10	California Manufacturers & Technology Association/American Chemical Council	10	S - Cost-Benefit Analysis	This description is inconsistent with established economic principles and practices, includingthose published in guidance by USEPA. The Board's approach fails to identify any guiding principle for decision-making. Whereas the statute directs the Board to ensure that MCLs are both technologically feasible and economically feasible, the Board appears to have wholly subordinated economic feasibility to technological feasibility. ⁴ The inconsistent application of a rule-based determination is indistinguishable from an arbitrary, post hoc decision. ³ State Water Resources Control Board (2017e), p. 28.	
				⁴ The Board claims that economic feasibility had a larger role than technological feasibility in the selection of the proposed MCL. See State Water Resources Control Board (2017e), p. 19 ("In determining the feasibility of the alternatives considered, the economic feasibility of the proposed alternative weighed more heavily than considerations of technical feasibility"). The evidence for this in the Board's documents is scanty as best, and in any case, it is refuted by the analysis presented in Section 4.	
10	California Manufacturers & Technology Association/American Chemical Council	11	S - Cost-Benefit Analysis		It is true that less stringent MCLs would also be economically feasible, but the State Water Board's charge in setting the MCL is not to just find what is feasible, but to set the MCL as close to the PHG as possible.
10	California Manufacturers & Technology Association/American Chemical Council	12	S - Cost-Benefit Analysis	secure an "external scientific peer review of the scientific basis for any rule proposed for adoption." The term scientific basis is further defined as "those foundations of a rule that are premised upon,or derived from, empirical data or other scientific findings, conclusions, or assumptions establishing a regulatory level, standard, or other requirement for the protection of public health or the environment." ⁵ The scientific basis "shall be deemed to have complied with this section if it complies with the peer review processes established pursuant to these statutes." ⁶ If the peer reviewer(s) conclude that the Board "has failed to demonstrate that the scientific portion of the proposed rule is based upon sound scientific knowledge, methods, and practices, the report shall state that finding, and the reasons explaining the finding" However, the Board "may accept the finding of the external scientific peer review entity, in whole, or in part, and may revise the scientific portions of the proposed rule accordingly," or if it disagrees with any aspect of the finding of the external scientific portions of the finding record, its basis for arriving at such a determination in the adoption of the finding rule, including the reasons why it has determined that the scientific portions of the proposed rule are based on sound scientific knowledge, methods, and practices." ⁷	No cost-benefit analysis of the type suggested was prepared. The State Water Board prepared and submitted the peer review documents to the "external peer review entity" as required by HSC 57004(d)(1). These documents included an example of calculations and data used in the cost estimation process and as described in the ISOR. The peer reviewers were tasked with reviewing five specific elements related to the regulations. Not having an economist on the peer review panel did not hamper the process. The peer reviewers were selected and tasked with the peer review assignment in accordance with the State Water Board's peer review process. Each of the three peer reviewers had a range of education, training, and experience that would enable them to provide substantive comments on any of the five review items identified by the State Water Board. Each of the peer reviewers provided comments on the question of whether the cost estimation method/approach was appropriate. In addition, the peer reviewers provided substantive feedback on the review of the methodology used to estimate the health benefit of the draft regulations, which was key since the main objective of the MCL is to protect public health. In summary, the requirements of the statutorily-mandated peer review process. The peer review process. The peer reviewers provided the review and response required by the peer review process. See also response to Commenter 10, Comment 2.

Commenter	Commenter	Comment	Category	Summarized Comment/	Response Summary
ID 10	Name/Organization <u>California Manufacturers &</u> <u>Technology</u> <u>Association/American</u> <u>Chemical Council</u>	ID 13	S - Cost-Benefit Analysis	Proposed Regulation Change The documents disclosed by the State Water Board are wholly inadequate for reproducing its work, and that makes it impossible for the public to conduct a proper review and provide informed comments. The Board's inadequate disclosure contrasts notably from the information disclosed by the Division of Drinking Water in a recent previous rulemaking. ⁸ Compare, e.g., the 1,2,3- TCP cost estimation methodology, State Water Resources Control Board (2017d) (28 pp. including tables) with the hexavalent chromium cost estimation methodology, California Department of Public Health (2013) (84 pp. Including tables).	The State Water Board identified in the ISOR and the Cost Estimating Methodology the steps and assumptions made by the State Water Board in identifying approximately how many systems would have to comply with the requirements, the costs for monitoring, and the costs for ongoing treatment using granular activated carbon for those systems that would have to provide treatment. There is sufficient data and descriptions of State Water Board processes available for the public to be able to assess approximate costs for systems that will have to monitor and treat; those costs are used in assessing economic feasibility of the proposed MCL.
10	California Manufacturers & Technology Association/American Chemical Council	14	S - Cost-Benefit Analysis	identified 289 sources that would be affected by the proposed MCL. However, on the Board's website, 562 sources are so identified. Similarly, in the ISOR the Board reports that 103 systems would be affected but 94 systems are identified on the	The data and table on the website were not relied upon to calculate cost or benefit estimates. The actual data relied upon in determining economic feasibility is described beginning on page 11 of the ISOR – "The State Water Board used the 1,2,3-TCP detections for active sources from the WQIr database for the period of January 1, 2001, through November 6, 2015 to estimate the statewide costs associated with monitoring and treating 1,2,3-TCP." The information presented on the State Water Board's 1,2,3-TCP website uses a different, data set and a different methodology for counting water systems and water sources than what was used for developing the proposed regulations. The posted data set had not gone through the same quality-control process included corrections for such things as duplicate values, misplaced decimal points, and other potential errors. The State Water Board continued to maintain the data referenced to allow any interested party to look at that earlier data set in the interest of transparency.
10	California Manufacturers & <u>Technology</u> <u>Association/American</u> <u>Chemical Council</u>	15	S - Cost-Benefit Analysis	the Board's analytic approach. Results presented in the attached tables cannot be	The State Water Board disagrees that the results cannot be duplicated. The data used to perform the analysis were identified on page 11 of the ISOR, and anyone can obtain the vast majority of that data using tools available for free to the public, including the public Drinking Water Watch portal or the WQIr files on the State Water Board's website. Some data used in the estimates may have, since November 2015, been altered or deleted if determined by a public water system or laboratory to be erroneous. The State Water Board believes that the available data are sufficient to accurately approximate the costs of compliance to public water systems, customers, and other affected parties including the cost per customer and aggregate cost of compliance.
10	<u>California Manufacturers &</u> <u>Technology</u> <u>Association/American</u> <u>Chemical Council</u>	16	S - Cost-Benefit Analysis	The State Water Board did not disclose a bona fide economic feasibility analysis or a costbenefit analysis, which is a prerequisite for determining economic feasibility. The Initial Statement of Reasons contains brief sections titled "economic feasibility," but these sections do not include actual analyses of economic feasibility. ¹² Most of the text merely summarizes the Board's cost estimates. In lieu of what the law requires, the Board offers unsupported, boilerplate assertions without any reasoned basis. ¹² State Water Resources Control Board (2017e), pp. 13-16 (on monitoring) and pp. 17- 19 (on treatment).	See responses to Commenter 10, Comments 1 and 4.
				The Board states that it "does not perform a cost-benefit analysis when evaluating economic feasibility," ¹³ but nowhere does the Board clearly explain exactly what it did do. This is especially peculiar given that the Board recognizes that it has a separate obligation to conduct an analysis pursuant to Government Code § 11340 et seq., and that this report "should include the benefits of the regulatory action." ¹⁴ How this is to be done without conducting cost-benefit analysis is not explained. Moreover, the Division of Drinking Water has previously acknowledged in many previous drinking water rulemakings that cost-benefit	Ultimately, where to set the MCL is not an economic formula, but rather a policy decision of the State Water Board members. State Water Board members are provided information and analyses prepared by their staff, presenting the costs and benefits of the proposed regulation. For 1,2,3-TCP, staff evaluated multiple MCLs, proposed an MCL and associated regulations, and then proceeded through the rulemaking process, including public comment, and ultimately bringing the regulations to the State Water Board members for approval at a public hearing.

Commenter	Commenter	Comment		Summarized Comment/	
ID	Name/Organization	ID	Category	Proposed Regulation Change	Response Summary
10	California Manufacturers & Technology Association/American Chemical Council	17	S - Cost-Benefit Analysis	analysis is essential. ¹⁵ ¹³ State Water Resources Control Board (2017a), p. 6. A similar statement can be found in the Standardized Regulatory Impact Analysis. See State Water Resources Control Board (2016), Attachment A, p. 5. ¹⁴ State Water Resources Control Board (2017e), p. 5. ¹⁵ See, e.g., California Department of Health Services (1999a), California Department of Health Services (1999b), California Department of Health Services (1999c), California Department of Public Health (2008), California Department of Public Health (2013), State Water Resources Control Board (2015).	The economic evaluation looked at the estimated costs of the monitoring and treatment for small and large systems, and assessed from those costs whether those additional costs would be economically feasible for water systems and households to pay. Page 22 of the ISOR states that "the cost per connection of centralized treatment does not greatly decrease at higher MCLs and therefore, an economically disadvantaged SWS would likely not find a higher MCL to be more economically feasible," than a lower, more stringent MCL. Therefore, because costs of treatment would not change significantly if the MCL was set at a less stringent level, and coupled with the additional considerations that could make the MCL more economically feasible for small systems, including the availability of economic assistance from loans and grants and the fact that people could stop buying bottled water, the State Water Board was able to make its determination that the MCL was being set as close to the PHG as economically and technologically feasible, and avoiding any significant risk to public health. See also responses to Commenter 10, Comments 1 and 4.
10	California Manufacturers & Technology Association/American Chemical Council	18	S - Cost-Benefit Analysis	The Board's denial that it has conducted a cost-benefit analysis is contradicted by documents it supplied to peer reviewers. In a document describing how data from water sources were "filtered to remove sources that are not active drinking water sources," the Board acknowledges that it performed a "full cost-benefit analysis": This worksheet has been filtered to highlight small water sources with average source concentrations of 1,2,3-TCP of more than 150 ng/L. Small water sources (or SWS) are for this analysis water systems with <200 service connections, which is used as a separator in some regulations. In the full version of the cost-benefit analysis the filtering of concentration and service connections occurs later in the process, but for ease of understanding the source narrowing has been performed now. ¹⁶	
10	<u>California Manufacturers &</u> <u>Technology.</u> <u>Association/American</u> <u>Chemical Council</u>	19	S - Cost-Benefit Analysis	 The implied existence of a "full cost-benefit analysis: is acknowledged a second time: Three versions of this worksheet (Small Water Systems, Large Water Systems, and Treated Water Systems) are included to help better illustrate the final cost-benefit results.¹⁷ Thus, it appears that the State Water Board conducted a cost-benefit analysis of the form it denies is required by law and denies having performed. Given the limited information the Board did disclose, the inability of the public to reproduce the Board's results based on this limited disclosure, and the fact that what the Board did disclose came from Excel spreadsheets¹⁸ that were not themselves disclosed, it is reasonable to infer that the Board performed, but did not disclose, a full cost-benefit analysis. ¹⁷ State Water Resources Control Board (2017c), p. 6 (emphasis added). ¹⁸ See the embedded comment on p. 4 of State Water Resources Control Board (2017c) ("Missing text was added "estimate the overall monitoring costs." that had been previously cut off in conversion to a pdf document from Excel"). 	

Commenter	Commenter	Comment	C-1	Summarized Comment/	D
ID	Name/Organization	ID	Category	Proposed Regulation Change	Response Summary
10	<u>California Manufacturers &</u> <u>Technology</u> <u>Association/American</u> <u>Chemical Council</u>	20	S - Cost-Benefit Analysis	Whether treatment is economically feasible for any alternative MCL ought to be determined using economic principles. This is not how the Board proposes to decide, however. Figure A illustrates such a model, assuming a linear nothreshold risk model as used by Office of Environmental Health Hazard Assessment (OEHHA) to derive the PHG. The benefit of treatment per connection (shown in green) is linear and intersects the origin. However, cost (shown in red) rises as the MCL becomes more stringent. Any MCL lower than T* is economically infeasible because it delivers less benefit than cost. For any fixed technology, the higher the risk posed by the contaminant, the higher on the graph the green benefit line will be and the closer to zero T* will be located. ¹⁹ A simplified way to implement the model is shown in Figure B, which displays the benefit information in cost-effectiveness units (i.e., cost per unit of benefit). In contrast to this economic model of economic feasibility, which has a solution that can be determined using data that the Board has on file, the model used by the Board cannot be shown graphically, calculated quantitatively, or coherently described verbally. ¹⁹ MCLs below MCLb, the PHG, are not permitted by law. <figure a:="" economic="" feasibility="" of="" treatment=""> <figure (simplified)="" b:="" economic="" feasibility="" of="" treatment=""></figure></figure>	See responses to Commenter 10, Comments 1 and 4.
10	<u>California Manufacturers &</u> <u>Technology</u> <u>Association/American</u> <u>Chemical Council</u>	21	S - Cost-Benefit Analysis	alternative MCL, and estimates cost per "theoretical" cancer case avoided. But nowhere does the Board provide a reasoned basis for concluding that the proposed MCL (or any other MCL) is economically feasible, nor does the Board reveal the criteria it used to make this determination. The closest thing to a	See CMTA/ACC Responses 1 and 4. The State Water Board disagrees that the cost per connection is an inappropriate metric for assessing economic feasibility, and believes that considering the cost per connection and the total cost to the state is critical. As described in the ISOR, when treating 1,2,3-TCP using GAC, the estimated per-connection cost of treatment is fairly constant, and the only real change as the MCL is lowered is the number of systems that would have to treat. Ultimately, whether to adopt the MCL is a policy decision for the State Water Board, after consideration of the information provided in the regulatory process and the comments received during the public process. See also responses to Commenter 10, Comments 1 and 4.
10	California Manufacturers & Technology Association/American Chemical Council	22	S - Cost-Benefit Analysis	Third, the Board's expressed concern about the high cost of the proposed MCL for small systems demonstrates confusion about the difference between cost and net benefit. The estimated average \$609 cost at 5 ppt is "high" because it produces no more than \$27 in reduced health risk. Households get nothing in return for the remaining \$582. This is not merely a wasteful diversion; it may have the unintended (and clearly undesirable) effect of increasing other health risks, particularly among the poor ²¹ ²¹ See, e.g., Keeney (1990), Keeney (1994) and Lutter and Morrall III (1994).	As noted previously, where the MCL is set is a policy decision for the Water Board, not a set economic formula. See also responses to Commenter 10, Comments 1 and 4.

Final Response to Comments for Proposed 1,2,3-Trichloropropane (1,2,3-TCP) Maximum Contaminant Level (MCL) Regulations

Commenter	Commenter	Comment	Category	Summarized Comment/	Response Summary
ID	Name/Organization	ID	category	Proposed Regulation Change	, ,
10	<u>California Manufacturers &</u> <u>Technology</u> <u>Association/American</u> <u>Chemical Council</u>	23	S - Cost-Benefit Analysis	Of course, there are circumstances in which spending the additional \$609 would be economically feasible. For example, If the risk posed by 1,2,3-TCP were 100 times greater than calculated by OEHHA, a household might gain as much as \$2,790 worth of benefits from reduced risk at the 5 ppt MCL. In that case, a 5 ppt MCL clearly would be economically feasible. For every dollar increase in the household's water bill, it would gain \$4.42 in benefits from risk reduction. Under the Board's proposal, however, each dollar increase in the household's water bill returns less than five cents in risk reduction benefit.	What is economically feasible is a policy decision of the board, and is not solely based on a cost-benefit analysis. See also response to Commenter 10, Comment 4.
10	California Manufacturers & <u>Technology</u>	Technology	S - Cost-Benefit Analysis	If the average cost per connection for small-system customers is \$609 for a 5 ppt MCL, for many households cost will be much higher. A hint about just how high can be gleaned from the Board's calculations. Setting the MCL at 35 ppt instead of	HSC 116365(b)(3) states that the State Water Board must consider the "cost per customer and aggregate cost of compliance." The State Water Board's economic estimates are not meant to be an accurate cost model for every public water system; some water systems will have higher costs and some will have lower costs. See also response to Commenter 10, Comment 3, regarding the concern regarding specific and significant per-connection cost increases between evaluated MCLs.
	Association/American Chemical Council			the effects that the public can expect. But the more that systems are different, the more misleading the average will be. Large net benefits realized by a few systems can disguise a widespread pattern of net costs. Statewide aggregation is especially inappropriate because it hides all the variability. The State Water Board appears to have sufficient information to report estimated annualized cost for each system. It has not done so, however; the Board only reports averages. Yet we know from the 70 ppt to 35 ppt comparison described above that cost per connection among small-system customers varies by at least a factor of 25, and quite possibly much more.	
10	<u>California Manufacturers &</u> <u>Technology</u> <u>Association/American</u> <u>Chemical Council</u>	25	S - Cost-Benefit Analysis	benefits exceed costs. Further, the smaller the unit of analysis, the more likely	HSC 116365 does not mandate that per-connection costs be performed at a system level. Such an analysis would not be relevant in setting an MCL because not only are the estimates not meant to be an accurate cost model for every individual public water system, but also a state-wide policy should not be limited to what the smallest and/or most disadvantaged systems can afford. If that was the case, then no new standard could ever be adopted as there are currently small disadvantaged systems that are already having difficulties meeting existing requirements. The result would be that affordability for a small percentage of the population would be driving health protections for the majority of the population. Similarly, ranking the systems would not provide any direction to the State Water Board when determining economic feasibility in accordance with HSC 116365. See also responses to Commenter 10, Comments 1 and 4.
				Table 4 in the Initial Statement of Reasons (ISOR) includes two boxes within the results for each alternative MCL considered. ²² One box applies to the Board's estimates of the costs of treatment: Costs are for systems requiring treatment. Monitoring costs for noncontaminated sources and contaminated sources without treatment are not included.	The commenter misunderstands the meaning of "systems requiring treatment." Systems with existing 1,2,3-TCP treatment systems still require treatment, and the ISOR acknowledges that these water systems will not have capital costs on page 18. In the absence of an MCL or with an MCL established at a level higher than their current source contamination levels, these public water systems could apply for permit amendments to cease treating for 1,2,3-TCP. Once the 1,2,3-TCP MCL is effective these sources will require treatment, and therefore any current and optional costs will become mandatory

Commenter	Commenter	Comment	Category	Summarized Comment/	Response Summary
ID	Name/Organization	ID	category	Proposed Regulation Change	
10	California Manufacturers & Technology Association/American Chemical Council	26	S - Cost-Benefit Analysis	A second box applies to the Board's estimate of theoretical cancer cases averted thorough treatment: These approaches are analytically inconsistent. The Board's cost estimate includes only "systems requiring treatment" but its calculation of risk reduction appears to include cancer cases averted by treatment systems already in place. This apples- to-oranges comparison violates elementary principles of economic analysis, which require that the same baseline be used for both sides of the ledger. It is highly misleading to count benefits that cannot exist, and the Board must remove them. ²² State Water Resources Control Board (2017e).	costs of the regulation.
10	<u>California Manufacturers &</u> <u>Technology</u> <u>Association/American</u> <u>Chemical Council</u>	27	S - Cost-Benefit Analysis	Figure C and Figure D follow the simplified model presented in Figure B to show the Board's estimated cost per "theoretical" cancer case avoided for small and large water systems, respectively. ²³ After considerable research, analysis and peer review by its Science Advisory Board, the U.S. Environmental Protection Agency (USEPA) has established an upper-bound value for avoiding the premature mortality of a random person in a population whose members face small unit risks. The USEPA "value of a statistical life" (VSL), updated to 2016 dollars, ²⁴ is superimposed in green on both graphs. Average valuations for each alternative MCL are identified, and the trend in values is represented by a smoothed curve for easier visualization. Economic feasibility requires that the red curve be lower than the green line. ²⁵ ²³ State Water Resources Control Board (2017e), Table 4. ²⁴ U.S. Environmental Protection Agency (2016), p. 7-8 (\$7.9 million (\$2008) multiplied by the ratio of the 2016 and 2008 GDP deflators (112.216/99.808) yields \$8,879,600. The USEPA VSL applies to tangible, not merely theoretical, premature mortality risks. ²⁵ The curve for small water systems displays a hitch that suggest the potential for material error in the Board's analysis. A more stringent MCL should never be less expensive.	See responses to Commenter 10, Comments 1 and 4.
10	California Manufacturers & Technology, Association/American Chemical Council	28	S - Cost-Benefit Analysis	produces no more than \$0.63 in theoretical benefit from risk reduction for every tangible dollar spent on treatment. Only the 35, 70 and 150 ppt MCLs produce greater theoretical benefit than tangible cost. At the proposed MCL, it takes treatment at more than 554,000 connections to prevent a single theoretical cancer case.	As previously stated, when the State Water Board proposes a new or revised MCL, State Water Board staff evaluates how close it can set the MCL to the PHG, without the MCL becoming economically or technologically infeasible. Here, once a proposed MCL was identified, the proposed MCL and associated regulations then proceeded through the rulemaking process, including public comment, and ultimately, bringing the regulations to the Board Members for approval. In considering whether the selected MCL is as close to the PHG as is technologically and economically feasible, the Board Members consider all of the information that is part of the regulatory package, including the comments made by the public. Ultimately, where to set the MCL is a policy decision of the State Water Board members, and not merely an economic formula. See also response to Commenter 10, Comment 4.
10	California Manufacturers & Technology Association/American Chemical Council	29	S - Cost-Benefit Analysis	economically feasible. Depending on the MCL, each dollar in tangible cost produces from \$0.09 to \$0.41 in theoretical benefit per tangible dollar in cost. At the proposed MCL, it takes treatment at nearly 160,000 connections to prevent a	In considering whether the selected MCL is as close to the PHG as is technologically and economically feasible, the Board members consider all of the information that is part of the regulatory package, including the comments made by the public. Ultimately, where to set the MCL is a policy decision of the State Water Board members, and not merely an economic formula. See also response to Commenter 10, Comment 4.

Final Response to Comments for Proposed 1,2,3-Trichloropropane (1,2,3-TCP) Maximum Contaminant Level (MCL) Regulations

Commenter	Commenter	Comment	Category	Summarized Comment/	Response Summary
ID	Name/Organization	ID		Proposed Regulation Change	The incremental costs described are misleading and irrelevant. As described in the ISOR,
10	California Manufacturers & Technology Association/American Chemical Council	30	S - Cost-Benefit Analysis	alternative MCL. Greater insight can be gleaned by comparing the incremental costs and risk reductions obtained by moving from any alternative MCL to its next	the cost of treatment for 1,2,3-TCP to small water systems is fairly consistent on a per- connection basis, and the only real change as the MCL is made more stringent is that the number of systems that would have to treat increases, not the cost per system. See also
10	California Manufacturers & <u>Technology</u> <u>Association/American</u> <u>Chemical Council</u>	31	S - Cost-Benefit Analysis	Figure F displays the same information for large water systems. The 150 ppt MCL may be economically feasible because the cost per theoretical cancer case avoided is about \$2 million. All other incremental changes are not, however. Incremental cost-effectiveness ranges from \$15 million to \$196 million per theoretical cancer case avoided. None of these incremental cost-effectiveness ratios offers anything close to the USEPA VSL.	See responses to Commenter 10, Comments 1 and 4.
10	California Manufacturers & Technology Association/American Chemical Council	32	S - Cost-Benefit Analysis	Similar comparisons can be made between the proposed MCL and each of the five alternatives considered by the Board. These comparisons are shown in Figure G (for small systems) and Figure H (for large systems). For small systems, cost per theoretical cancer case avoided ranges from \$135 million (moving from 150 to 5 ppt) to \$408 million (moving from 7 to 5 ppt). For large systems, cost per theoretical cancer case avoided ranges from \$41 million (moving from 150 to 5 ppt) to \$90 million (moving from 7 to 5 ppt). <figure adjacent<br="" avoided="" cancer="" case="" cost="" e:="" implied="" incremental="" per="" theoretical="" when="">MCLs are Compared (SWS)> <figure 6:="" adjacent<br="" avoided="" cancer="" case="" cost="" per="" theoretical="" when="">MCLs are Compared (LWS)> <figure 6:="" avoided="" cancer="" case="" cost="" each="" five<br="" from="" if="" moving="" of="" per="" the="" theoretical="">Alternative MCLs to the Board's Proposed 5 ppt MCL (SWS)> <figure avoided="" cancer="" case="" cost="" each="" from="" h:="" if="" implied="" moving="" of="" per="" the<br="" theoretical="">Five Alternative MCLs to the Board's Proposed 5 ppt MCL (LWS)></figure></figure></figure></figure>	See responses to Commenter 10, Comments 1 and 4.
				The State Water Board appears to assume that cancer risk reductions are realized immediately after exposure is reduced or eliminated. This assumption would be inconsistent with the cancer risk model OEHHA used to derive the PHG, however. OEHHA's risk model equates an increase of 0.0007 ppb of 1,2,3-TCP ingested at 4 liters/day equivalent for 70 years with a one in 1 million excess cancer risk. Thus, it follows that a decrease in exposure at the same rate for the same period would reduce cancer risk by one in 1 million. But the Board appears to assume that all cancer risk reductions occur immediately, not over 70 years. ²⁷ The correct way to perform this calculation requires taking account of the estimated number of years of exposure reduction for each connection.	avoidance) is appropriate and is not inconsistent with the Public Health Goal established by OEHHA. See also response to Commenter 10, Comment 4.

Commenter	Commenter	Comment	Category	Summarized Comment/	Response Summary
ID	Name/Organization	ID	category	Proposed Regulation Change	· · ·
10	California Manufacturers & Technology Association/American Chemical Council	33	S - Cost-Benefit Analysis	In 2015, the median age of California residents was 36.2 years, ²⁸ implying that the median resident whose drinking water is treated would gain 33.8 years of exposure reductions, or 48% of the unit risk reduction. ²⁹ This reduction in calculated cancer risk reduction can be illustrated by reducing the USEPA VSL from \$8.9 million to \$4.3 million. Figure I shows that this adjustment has no material effect in economic feasibility for small water systems. However, the adjustment matters for large systems, as Figure J shows. The most stringent MCL that is economically feasible is now someplace between 35 and 70 ppt. ²⁷ This inference is drawn from State Water Resources Control Board (2017d), but it cannot be confirmed because the Board did not show its work. ²⁸ U.S. Census Bureau (2015). ²⁹ A more sophisticated adjustment would take account of the age distribution and average weights of persons in each age distribution group. The OEHHA risk model assumes the weight of an adult is 70 kg. <figure (sws)="" 1:="" [<i="" adjusted="" avoided="" board-estimated="" cancer="" case="" cost="" exposure="" for="" of="" per="" theoretical="" years="">data labels: MCL in ppt; \$ millions per theoretical cancer case avoided] </figure>	
10	California Manufacturers & Technology Association/American Chemical Council	34	S - Cost-Benefit Analysis	 Additional adjustments are needed to transform the Board's work into a proper economic feasibility analysis. These adjustments follow economic analysis guidance published by USEPA: Risk assessors and economists should: 1. Estimate changes in the probabilities of human health or ecological outcomes rather than 'safety assessment' measures such as reference doses and reference concentrations. 2. Work to produce expected or central estimates of risk, rather than bounding estimates as in safety assessments. At a minimum, any expected bias in the risk estimates should be clearly described. 3. Attempt to estimate the "cessation lag" associated with reductions in exposure. That is, the analysis should characterize the time profile of changes in exposures and risks. 4. Attempt to characterize the full uncertainty distribution associated with risk estimates.³⁰ Each of these items has an important implication for the State Water Board's analysis, and is discussed in the subsections below. ³⁰ U.S. Environmental Protection Agency (2016), p. 7-5. The "reference dose" is USEPA's version of the safety assessment performed by OEHHA, resulting in the PHG. For more on its methodology, see Barnes and Dourson (1988), U.S. Environmental Protection Agency (202b), U.S. 	When developing estimates of the costs and the benefits, the State Water Board developed estimates based on reasonable assumptions. The risk calculation method on pages 20 and 21 of the ISOR was accepted as adequate by the peer reviewers. See also responses to Commenter 10, Comments 1 and 4.

Commenter ID	Commenter Name/Organization	Comment ID	Category	Summarized Comment/ Proposed Regulation Change	Response Summary
				The purpose of the PHG is to identify a "virtually safe dose," an exposure level that "avoids any significant risk to public health." ³¹ The State Water Board has a different responsibility: determining which MCLs are economically feasible. That requires estimating risk reduction objectively. It is not sufficient to calculate "theoretical" cancer cases avoided, as the Board has done. Reductions in cancer incidence can only be reliably estimated using an objective characterization of dose-response, and the State Water Board did not perform any such characterization. ³² The Board calculates cancer cases using a formula in the PHG. But the PHG is what USEPA calls a "safety assessment" that yields "bounding estimates" rather than "expected or central estimates of risk." A properly conducted economic feasibility analysis must use "expected or central estimates of the actual number of cancer cases the public can reasonably anticipate will be prevented.	How the PHG was set by OEHHA is outside of the scope of these regulations. Once a PHG is set, the State Water Board is instructed by HSC 116365 to set the MCL as close to it as technologically and economically feasible. See also responses to Commenter 10, Comments 1 and 4.
				The laboratory studies OEHHA used to derive the PHG have key features that make the PHG inappropriate for directly estimating human cancer risk. First, rats and mice received by gavage doses of 1,2,3-TCP substantially higher than the levels to which humans are exposed via drinking water. ³³ Second, these doses likely exceeded what toxicologists call the Maximum Tolerated Dose (MTD). When the MTD is exceeded in a laboratory animal study, cancer often occurs as a secondary result of frank toxicity. ³⁴ And toxicity was evident in these bioassays; there was substantial weight loss and premature mortality from causes other than cancer. ³⁵ Third, gavage involves direct administration of a large dose of the contaminant, which can have long-lasting effects that would not occur in drinking water. ³⁶ This is very different from drinking water ingestion, which involves a fairly constant concentration. Third, the use of corn oil instead of drinking water as the agent to carry the dose appears to have had its own, independent carcinogenic effects. In the words of peer reviewer Helmut Zarbl, corn oil "synergiz[es] with carcinogens by acting as a co-carcinogen or a tumor promoter, therefore overestimating carcinogenicity." ³⁷ Finally, OEHHA relied on a cancer site in rodents – the forestomach of the female mouse – that does not exist in humans, so its propriety for human cancer risk assessment is controversial. ³⁸	

Commenter	Commenter	Comment		Summarized Comment/	
ID	Name/Organization	ID	Category	Summarized Comment/ Proposed Regulation Change	Response Summary
	Name/Organization	U		The product of this series of assumptions is an overstatement of the "expected or	
				central estimates of human cancer risk." If the Board were to follow USEPA's	
				guidance, it would estimate the bias inherent in the PHG and adjust its	
				calculations of cancer cases avoided accordingly. One way to do that is to	
				estimate risk using a model with less intentional bias, such	
				as the model by Tardiff and Carson (2010). Instead of relying on a series of default	
				assumptions, this model incorporates mode-of-action information and the weight-	
	California Manufacturers &			of-evidence framework established by the World Health Organisation's	
10	Technology	35	S - Cost-Benefit Analysis	International Programme of Chemical Safety into a nonlinear dose-response	
	Association/American			model. When applied, this model produces an estimate of 200-280 ppb as the	
	Chemical Council			drinking water equivalent level that is "considered protective against tumors,"	
				and thus it is likely to be consistent with the statutory risk management directive	
				that applies to PHGs. ³⁹	
				³¹ Compare Faustman and Omenn (2001), p. 95 ["a dose that gives an 'acceptable level'	
				of risk (e.g., upper confidence limit for 10 ⁻⁶ excess risk")) and Office of Environmental	
				Health Hazard Assessment (2009), p.2 "OEHHA sets PHGs for carcinogens at a de	
				minimis risk level of one in a million (10^6) "].	
				³² Had the Board attempted to do so, two of the three peer reviewers had the requisite expertise to opine on whether it had succeeded. The charge to reviewers asked them	
				only to validate the Board's arithmetic, a task not requiring a terminal degree in	
				toxicology or mathematics.	
				toxicology of mathematics.	
				³³ Rats were administered 0, 5, 10 or 30 mg/kg-day 5 days/week. Mice were	
				administered 0, 10, 30 or 60 mg/kg-day 5 days/week. See Office of Environmental	
				Health Hazard Assessment (2009), pp. 16-23. These doses are 5-6 orders of magnitude	
				greater than what humans might experience via drinking water.	
				³⁴ Eaton and Klaassen (2001), p. 29; Katsonis, Burdock and Flamm (2001), pp. 1064-	
				1065; Pitot III and Dragan (2001), pp, 293, 299; and National Research Council (1993).	
				³⁵ Despite its relevance, OEHHA did not discuss whether the studies it relied upon	
				administered doses exceeding the MTD or whether such dosing could have had material	
				effects on the results. See Office of Environmental Health Hazard Assessment (2009),	
				and search for "MTD" and "Maximum Tolerated Dose." MTD also is not included in the	
				State Water Board's list of relevant acronyms. See State Water Resources Control Board	
				(2017f).	
				^{35 [sic]} La, Schoonhoven, Ito, et al. (1996), p. 108 ("Gavage administration, which results	
				in high bolus concentrations compared to drinking water exposure, may quantitatively	
				affect toxicokinetics, cytotoxicity, and genotoxicity"); and Tardiff and Carson (2010), p.	
				1506 ("cancer DWELs are based on corn oil studies and corn oil gavage, unlike	
				drinking water exposure, contributes – perhaps extensively – to tumor production").	
				Concern about bolus doses is not mentioned in the PHG.	
				³⁷ Versar (2008), p. 11 (comments by USEPA peer reviewer Helmut Zarbl, emphasis in	
				original), possibly based on La, et al. (1996) (potency 1.4 to 2.4 times higher where corn oil was administered). See also Tardiff and Carson (2010), p. 1506 ("corn oil gavage,	
				oli was administered). See also Tardiff and Carson (2010), p. 1506 ("Corn oli gavage, unlike drinking water exposure, contributes – perhaps extensively – to tumor	
				production"). Concerns about gavage administration and the synergistic effect of corn	
				oil are not mentioned in the PHG.	
				³⁸ Director Cotto Llong et al. (2007)	
				³⁸ Proctor, Gatto, Hong, et al. (2007).	
				³⁹ Tardiff and Carson (2010), p. 1506. A concentration that is "protective against	
				tumors" is similar in intent to "avoid[ing] any significant risk to public health" (HSC § 116365(b)(2)). The concentration estimated to be protective against noncancer effects is	
				116365(b)(2)). The concentration estimated to be protective against honcancer effects is 780 ppb.	
				7ou hhn.	

Commenter	Commenter	Comment	Category	Summarized Comment/	Response Summary
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	California Manufacturers & Technology Association/American Chemical Council	36	S - Cost-Benefit Analysis	USEPA routinely uses the VSL to quantify the benefit of preventing premature mortality. This method does not apply without modification to other health endpoints, and economic analyses must use valuation defaults that match as closely as possible the actual endpoints of interest. ⁴⁰ The nationwide 5-year survival rate for digestive system cancers in 2006-12 was 44.3%, ⁴¹ so an adjustment to the USEPA VSL is necessary and appropriate to account for this difference. ⁴⁰ U.S. Environmental Protection Agency (2016), p. 7-5. ⁴¹ Howlader N, Noone AM, Krapcho M, et al. (2016).	Unlike the federal SDWA, the California SDWA does not require a health risk reduction and cost analysis in support of any primary drinking water regulation (42 USC 300g- 1(b)(3)(C)(i)(1) and (II).) Therefore, there is no reason to use or adjust for the U.S. EPA VSL. See also responses to Commenter 10, Comments 1 and 4.
10	California Manufacturers & Technology Association/American Chemical Council	37	S - Cost-Benefit Analysis	For health endpoints such as cancer, there is a "cessation lag" defined as " the time interval between the cessation of exposure and the reduction in risk." ⁴² USEPA guidance directs analysts to account for cessation lags when valuing reduced mortality risks, and then discount appropriately. ⁴³ USEPA's independent Science Advisory Board concurs with this guidance and has further advised the Agency to discount delayed cancer reduction benefits at the same rate used to discount other future benefits and costs. ⁴⁴ ⁴² U.S. Environmental Protection Agency (2016), p. x. ⁴³ U.S. Environmental Protection Agency (2016), p. 7-8. 44 U.S. Environmental Protection Agency Science Advisory Board (2000). The SAB committee used the term "latency" for the delayed onset of illness after exposure (as EPA's current guidance uses it) and delayed realization of benefits after reduction in exposure (what EPA's current guidance calls "cessation lag"). Different terms are appropriate because there is no biological reason why both delays would be the same. The impetus for the SAB review was a need to inform Agency analysts about how to capture both latency and cessation lag with respect to drinking water regulation.	Unlike the federal SDWA, the California SDWA does not require a health risk reduction and cost analysis in support of any primary drinking water regulation (42 USC 300g- 1(b)(3)(C)(i)(I) and (II).) Therefore, there is no reason to discount delayed cancer reduction benefits. See also responses to Commenter 10, Comments 1 and 4.
10	California Manufacturers & Technology Association/American Chemical Council	38	S - Cost-Benefit Analysis	When a regulatory action has future costs and benefits, both must be discounted in the same manner. ⁴⁵ This enables apples-to-apples comparisons. The State Water Board used a 7% discount rate for future costs, so 7% is a reasonable discount rate to apply to future benefits. The Board's published analysis compares apples to oranges – discounted costs and undiscounted benefits. ⁴⁶ ⁴⁵ U.S. Environmental Protection Agency (2016), Chapter 6. ⁴⁶ The Board discounted only a 20-year stream of costs. This period may be insufficient to capture all benefits. However, the same time period must be used for both benefits and costs, so of a longer period is used for benefits it also must be used for costs.	The State Water Board did not perform a cost-benefit analysis of the type suggested by the commenter and did not apply a monetary benefit-value to human life or cancer avoided. The State Water Board did provide an estimated annual cost per cancer reduction, but did not base any determination of feasibility on that value. A capital recovery interest rate of 7% was applied to capital costs to determine amortized capital costs, but reapplying that cost to cancer avoidance is not appropriate. See also responses to Commenter 10, Comments 1 and 4.
10	<u>California Manufacturers &</u> <u>Technology</u> <u>Association/American</u> <u>Chemical Council</u>	39	S - Cost-Benefit Analysis	and correct, the proposed MCL clearly is not economically feasible. Average cost per theoretical cancer case avoided is \$97 million for small systems and \$14 million for large systems. These ratios are, respectively, 12 and two times the USEPA VSL, and the VSL applies to premature mortality, not cancer. When the incremental effects of adjacent MCLs are considered, each of the	The State Water Board disagrees with the conclusions for the reasons stated throughout this response. The State Water Board is not required by HSC 116365 to perform a cost- benefit analysis and set the MCL at that place where the expense of treatment is exceeded by the benefit of the regulation, which the commenter suggests should be measured by the monetary value of reduced cancer, or of a human life saved. The State Water Board is required to "consider the costs of compliance to public water systems, customers, and other affected parties with the proposed primary drinking water standard, including the cost per customer and aggregate cost of compliance, using best available technology." (HSC 116365(a)(3).) The ISOR contains clear documentation that the State Water Board did sufficiently consider economic feasibility as required and that the proposed regulations are economically feasible. The Water Board's interpretation of what is required by HSC 116365 is entitled to great weight unless it is either 'arbitrary, capricious or without rational basis' or is 'clearly erroneous or unauthorized.' (Yamaha Corp. of America v. State Board of Equalization (1998) 18 Cal. 4th 1, 6-7.) An MCL is "a quasi-legislative regulation adopted by [the Water Board] to which the Legislature has confided the power to 'make law,' and which, if authorized by the enabling legislation, bindcourts as firmly as statutes themselves." (Id. at 7.)

Commenter	Commenter	Comment	Catogony	Summarized Comment/	Response Summary
ID	Name/Organization	ID	Category	Proposed Regulation Change	Response Summary
11	Pasadena Water & Power	1	A - Cost Recovery	"GAC is an expensive technology, but given the reality that the overwhelming majority of CWSs that have 123-TCP in their water sources have Potentially Responsible Parties (PRPs) who will pay for such a system, GAC does make sense."	The State Water Board is aware that some public water systems have been able to successfully recover the cost of treatment from responsible parties. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations.
11	Pasadena Water & Power	2	B - Adopt 5 ppt	"supports the use of a Detection Level for Reporting (DLR) of 5 ppt "	Thank you for your support.
11	Pasadena Water & Power	3	E - Blending	"recommends that the language of the proposed regulations be expanded to	Blending is already considered to be a treatment technique capable of reducing d contaminant concentrations to compliance levels, and therefore does not require inclusion in the regulations. Blending is highly site-specific and reliant upon operating criteria and plans that are reviewed by the Division of Drinking Water District offices; additional regulations for blending would not be appropriate.
12	Pasadena Water & Power	4	F - Non-detects	"allow a numeric value of zero for laboratory results that are less the DLR when averaging is used for compliance."	A value of zero is typically used for results that are less than the Detection Limit for the Purposes of Reporting (DLR) when calculating the running annual average of source water samples. Further defining the value of non-detects in regulation may provide clarity but may also interfere with necessary operational flexibility when establishing operations plans that are adequately protective of public health.
12	Environmental Working Group, Clean Water Action, Community Water Center	1	A - Cost Recovery	"there are responsible parties that courts have indicated can and should pay for water treatment, so this health-protective standard is both feasible and appropriate."	The State Water Board is aware that some public water systems have been able to successfully recover the cost of treatment from responsible parties. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations.
12	Environmental Working Group, Clean Water Action, Community Water Center	2	B - Adopt 5 ppt	"urge the State Water Resources Control Board to adopt the Division of Drinking Water's proposed 5 part per trillion (ppt) maximum contaminant level (MCL) for 1 ,2,3-trichloropropane (TCP)."	
13	<u>Holly Welstein</u>	1	A - Cost Recovery	"This will allow water systems to recoup water treatment costs from the companies that knowingly sold contaminated pesticides that introduced this carcinogen into the water supply."	The State Water Board is aware that some public water systems have been able to successfully recover the cost of treatment from responsible parties. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations.
13	Holly Welstein	2	B - Adopt 5 ppt	"Please set the TCP drinking water standard at the detectable limit of 5 ppt."	Thank you for your support.
14	California Water Association	1	B - Adopt 5 ppt	"CWA joins all the commenting parties in supporting the proposed MCL of 0.000005 milligrams per liter (mg/L), or 5 parts per trillion (ppt)."	Thank you for your support.
14	California Water Association	2	D - Compliance plans	The proposed regulations do not recognize that complying with the proposed MCL may include "challenging and time-consuming actions". Many water systems may violate the MCL despite efforts to comply. "The Proposed Regulations Should Include a Systematic Compliance Strategy that Allows Water Systems to Come Into Compliance with the New Drinking Water Standard."	Granular activated carbon is neither a new nor a novel technology requiring extensive preliminary planning and design to implement. A compliance period to provide public water systems additional time to come into compliance with the MCL for 1,2,3-TCP is therefore not proposed as part of the regulations. Although public water systems may wish to avoid being declared noncompliant with the proposed MCL during the period between finding a source out of compliance and completing either installation of treatment or other activities which may bring the water system back into compliance, providing a compliance period is not necessary and not in the public interest.

Commenter	Commenter	Comment	Catagony	Summarized Comment/	Response Summary
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14	California Water Association	3	D - Compliance plans	"CWA recommends revising the Proposed Regulation to include a firm, but flexible strategy that would facilitate public water system compliance with the final MCL in a manner that balances the public health needs of customers with the cost and rate impacts on those same customers." "In CWA's view, an 18 to 24-month compliance time frame, for instance, would remove the specter of unwarranted enforcement action without removing the urgency to get treatment up and running."	The Division of Drinking Water District offices may work with systems on system-specific plans to avoid violating the proposed MCL or coming into compliance with the regulations but the State Water Board does not consider allowing a water system to remain in compliance while serving water that does not meet the proposed 1,2,3-TCP MCL to be adequately protective of public health.
14	California Water Association	4	G - CEQA	Be Supplemented By Analysis of GAC Treatment."	The Initial Study/Mitigated Negative Declaration (IS/MND) analyzes potential environmental impacts of implementing Granular Activated Carbon (GAC), and demonstrates that GAC would not have significant environmental impacts. Nonetheless, there is the potential for unique circumstances at specific water systems to necessitate additional analysis and mitigation to address site-specific concerns. The State Water Board, therefore, disagrees that there are changes that should be made to the document to ensure that it would be able to be relied upon by all water systems that may implement GAC, and that site-specific conditions may require that additional analyses be completed.
				addressed elsewhere. The other comment addresses the analyses performed pursuant to Public Resources Code section 21159 and the California Environmental Quality Act (CEQA). CWA states that they do not challenge the conclusions in the initial study/mitigated negative declaration (IS/MND), but	The CWA is mistaken that GAC is required to be used to treat 1,2,3-TCP. Although it was identified as the BAT, and it is assumed that most systems with 1,2,3-TCP contamination will need to implement GAC, water systems can employ whatever strategies or treatment they want to address 1,2,3-TCP. The IS/MND analyzes potential environmental impacts of implementing GAC, and demonstrates that GAC would not have significant environmental impacts. Nonetheless, there is the potential for unique circumstances at specific water systems to necessitate additional analysis and mitigation to address site-specific concerns. The State Water Board, therefore, disagrees that there are changes that should be made to the document to ensure that it would be able to be relied upon by all water systems that may implement GAC, and that site-specific conditions may require that additional analyses be completed.
14	California Water Association	5	G - CEQA	CWA states that GAC is required and therefore the foreseeable treatment technology/pollution control equipment that public water systems must implement. Because of this, it believes the Board needs to analyze the impacts of implementation of GAC, pursuant to Public Resources Code 21159, and offers recommendations for bolstering the Board's analysis of the impacts of implementing GAC in the IS/MND. CWA believes the supplements are required to clarify that the analysis fully addresses the environmental effects of GAC, enabling lead agencies implementing GAC to rely on the IS/MND and streamline their environmental review.	
14	California Water Association	6	G - CEQA	"we recommend augmenting the IS/MND project description to explain with greater specificity, the assumptions used to assure that the environmental impacts analysis comprehensively and conservatively considers the impacts of implementing GAC units statewide by all PWSs reasonably likely to be required to address any source of 1,2,3-TCP contamination."	The Water Board decided not to implement the recommendation because it believes that the IS/MND sufficiently looked at the potential impacts of the installation of GAC for treatment of 1,2,3-TCP on a state-wide basis.
14	California Water Association	7	G - CEQA	"The ISOR identifies Point of Entry (POE) treatment as a potential alternative method of compliance, but the IS/MND does not. We recommend augmenting the IS/MND to include POE as an alternative method of compliance, and an assessment of the likely impacts of implementing POE, which are unlikely to be significant. At a minimum, the IS/MND should acknowledge and explain the discrepancy."	A separate discussion of POU/POE is not necessary. POU/POE technology would be the same, with the only difference being that the GAC would be located outside of a home or under a sink. No additional analysis is required.

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14	California Water Association	8	G - CEQA	"We recommend augmenting this text to clarify assumptions used to develop this reasonable range to show substantial evidence that the Board fulfilled this requirement in preparing the IS/MND."	No change is required. As was detailed in the IS/MND, the analysis recognized that this regulation would be implemented state-wide, and considered the various means of compliance, and focusing analysis on the potential impacts from GAC, the implementation of which will not differentiate much based on site-specific factors.
14	California Water Association	9	G - CEQA	"Clarify the discussion of future anticipated discretionary actions by the Board in connection with Safe Drinking Water Act amended permits, any public PWS in implementing GAC, and any other lead agencies with jurisdiction over private PWS implementation of GAC to provide that these future discretionary actions are not anticipated to required additional environmental analysis based on the comprehensive analysis of the IS/MND, but if such supplemental analysis is required, it could be conducted in connection with such future discretionary actions."	As described in the IS/MND on page 14 of the IS/MND, it is anticipated that the Water Board will likely rely on this IS/MND when taking future discretionary permitting actions to allow use of GAC to address 1,2,3-TCP, and would expect that other agencies, including public water systems and lead agencies with jurisdiction over private PWS, could also rely on the IS/MND. If, however, there are site specific impacts that have not been addressed, additional analysis may be required. It is not anticipated that additional environmental analysis will be needed, except to the extent that site specific conditions require additional analysis.
14	California Water Association	10	G - CEQA	"Since operation of GAC units require pumps, demanding energy, we recommend adding an analysis of energy impacts pursuant to CEQA Guidelines Appendix F."	Recommendation was considered, but found not necessary. For an existing well, an additional pump would not necessarily be required to run the GAC, and even if additional pump is required, the amount of additional energy expenditure would be very minimal, especially compared to the existing energy use to pump the water from the well.
14	California Water Association	11	G - CEQA	"We recommend adding in a discussion of construction air emissions for criteria pollutants since grading is anticipated to be necessary to install slabs, footings, etc., as is indicated on p. 33 of the IS/MND, and since greenhouse gas (GHG} emissions during construction are anticipated (p. 35}. Standard Air Quality Management District construction mitigation m [~] asures may or may not be necessary. Rather than no impacts, we suggest that no cumulative air quality impacts would exist, but would be less than significant."	Although there may be air emissions from construction, they would be so minimal as to not result in any impacts. The GAC facilities would generally be located adjacent to existing wells and distribution works, within the footprint of the existing facilities. One to three 12 foot diameter tanks would be installed on concrete pads, which would be approximately 200 square feet each. Construction related to creating such pads would be minimal, and air impacts, therefore, nonexistent. Note too that construction impacts on GHG emissions was addressed separately.
14	California Water Association	12	G - CEQA	"We recommend adding an additional MM to assure impacts to listed species (factor a) and impacts to Section 404 jurisdictional waters (factor c) and habitat conservation plans (factor f) are fully mitigated. Consistent with the state and federal Endangered Species Acts and federal Clean Water Act and Board policy, we recommend that the additional MM should require that the GAC implementation projects should be designed to avoid and minimize impacts to those resources to the maximum extent feasible."	As explained in the IS/MND, it is unlikely that installation of GAC would have a significant effect on biological resources. The treatment facilities will generally be located adjacent to existing disturbed areas, and the size of the pads necessary for a tank are fairly small, less than 0.5 acre for three tanks. In addition, a mitigation measure already was included to require avoidance of biological resources, and if avoidance is not possible, to mitigate impacts.
14	California Water Association	13	G - CEQA	"We recommend augmenting the GHG emissions analysis to encompass any increases in GHG's due to operational energy use."	No augmentation is necessary. Increases in operational energy use will be minimal, especially when compared with existing energy use for running well pumps.
14	California Water Association	14	G - CEQA	"We recommend: • adding a reference to the information relied upon to support the assumption that Backwash would be free of detectable levels of 1,2,3-TCP"	No addition is necessary. The assumption that backwash water would be free of detectable levels of 1,2,3-TCP is based on the fact that as the filter is backwashed, any detectable levels of 1,2,3-TCP would be absorbed in the backwash process.
14	California Water Association	15	G - CEQA	"We recommend • expanding the discussion of all pollutants likely to be contained in the backwash to show that it is truly a low threat discharge, particularly given that MM 5 allows for PW5s to discharge the backwash to the storm drain upon approval of the storm drain operator"	No expansion is necessary. The GAC system would likely be implemented after any existing treatment that is being implemented to remove other regulated constituents, such as organic and inorganic chemicals. During the backwash, GAC would be effective at removing 1,2,3-TCP and any other volatile and synthetic organic compounds that are not currently being treated. As described in the IS/MND, the resulting backwash water could contain chlorine, which would not be appropriate for all manner of disposal, and the manner of disposal would need to be appropriately approved. For example, if disposal to storm drain was proposed, the entity whose is permitted under the appropriate MS4 permit would have to provide permission for the discharge, which would be contingent, in part, upon the discharge meeting the applicable permitting requirements.

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14	California Water Association	16	G - CEQA		No revision is necessary. If the discharge did not meet the requirements of the applicable MS4 permit, it would not be able to discharge into the storm drain. Municipalities are the entities permitted under MS4 permits, and they have the obligation under those permits to limit discharges to those that meet the criteria specified in the permit.
14	California Water Association	17	G - CEQA	"we recommend that MMS should be revised to clarify whether any NPDE5 permit coverage is required in addition to the approval of an M54 operator, and, if so, to specify that such discharges can be made pursuant to and in compliance with the General Drinking Water NPDE5 Permit."	No revision in required. Discharges to storm drains are covered by MS4 permits, which are NPDES permits, and the permits are issued to the municipalities in whose jurisdiction the storm drains lie, not to individual dischargers to the storm drains. In the MS4 permits, the municipalities have obligations to control and restrict discharges to their storm drains. They can only allow discharges to their storm drain systems that meet the criteria specified in their permits. Therefore, if the discharge of the backwash met the requirements of a municipality's MS4 permit and the municipality allowed the discharge, the discharge of the backwash would be covered by the municipality's MS4 permit. Backwash water is explicitly exempt from the General Drinking Water NPDES Permit, and so that permit would not apply.
14	California Water Association	18	G - CEQA	"We suggest that backwash discharges from storm drains to surface of ground waters may have insignificant rather than no impact on degradation of water quality."	The impact of backwash water on water quality was addressed in the IS/MND under subsection (a) of the "Hydrology and Water Quality" section. In response to the question about whether the project would cause violations of water quality standards or impacts, impacts of the backwash water being discharged to surface or groundwaters were identified as having "insignificant impact with mitigation." Subsection (e) asks about whether the project would "otherwise substantially degrade water quality," and because those impacts were already addressed, it was identified that there would be "no impact," and explained that the intent of the project is to improve water quality by reducing levels of 1,2,3-TCP in drinking water. No revision is, therefore, necessary.
14	California Water Association	19	G - CEQA	"We suggest: • The analysis should clarify that both construction and operational noise from pumping systems and disposal were taken into account in the evaluation;"	Yes, as noted in the discussion in Section XII regarding noise impacts, construction and operation impacts were considered.
14	California Water Association	20	G - CEQA	 "We suggest: The noise from construction and operational impacts is likely to have some impact on ambient noise and receptors, but the impact is likely to be insignificant." 	Yes, as discussed in the IS/MND, impacts from construction and operations is not likely to have a substantial permanent increase in ambient noise levels. No change is necessary.
14	California Water Association	21	G - CEQA	"We suggest: • Compliance with local agency (city and county) construction noise ordinances will assure full and effective mitigation of any construction noise."	Yes, as noted in subsections a and d, the nose generated from construction and operation would be in compliance with local noise ordinances. No change is necessary.
14	California Water Association	22	G - CEQA	"We suggest: •The types of potential construction traffic should be mentioned, and it should be noted that any additional construction related traffic impacts will be fully and effectively mitigated via compliance with local agency (city and county) construction traffic ordinances."	No change is necessary. The discussion of traffic impacts related to construction will be temporary and the amount of construction necessary to build the pads and bring in the GAC tanks is minimal. (See description of construction activities on p. 12)
14	California Water Association	23	G - CEQA		Fines and other solids from backwash could be disposed of in normal trash receptacles and would be minimal, especially in comparison with the filters that would need to be disposed of. No additional discussion of the disposal of fine sediment from backwash water was warranted.
14	California Water Association	24	G - CEQA	"We suggest: •Clarifying that the cumulative impacts analysis considered all environmental factors and determined none of them to be cumulatively significant"	No change required. The discussion in subsection b on page 62 specifically states that it is not anticipated that treatment by all of the affected PWS will cause cumulatively considerable impacts. That statement was made after consideration of the potential effect on all environmental factors, as was set forth in the IS/MND.
14	California Water Association	25	G - CEQA	"We suggest: •TReformatting the cumulative impacts section to be a stand-alone section so it does not appear to be part of the mandatory findings of significance section, and relate only to those findings."	No change is required. The discussion of cumulative impacts do not need to be a stand- alone section, and are appropriately set out in the mandatory findings of significant section, as set out in the CEQA Checklist. No cumulative impacts are identified.

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14	California Water Association	26	H - BAT	"Because water systems have a duty to implement BAT, GAC is the required"	Best Available Technology (BAT) designation does not mandate use of the BAT. Public water systems may propose alternative treatment options to the BAT when applying for a permit and, if found acceptable by the Division of Drinking Water District office, will be granted a permit to operate treatment other than Granular Activated Carbon (GAC) for the purposes of removing 1,2,3-TCP.
15	<u>Jo Anne Welsch</u>	1	A - Cost Recovery	"Water treatment costs will have to be recouped from the businesses responsible"	The State Water Board is aware that some public water systems have been able to successfully recover the cost of treatment from responsible parties. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations. Any action the State Water Board could take to assist in recouping costs of treatment for public water systems would be taken outside of this regulatory process, and is, therefore, outside of the scope of these regulations.
15	Jo Anne Welsch	2	B - Adopt 5 ppt	"Please set the TCP drinking water standard at the current detection limit, 5 ppt."	Thank you for your support.
16	John Fesenko	1	B - Adopt 5 ppt	"set the drinking water standard for 1,2,3-TCP at 5 ppt"	Thank you for your support.
17	Kaihli Vang	1	B - Adopt 5 ppt	"adopt the proposed limit of 5 parts per trillion"	Thank you for your support.
18	<u>Kathleen Hyland</u>	1	A - Cost Recovery	"allow water systems to recoup water treatment costs from the companies that sold contaminated pesticides."	The State Water Board is aware that some public water systems have been able to successfully recover the cost of treatment from responsible parties. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations. Any action the State Water Board could take to assist in recouping costs of treatment for public water systems would be taken outside of this regulatory process, and is, therefore, outside of the scope of these regulations.
18	Kathleen Hyland	2	B - Adopt 5 ppt	"Please set the TCP drinking water standard at 5 ppt"	Thank you for your support.
	Kathleen Hyland	2	B Adopt 5 ppt	"Please set the TCP drinking water standard at 5 ppt"	Thank you for your support.
19	American Civil Liberties Union of CA	1	B - Adopt 5 ppt	"the ACLU of CA supports this Board's decision to adopt a 5 ppt standard for 1,2,3-TCP"	
19	American Civil Liberties Union of CA	2	P - Disproportionate Effect	"1,2,3-TCP Contamination Has a Disproportionate Impact on Communities of Color"	The State Water Board is aware that some communities may be disproportionally affected by 1,2,3-TCP. The State Water Board's Division of Drinking Water District offices provide technical support to public water systems and funding opportunities are available from the Division of Financial Assistance through loans and grants.
20	<u>Olivenhain Municipal Water</u> <u>District</u>	2	L - Operation and Implementation Concerns	"During this time, while its treatment facilities sit idle, OMWD will be required to utilize expensive, treated water connections from San Diego County Water Authority [i.e., purchased water] to meet all demands, incurring additional expenses for ratepayers."	How a public water system chooses to comply with the regulations is not dictated by the regulations. Some public water systems may instead choose to serve water in violation of the MCL while completing any necessary actions to resolve the MCL exceedance and provide public notice of the exceedance.

Commenter	Commenter	Comment	Category	Summarized Comment/	Response Summary
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20	<u>Olivenhain Municipal Water</u> <u>District</u>	3	L - Operation and Implementation Concerns	"Following detection levels above the MCL of 5 ppt, OMWD's David C. McCollom	The regulation does not mandate the use of granular activated carbon (GAC) to treat for 1,2,3-TCP. The State Water Board's Division of Drinking Water District offices provide technical support to public water systems and funding opportunities are available from the Division of Financial Assistance through loans and grants.
20	<u>Olivenhain Municipal Water</u> <u>District</u>	1	D - Compliance plans	many affected water systems would be in violation of the new standard soon after monitoring begins, as it is not feasible to install appropriate water treatment in the time allotted" "OMWD strongly recommends that the State Board amend the proposed rule to	Granular activated carbon is neither a new nor a novel technology requiring extensive preliminary planning and design to implement. A compliance period to provide public water systems additional time to come into compliance with the MCL for 1,2,3-TCP is therefore not proposed as part of the regulations. Although public water systems may wish to avoid being declared noncompliant with the proposed MCL during the period between finding a source out of compliance and completing either installation of treatment or other activities which may bring the water system back into compliance, providing a compliance period is not necessary and not in the public interest.
20	<u>Olivenhain Municipal Water</u> <u>District</u>	4	L - Operation and Implementation Concerns	"Ongoing treatment costs can be greatly impacted by operational practices such as GAC treatment Further, the requirements that the State Board would impose	The State Water Board did include estimates of operations and maintenance costs as part of the economic feasibility discussion in the Initial Statement of Reasons (ISOR). Public water systems work closely with their Division of Drinking Water District Offices to develop system-specific operation plans that would address operational requirements.
20	Olivenhain Municipal Water District	5	Q - Loss of Confidence	"public confidence in the safety of their drinking water may be seriously undermined along with their confidence in their water supplier."	The public may lose confidence in their water supply or supplier but the public also has a right to know when their drinking water does not meet public health standards. The State Water Board is also committed to transparency when informing the public.
21	Community Water Center/Clean Water Action	1	I - Grandfathering	"support amending Title 22, Section 64445 (Initial Sampling -Organic Chemicals) as "to allow limited 'grandfathering' of monitoring data collected prior to the effective date of any regulation establishing an MCL for an organic chemical".	Thank you for your support.
22	Planned Parenthood Mar Monte	2	B - Adopt 5 ppt	"urge the State Water Resources Control Board to adopt the Division of Drinking Water's proposed 5 part per trillion (ppt) maximum contaminant level ("MCL") for 1,2,3-trichloropropane ("TCP") with all expediency."	Thank you for your support and your comment. The State Board agrees and has therefore made adoption of the 1,2,3-TCP MCL one of its highest priorities.
22	Planned Parenthood Mar Monte	3	P - Disproportionate Effect	rich San Joaquin ValleyTCP is not the only pollutant impacting water supplies in	The State Water Board is aware that some communities may be disproportionally affected by 1,2,3-TCP. The State Water Board's Division of Drinking Water District offices provide technical support to public water systems and funding opportunities are available from the Division of Financial Assistance through loans and grants.
22	Planned Parenthood Mar. <u>Monte</u>	1	A - Cost Recovery	viable responsible parties have been identified, and affected water suppliers have available legal remedies to recoup water treatment costs, choosing to allow greater cancer risk because of the economic factors benefits only the responsible	The State Water Board is aware that some public water systems have been able to successfully recover from responsible parties for the cost of treatment. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations.
23	Lucy	1	B - Adopt 5 ppt	General support of the MCL	Thank you for your support.
24	California Rural Legal Assistance, Inc	1	B - Adopt 5 ppt	"The SWRCB Must Adopt the Five Parts Per Trillion MCL."	Thank you for your support.

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24	<u>California Rural Legal</u> <u>Assistance, Inc</u>	2	I - Grandfathering	data will not provide a clear picture to the SWRCB, the affected communities, or	t The State Water Board recognizes that the scenario described is theoretically possible but also very unlikely, and the proposed regulations include a requirement to submit a request to the State Water Board for approval and condition that substitution may only occur with State Water Board approval. The State Water Board is not required to approve a request for substitution and during review may determine that substitution is not appropriate pursuant to section 64445
24	<u>California Rural Legal</u> <u>Assistance, Inc</u>	3	I - Grandfathering		Substitution of samples encourages PWS to monitor their drinking water sources in advance of drinking water standards; this early sampling helps PWS with contaminated sources prepare for future compliance actions and begin planning well in advance of the effective date of the regulations. Not allowing substitution of results may discourage some PWS from performing early sampling.
24	California Rural Legal Assistance, Inc	4	I - Grandfathering	"SWRCB should permit data substitutions for public water systems only if the systems has actively tested for the newly-regulated contaminant for at least the past three years and has found no detection of the contaminant within that time frame."	Many public water systems have sampled for 1,2,3-TCP but few if any public water systems have or would likely actively sample for 1,2,3-TCP (or any unregulated organic chemical) for three years prior to an MCL becoming effective if they could wait for the MCL to become effective and only perform the required four quarters of initial sampling; this suggested change, therefore, would likely be less protective to public health because the change would not provide any incentive for public water systems to perform any initial sampling.
24	California Rural Legal Assistance, Inc	10	P - Disproportionate Effect	"Rural communities, low income communities, especially racial and ethnic groups, are also disproportionately affected by environmental burdens such as 123 TCP contamination."	The State Water Board is aware that some communities may be disproportionally affected by 1,2,3-TCP. The State Water Board's Division of Drinking Water District offices provide technical support to public water systems and funding opportunities are available from the Division of Financial Assistance through loans and grants.
24	California Rural Legal Assistance, Inc	5	J - Underestimated Costs	"the SWRCB overestimates the effect of economies of scale on medium-sized water systems. The cost estimates place water systems into overly-simplified categories of small systems with less than 200 connections and large systems with more than 200 connections, assuming over \$500 difference annually in the cost of connections between the two."	с , , , , , , , , , , , , , , , , , , ,
24	<u>California Rural Legal</u> <u>Assistance, Inc</u>	6	J - Underestimated Costs	"treatment estimates do not include overhead and maintenance costs, costs for land acquisition, or site-specific costs."	The State Water Board did include operations and maintenance costs in various analysis, with the first reference to those costs on page 17 of the Initial Statement of Reasons (ISOR). The State Water Board did not include land acquisition costs or other site-specific costs because the cost of land in California is too variable with respect to location to accurately estimate, and, as previously stated, the cost estimates are intended to be generalizations across the state, not cost guidance for a particular water system. Additionally, many PWS will not need to acquire land for construction of the assumed required treatment, further supporting not including those costs in the total estimate.

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24	<u>California Rural Legal</u> <u>Assistance, Inc</u>	7	J - Underestimated Costs	"The SWRCB acknowledges in its Initial Statement of Reasons that the cost implications for 123 TCP remediation will have a disproportionate impact on small communities, and the "estimated annual cost of \$609 per connection could represent a significant financial burden to some California communities." The SWRCB is dismissive of the real impact of cost increases, however, in its analysis of the application of CA Water Code Section 106.3 to the proposed regulation."	The State Water Board did recognize that the proposed regulation may be difficult to lafford for smaller water systems, and described potential alternative, more affordable compliance strategies in the Initial Statement of Reasons (ISOR), and recognized the ability of obtaining funding from the Division of Financial Assistance. The State Water Board also recognizes that any additional costs are going to be difficult for some systems. The State Water Board, however, does not believe that what is considered economically feasible should be limited to only what is affordable to the smallest, most disadvantaged communities, because then there would be little or no additional protections possible for any Californians. Additionally, at the public hearing Ryan Jensen from Community Water Center indicated that his family spends \$800 per year on bottled water living in Visalia; presumably this household will eliminate or at least severely reduce their bottled water expenditures once the water delivered by the public water system is uncontaminated. Therefore, the annual estimated cost of treatment for a small water system as stated in the Initial Statement of Reasons (\$609) would be less than the cost of bottled water. A similar analysis was included as part of the Standardized Regulatory Impact Assessment developed for the Department of Finance and included in the draft regulations as an attachment to the ISOR.
24	<u>California Rural Legal</u> <u>Assistance, Inc</u>	8	K - Financial Assistance	"to prevent the costs of remediation being passed on to already-overburdened low-income residents, the state should make funding available for disadvantaged communities to finance monitoring and remediation efforts."	The State Water Board's District Offices provide technical assistance and often work with outside groups such as the Rural Community Assistance Corporation to provide tailored assistance to eligible PWS.
24	<u>California Rural Legal</u> <u>Assistance, Inc</u>	9	K - Financial Assistance	"If the state decides to explore options to off-set the costs of providing financial assistance for 123 TCP remediation, the state should not utilize taxes on bottled water to generate funds the State should seek additional public input on [funding methods] that do not create additional burdens on contaminated communities."	Although how the State Water Board or the State of California raises funds for loans and grants is outside the scope of this regulation, the State Water Board appreciates the insight provided about the potential impacts of a tax on bottled water to support funding. The State Water Board also agrees that it is important that low-income communities not be further disadvantaged, and recognizes the challenges that are faced by these communities that not only are disproportionately affected by 1,2,3-TCP, but also are often most challenged when obtaining funding to address contamination.
25	Mase Milham	1	B - Adopt 5 ppt	"Please set the TCP drinking water standard a 5ppt"	Thank you for your support.
25		1	b Adopt 5 ppt	"we support the adoption of the proposed MCL for 1,2,3-TCP."	Thank you for your support.
26	Monte Vista Water District/City of Chino/Chino Desalter Authority	1	B - Adopt 5 ppt		
26	Monte Vista Water District/City of Chino/Chino Desalter Authority	2	D - Compliance plans	"the proposed regulation does not provide adequate time for water systems to undertake major compliance actionsto comply with a the new regulation before a public water system is found to be in violation of MCLThe result of such Noncompliance is a severe reduction in water supply reliability, liability to lawsuits, and loss of public trust."	The concerns about the impacts of noncompliance may be less than expected. Although there have been several lawsuits against water systems due to the quality of the water supplied, staff are aware of only a relatively small number of such suits. Unlike the federal Safe Drinking Water Act (SDWA), there is no citizen suit provision under SDWA, and civil penalties cannot be imposed under the federal SDWA citizen suit provisions. The most contaminated sources may be shut down and the vast majority of water systems will continue to serve drinking water despite an exceedance of the MCL, all while providing required public notification and following requirements set forth in any compliance order issued by the State Water Board. The public may lose confidence in their water supply or supplier but the public also has a right to know when their drinking water does not meet public.
26	Monte Vista Water District/City of Chino/Chino Desalter Authority	4	E - Blending	"Nor does the proposed regulation clearly identify the range of actions that may be taken to achieve compliance, including system blending"	On page 27 of the Initial Statement of Reasons (ISOR), the State Water Board stated that other technologies capable of treating water to the proposed MCL may exist, and that the inclusion of a technology as a Best Available Technology (BAT) does not preclude a public water system from receiving a permit allowing use of alternative treatment, including blending.

Final Response to Comments for Proposed 1,2,3-Trichloropropane (1,2,3-TCP) Maximum Contaminant Level (MCL) Regulations

Commenter	Commenter	Comment	Category	Summarized Comment/	Response Summary
ID	Name/Organization	ID	Category	Proposed Regulation Change	· ·
26	Monte Vista Water District/City of Chino/Chino Desalter Authority	3	D - Compliance plans	"At the very least, the proposed rule should provide a compliance pathway similar to the one established for hexavalent chromium VI by SB 385 (Chapter 282, Section 116431 of the Health and Safety Code) in which the Water Board can review and pre-approve compliance plans to provide adequate time to construct treatment facilities before a system is deemed in violation. This compliance pathway includes public notice as well as the specific actions and timeframe in which compliance will be achieved." (2)"Amend the proposed rule to provide a specific, reasonable time period for public water systems to achieve compliance with the new 1,2,3-TCP MCL before being deemed in violation."	The State Water Board is aware that some communities may be disproportionally affected by 1,2,3-TCP. The State Water Board's Division of Drinking Water District offices provide technical support to public water systems and funding opportunities are available from the Division of Financial Assistance through loans and grants. The State Water Board acknowledges that a compliance plan process was established under SB 385 to allow public water systems that are out of compliance with the hexavalent chromium MCL to apply for and receive a compliance plan. Granular Activated Carbon (GAC) does not, however, have the same challenges as the treatment technology for hexavalent chromium; GAC is a readily available and reliable technology, and there are not similar cost and implementation issues with treatment of 1,2,3-TCP as there were with hexavalent chromium.
26	Monte Vista Water District/City of Chino/Chino Desalter Authority	5	E - Blending	"Amend the proposed rule to clarify that system blending may be used to comply with the new 1,2,3,-TCP MCL as presented in the Board's workshops."	Blending is already considered to be a treatment technique capable of reducing contaminant concentrations to compliance levels, and therefore does not require inclusion in the regulations. Blending is highly site-specific and reliant upon operating criteria and plans that are reviewed by the Division of Drinking Water District offices; additional regulations for blending would not be appropriate.
27	<u>Melinda Roy</u>	1	A - Cost Recovery	"hold accountable those who have polluted our waters"	The State Water Board is aware that some public water systems have been able to successfully recover the cost of treatment from responsible parties. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations.
28	<u>Metropolitan Water Distict of</u> <u>Southern California</u>	1	B - Adopt 5 ppt	"Metropolitan supports the proposed MCL and associated regulations for 1,2,3- TCP."	Thank you for your support.
				"amend the proposed rule to provide a specific, reasonable time period to comply with the [MCL] A reasonable implementation period will allow water systems time to adjust operations or install treatment without [violation] or eroding public confidence in drinking water." References SB 385 and hexavalent chromium compliance plans. "Metropolitan recommends that the implementation schedule for 1,2,3-TCP should not be less than three to five years."	Granular activated carbon is neither a new nor a novel technology requiring extensive preliminary planning and design to implement. The State Water Board does not consider allowing a water system to remain in compliance while serving water that does not meet the proposed 1,2,3-TCP MCL to be adequately protective of public health.
28	<u>Metropolitan Water Distict of</u> <u>Southern California</u>	2	D - Compliance plans	"Metropolitan recommends that the State Water Board amend the proposed rule to provide a specific reasonable time period to enable public water systems to comply with the new 1,2,3-TCP MCL." "SB 385 (Hueso, D- San Diego) established a process for public water systems to work toward and achieve compliance with the chromium 6 MCL without being deemed in violation of the standard, as long as the necessary safeguards were met. As such, Metropolitan recommends that the implementation schedule for 1,2,3-TCP should not be less than three to five years."	
28	<u>Metropolitan Water Distict of</u> <u>Southern California</u>	3	M - ELAP procedures	"False-positive or false-negative samples may arise if adequate quality assurance and quality control are not implemented. As such, Metropolitan recommends that the State Water Board direct the Environmental Laboratory Accreditation Program (ELAP) to establish standard procedures regarding the use of field blanks, provisions to investigate positive results at levels at or near the DLR, and resampling when appropriate."	This comment is not directly relevant to the proposed regulations, but the State Water Board, of whom ELAP is a part of, will work to help ensure that sample results are accurate when reported.

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29	<u>Michael Biczynski</u>	1	A - Cost Recovery	"allow water systems to recoup water treatment costs from the companies that sold pesticides manufactured with or contaminated by TCP, and from industrial users who fail to dispose of it properly."	The State Water Board is aware that some public water systems have been able to successfully recover from responsible parties for the cost of treatment. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations.
29	Michael Biczynski	2	B - Adopt 5 ppt	"set the TCP drinking water standard at 5 ppt (the detection limit) to protect public health"	Thank you for your support.
30	<u>City of Shafter</u>	1	N - Treatment Design	"The main concern the City has regarding recent action and updates from the State regarding TCP is a possibility that a "series" layout of treatment vessels will eventually be required and the "parallel" layout will no longer be accepted." "the State should allow some operational flexibility on a water system's part to meet the standard through the most economically viable treatment systems possible."	The State Water Board did not specify design or operational criteria for the treatment of 1,2,3-TCP in the proposed regulations. Each treatment system will have particular design and operational criteria determined as part of the permitting process at the Divsion of Drinking Water District offices. A proposed parallel system may or may not be approved in the permitting process after determining if the design is appropriate for a given source in a given water system.
31	Patrick M.K. Richardson (Byers/Richardson Lawyers; Appendix A)	1	A - Cost Recovery	"allow water systems to recoup water treatment costs from the companies that sold the contaminated pesticides."	The State Water Board is aware that some public water systems have been able to successfully recover from responsible parties for the cost of treatment. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations.
31	Patrick M.K. Richardson (Byers/Richardson Lawyers; Appendix A)	2	B - Adopt 5 ppt	"set the TCP drinking water standard at 5 ppt (the detection limit)"	Thank you for your support.
32	Paula Cooper-Tipton	1	A - Cost Recovery	"allowance for water treatment systems to recoup their costs from companies that sold the contaminants"	The State Water Board is aware that some public water systems have been able to successfully recover from responsible parties for the cost of treatment. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations.
32	Paula Cooper-Tipton	2	B - Adopt 5 ppt	"protect our communities by setting the TCP standard at 5 ppt."	Thank you for your support.
33	<u>acwa/awwa-ca-nv</u>	1	D - Compliance plans	"it is not feasible for public agencies to install appropriate water treatment systems to comply with the MCL within the time period provided in the regulation." "A compliance period is warranted given the significant impact that the MCL will have on water agencies."	Granular activated carbon is neither a new nor a novel technology requiring extensive preliminary planning and design to implement. The State Water Board does not consider allowing a water system to remain in compliance while serving water that does not meet the proposed 1,2,3-TCP MCL to be adequately protective of public health. Public water systems may choose to begin taking actions to remain in compliance with the proposed MCL in advance of the regulation effective date.
33	<u>ACWA/AWWA-CA-NV</u>	2	D - Compliance plans	based drinking water standard, in addition to being subject to Water Board enforcement actions, there are, at minimum, three significant adverse impacts: 1. The water system is immediately subject to legal liability and lawsuits; 2. Water supply reliability can be affected if wells must be shut off; and	The concerns about the impacts of noncompliance may be less than expected. Although there have been several lawsuits against water systems due to the quality of the water supplied, staff are aware of only a relatively small number of such suits. Unlike the federal Safe Drinking Water Act, there is no citizen suit provision under the State Safe Drinking Water Act (SDWA), and civil penalties cannot be imposed under the federal SDWA citizen suit provisions. The most contaminated sources may be shut down and the vast majority of water systems will continue to serve drinking water despite an exceedance of the MCL, all while providing required public notification and following requirements set forth in any compliance order issued by the State Water Board. The public may lose confidence in their water supply or supplier but the public also has a right to know when their drinking water does not meet public health standards. The State Water Board is also committed to transparency when informing the public.

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33	<u>ACWA/AWWA-CA-NV</u>	3	D - Compliance plans	"The federal Safe Drinking Water Act provides for a phase-in period of up to five years to ensure that water systems have a reasonable amount of time to undertake the work-including the planning, financing, design and construction of capital improvements like treatment facilities that is necessary to comply with new drinking water standards."	Granular activated carbon is neither a new nor a novel technology requiring extensive preliminary planning and design to implement. A compliance period to provide Public Water Systems additional time to come into compliance with the MCL for 1,2,3-TCP is therefore not proposed as part of the regulations. Although Public Water Systems may wish to avoid being declared noncompliant with the proposed MCL during the period between finding a source out of compliance and completing either installation of treatment or other activities which may bring the water system back into compliance, providing a compliance period is not necessary and not in the public interest. The State Water Board's Division of Financial Assistance has loan and grant programs that may offset the financial impact of the proposed regulation.
33	ACWA/AWWA-CA-NV	4	D - Compliance plans	"SB 385 signaled the intent of the Legislature that a reasonable compliance period can be an appropriate practice if it is developed along with appropriate safeguards and public notification."	The California legislature limited the scope of SB 385 to hexavalent chromium. Hexavalent chromium at the time of MCL adoption was considered both highly expensive and difficult to remove from drinking water. GAC is readily available and a reliable technology, and similar cost and implementation issues are not expected with 1,2,3-TCP.
33	ACWA/AWWA-CA-NV	5	D - Compliance plans	"Compliance periods are important to refine and optimize existing water treatment technologies or develop better technologies capable of meeting the new MCL with fewer social environmental and financial impacts."	Granular activated carbon is neither a new nor a novel technology that will benefit from additional time to foster treatment technology innovation. A compliance period to provide Public Water Systems additional time to come into compliance with the MCL for 1,2,3-TCP or to foster treatment technology innovation is not in the public interest and therefore not proposed as part of the regulations.
33	ACWA/AWWA-CA-NV	7	L - Operation and Implementation Concerns	"the Water Board must also consider that treatment costs can be greatly impacted by operational practices, in particular with operating granular activated carbon treatment, which is identified in the rule as the best available treatment for this contaminant."	The State Water Board did consider general operational practices when developing the regulations. The State Water Board cannot consider every unique and site-specific element to drinking water operations that a PWS may encounter as part of their compliance actions.
33	ACWA/AWWA-CA-NV	6	F - Non-detects	"The requirements that the Water Board would impose as part of implementing this regulation must give full consideration to operational factors such as incorporating "non-detects" in averaging for MCL compliance, turn-around times between sampling and getting certified outside laboratory results, blending objectives, etc."	Criteria for blending and other operational concerns will be determined as part of the review performed by the Division of Drinking Water District offices when a permit application for blending is submitted. Defining operational factors for blending in regulation may provide clarity but may also interfere with necessary operational flexibility when establishing operations plans that are adequately protective of public health
33	ACWA/AWWA-CA-NV	8	Q - Loss of Confidence	"Public confidence in the safety of drinking water may be seriously undermined along with confidence in the water system."	The public may lose confidence in their water supply or supplier but the public also has a right to know when their drinking water does not meet public health standards. The State Water Board is also committed to transparency when informing the public.
34	<u>Rita Minjares</u>	2	B - Adopt 5 ppt	"Tell the State Water Board to establish a legally enforceable drinking water standard of 5 parts per trillion, which is the chemical's detection level in water."	Thank you for your support.
34	<u>Rita Minjares</u>	1	A - Cost Recovery	"hold [responsible parties] accountable for the harm they've caused" "hold Dow Chemical and Shell Oil accountable for the harm they've caused."	The State Water Board is aware that some public water systems have been able to successfully recover from responsible parties for the cost of treatment. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations.
35	Ryan Anthony Hatch	1	B - Adopt 5 ppt	General support of the MCL	Thank you for your support.
36	RCAC/Self Help Enterprises	1	B - Adopt 5 ppt	"support adoption of the proposed 5 part per trillion maximum contmainant level (MCL)"	Thank you for your support.
25		2	<i>и</i> г	" We therefore urge the Board to provide additional assistance to rural, low- income communities to help them comply with the standard"	Technical and financial assistance is available from the State Water Board's Division of Drinking Water and Division of Financial Assistance through existing loan and grants programs. While administration of these programs is outside the scope of the proposed
36	RCAC/Self Help Enterprises	2	K - Financial Assistance	" SWRCB should dedicate additional training and grant funding to communities impacted by the regulation."	regulations, State Water Board staff will continue to work with impacted public water systems to provide the assistance needed.

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36	<u>RCAC/Self Help Enterprises</u>	3	P - Disproportionate Effect	" The communities we serve are disproportionally impacted by the prevalance of 123 TCP in their water supplies"	The State Water Board is aware that some communities may be disproportionally affected by 1,2,3-TCP. The State Water Board's Division of Drinking Water District offices provide technical support to public water systems and funding opportunities are available from the Division of Financial Assistance through loans and grants.
37	Various (10 cities/districts)	1	A - Cost Recovery	"we want the parties responsible for causing the 1,2,3-TCP contamination, rather than our water customers, to cover the costs of treatment."	The State Water Board is aware that some public water systems have been able to successfully recover from responsible parties for the cost of treatment. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations.
37	Various (10 cities/districts)	2	B - Adopt 5 ppt	"We urge the Water Board to adopt the proposed 1,2,3-TCP MCL at 5 ppt, and to do so as soon as possible."	Thank you for your support.
38	Unknown	1	B - Adopt 5 ppt	"set the TCP drinking water standard to 5 ppt"	Thank you for your support.
39	Wendy Meunier	1	B - Adopt 5 ppt	"set the TCP drinking water standard to 5 ppt"	Thank you for your support.
40	Zarli	1	B - Adopt 5 ppt	"set the TCP drinking water standard to 5 ppt"	Thank you for your support.
41	Various	1	A - Cost Recovery	in some form of recuperation from entities that the commenters felt were responsible for the presence of 1,2,3-TCP in drinking water. These recuperative	The State Water Board is aware that some public water systems have been able to successfully recover from responsible parties for the cost of treatment. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations.
41	Various	2	B - Adopt 5 ppt	"Please set the TCP drinking water standard at 5 ppt"	Thank you for your support.
332	Various (form letter)	1	R - Adopt MCL Near 0.7 ppt	"I urge the State Water Resources Control Board to act quicly to adopt the most health-protective maximum contaminant ("MCL") for 1,2,3-TCP as close to the Public Health Goal of 0.7 ppt as technically feasible."	The establishment of an MCL for 1,2,3-TCP at a value less than the established Detection Level for Reporting of 5 ppt, cannot be determined to be technologically feasible. In addition, it is not possible to make an accurate estimate of the economic impact or reduction in cancer exposure at values less than 5 ppt, given that the current analytical results of source sampling do not report data at levels below 5 ppt. Therefore an MCL at a value of 0.7 ppt was not evaluated nor considered for adoption.
452	Brian Huse	1	A - Cost Recovery	"Also the companies who manufacture & sell 1,2,3 TCP should be required to cover the costs born by water districts to treat the tainted water supplies. "	The State Water Board is aware that some public water systems have been able to successfully recover from responsible parties for the cost of treatment. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations.
452	Brian Huse	2	B - Adopt 5 ppt	"I urge you to set a strict standard for 1,2,3 TCP at 5 parts per million. "	Thank you for your support.
452	Brian Huse	3	P - Disproportionate Effect	"Like so many carcinogens, this toxic chemical impacts low income rural communities associated with the sale & use of pesticides."	The State Water Board is aware that some communities may be disproportionally affected by 1,2,3-TCP. The State Water Board's Division of Drinking Water District offices provide technical support to public water systems and funding opportunities are available from the Division of Financial Assistance through loans and grants.
453	Tom Meshishnek	1	A - Cost Recovery	"I also urge you to allow public and private water systems to recoup the cost of treating contamination due to 1,2,3, TCP, from the manufacturers of pesticides which have contributed to contamination by 1,2,3 TCP."	The State Water Board is aware that some public water systems have been able to successfully recover from responsible parties for the cost of treatment. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations.
453	Tom Meshishnek	2	B - Adopt 5 ppt	"I urge you to establish a limit of 5 parts per trillion for 1,2,3 trichloropropane in public drinking water."	Thank you for your support.
454	Steven L. Lucas and Rose A. Barry	1	A - Cost Recovery	"In addition, the cost of treating the water should be collected from those companies that polluted the water in the first place."	The State Water Board is aware that some public water systems have been able to successfully recover from responsible parties for the cost of treatment. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations.
454	Steven L. Lucas and Rose A. Barry	2	B - Adopt 5 ppt	"I am urging you enact a measure that would establish the standard of 5 ppm to keep our water safe. "	Thank you for your support.

Commenter ID	Commenter	Comment ID	Category	Summarized Comment/	Response Summary
454	Name/Organization Steven L. Lucas and Rose A. Barry	3	P - Disproportionate Effect	Proposed Regulation Change "It endangers the health of our citizens, especially those who love in the rural communities where this pesticide has been used."	The State Water Board is aware that some communities may be disproportionally affected by 1,2,3-TCP. The State Water Board's Division of Drinking Water District offices provide technical support to public water systems and funding opportunities are available from the Division of Financial Assistance through loans and grants.
455	Spencer D. Smith	1	A - Cost Recovery	"and allow water systems to recoup water treatment costs from the companies that sold the contaminated pesticides."	The State Water Board is aware that some public water systems have been able to successfully recover from responsible parties for the cost of treatment. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations.
455	Spencer D. Smith	2	B - Adopt 5 ppt	"Please set the TCP drinking water at 5 ppt (the detection limit) to protect public health"	Thank you for your support.
455	Spencer D. Smith	3	P - Disproportionate Effect	"1,2,3 TCP is a man-made carcinogen that contaminates 372 known California drinking water sources, largely in low-income rural communities where faulty pesticides were sold."	The State Water Board is aware that some communities may be disproportionally affected by 1,2,3-TCP. The State Water Board's Division of Drinking Water District offices provide technical support to public water systems and funding opportunities are available from the Division of Financial Assistance through loans and grants.
456	Daniel Scovill	1	A - Cost Recovery	"Please hold companies which sell such contaminated pesticides accountable for the treatment cost associated. "	The State Water Board is aware that some public water systems have been able to successfully recover from responsible parties for the cost of treatment. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations.
456	Daniel Scovill	2	B - Adopt 5 ppt	"I am writing to request that you set a TCP drinking water standard at 5 PPT to protect public health, our communities in the state of California, and to lead the way for the nation."	Thank you for your support.
456	Daniel Scovill	3	P - Disproportionate Effect	"I have recently learned of 1,2,3 TCP. This Man-Made carcinogen contaminates nearly 400 known California drinking sources many in low income/rural communities. "	The State Water Board is aware that some communities may be disproportionally affected by 1,2,3-TCP. The State Water Board's Division of Drinking Water District offices provide technical support to public water systems and funding opportunities are available from the Division of Financial Assistance through loans and grants.
457	Jesse Barlow	1	A - Cost Recovery	"and allow water systems to recoup water treatment costs from the companies that sold contaminated pesticides. "	The State Water Board is aware that some public water systems have been able to successfully recover from responsible parties for the cost of treatment. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations.
457	Jesse Barlow	2	B - Adopt 5 ppt	"Please set the TCP drinking water standard at 5 ppt – the detection limit – to protect public health"	Thank you for your support.
457	Jesse Barlow	3	P - Disproportionate Effect	"1,2,3 TCP is a man-made carcinogen that contaminates 372 known California drinking water sources, largely in low-income rural communities where faulty pesticides were sold."	The State Water Board is aware that some communities may be disproportionally affected by 1,2,3-TCP. The State Water Board's Division of Drinking Water District offices provide technical support to public water systems and funding opportunities are available from the Division of Financial Assistance through loans and grants.
458	Deborah K. Mar	1	A - Cost Recovery	"I am also requesting that you recoup the additional treatment costs from the corporations selling toxic chemicals that endangered our citizens and polluted our water sources."	The State Water Board is aware that some public water systems have been able to successfully recover from responsible parties for the cost of treatment. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations.
458	Deborah K. Mar	2	B - Adopt 5 ppt	"I am asking you to sent the TCP drinking water standard at the detection limit which is 5 ppt. This will limit the damage from this pesticide and protect public health of all Californians. "	Thank you for your support.

Commenter	Commenter	Comment	Category	Summarized Comment/	Response Summary
ID	Name/Organization	ID		Proposed Regulation Change	The State Water Board is aware that some communities may be disproportionally affected
458	Deborah K. Mar	3	P - Disproportionate Effect	1,2,3 TCP is an example of a man-made carcinogen contaminating water sources in over 350 identified sources of drinking water. This particularly affects low income rural communities in which high levels of this pesticide is sold."	In State Water board is aware that some communities may be disproportionally arrected by 1,2,3-TCP. The State Water Board's Division of Drinking Water District offices provide technical support to public water systems and funding opportunities are available from the Division of Financial Assistance through loans and grants.
459	John Crowley and family	1	A - Cost Recovery	"and allow water systems to recoup water treatment costs from the companies that sold the contaminated pesticides. "	The State Water Board is aware that some public water systems have been able to successfully recover from responsible parties for the cost of treatment. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations.
459	John Crowley and family	2	B - Adopt 5 ppt	"Please set the TCP drinking water standard at 5 ppt (the detection limit) to protect the public health"	Thank you for your support.
459	John Crowley and family	3	P - Disproportionate Effect	"1,2,3 TCP is a man-made carcinogen that contaminated 372 known California drinking water sources, largely in low income rural communities where faulty pesticides were sold."	The State Water Board is aware that some communities may be disproportionally affected by 1,2,3-TCP. The State Water Board's Division of Drinking Water District offices provide technical support to public water systems and funding opportunities are available from the Division of Financial Assistance through loans and grants.
460	Linda S. Mitteness	1	A - Cost Recovery	"FURTHER please mandate that local water systems recoup water treatment costs from the companies that sold the contaminated pesticides. In an equitable world, those pesticide manufacturers would also be required to pay for safe bottled water for those very poor communities where there are only private wells, not community water systems or with water systems that cannot afford to fix their water treatment programs."	The State Water Board is aware that some public water systems have been able to successfully recover from responsible parties for the cost of treatment. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations.
460	Linda S. Mitteness	2	B - Adopt 5 ppt	"PLEASE set the TCP drinking water standard at 5 ppt (the detection limit) to protect public health. "	Thank you for your support.
460	Linda S. Mitteness	3	P - Disproportionate Effect	"1,2,3 TCP is a man-made carcinogen that contaminates 372 known California drinking water sources (who knows how many unknown private water sources), largely in low-income rural communities where faulty pesticides were sold."	The State Water Board is aware that some communities may be disproportionally affected by 1,2,3-TCP. The State Water Board's Division of Drinking Water District offices provide technical support to public water systems and funding opportunities are available from the Division of Financial Assistance through loans and grants.
461	Irene Kaufman	1	A - Cost Recovery	"and allow water systems to recoup water treatment costs from the companies that sold contaminated pesticides."	The State Water Board is aware that some public water systems have been able to successfully recover from responsible parties for the cost of treatment. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations.
461	Irene Kaufman	2	B - Adopt 5 ppt	"Please set the TCP drinking water standard at 5 ppt (the detection limit) to protect public health"	Thank you for your support.
461	Irene Kaufman	3	P - Disproportionate Effect	"1,2,3 TCP is a man-made carcinogen that contaminates 372 know California drinking water sources, largely in low income rural communities where faulty pesticides were sold."	The State Water Board is aware that some communities may be disproportionally affected by 1,2,3-TCP. The State Water Board's Division of Drinking Water District offices provide technical support to public water systems and funding opportunities are available from the Division of Financial Assistance through loans and grants.
462	Judith C. Barker	1	A - Cost Recovery	"FURTHER please mandate that local water systems recoup water treatment costs from the companies that sold the contaminated pesticides. "	The State Water Board is aware that some public water systems have been able to successfully recover from responsible parties for the cost of treatment. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations.
462	Judith C. Barker	2	B - Adopt 5 ppt	"PLEASE set the TCP drinking water standard at 5 ppt (the detection limit) to protect public health. "	Thank you for your support.

Commenter	Commenter	Comment	Category	Summarized Comment/	Response Summary
ID	Name/Organization	ID	Category	Proposed Regulation Change	Response Summary
462	Judith C. Barker	3	P - Disproportionate Effect	"Pesticides are an ongoing danger to human health in California. 1,2,3 TCP is a man-made carcinogen that contaminates 372 known California drinking water sources (who knows how many unknown private water sources), largely in low- income rural communities where faulty pesticides were soldAs a medical anthropologist, I have done research on the dental health of small children in poor immigrant communities (largely farm-workers) and have seen the devastating effects on budgets and lives not having decent water to drink."	The State Water Board is aware that some communities may be disproportionally affected by 1,2,3-TCP. The State Water Board's Division of Drinking Water District offices provide technical support to public water systems and funding opportunities are available from the Division of Financial Assistance through loans and grants.
463	David and Susan May	1	A - Cost Recovery	"and allow water systems to recoup the water treatment costs from the companies that sold the contaminated pesticides. "	The State Water Board is aware that some public water systems have been able to successfully recover from responsible parties for the cost of treatment. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations.
463	David and Susan May	2	B - Adopt 5 ppt	"Please set the TCP water standard to 5 ppt to protect public health"	Thank you for your support.
463	David and Susan May	3	P - Disproportionate Effect		The State Water Board is aware that some communities may be disproportionally affected by 1,2,3-TCP. The State Water Board's Division of Drinking Water District offices provide technical support to public water systems and funding opportunities are available from the Division of Financial Assistance through loans and grants.
464	Ed McCormick	1	A - Cost Recovery	"Please also take action to allow utilities to be reimbursed water treatment costs from the corporations that sold the pesticides contaminated with TCP."	The State Water Board is aware that some public water systems have been able to successfully recover from responsible parties for the cost of treatment. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations.
464	Ed McCormick	2	B - Adopt 5 ppt	"Please set the TCP drinking water standard at five (5) parts per trillion (ppt) to ensure that public health in California is adequately protected. 1,2,3 TCP is a man- made carcinogen contaminating hundreds of California drinking water sources."	Thank you for your support.
465	Linden Young	1	A - Cost Recovery	"and allow water systems to recoup water treatment costs from the companies that sold the contaminated pesticides."	The State Water Board is aware that some public water systems have been able to successfully recover from responsible parties for the cost of treatment. Although adoption of the proposed regulations may provide clarity and assist public water systems in their litigation or negotiations with responsible parties over reimbursement for treatment costs, that is not the intent of the State Water Board's actions in adopting the regulations.
465	Linden Young	2	B - Adopt 5 ppt	"Please set the TCP drinking water standard at 5 ppt (the detection limit) to protect public health"	Thank you for your support.
465	Linden Young	3	P - Disproportionate Effect	"1,2,3 TCP is a man-made carcinogen that contaminates 372 known California drinking water sources, largely in low income rural communities where faulty pesticides were sold."	The State Water Board is aware that some communities may be disproportionally affected by 1,2,3-TCP. The State Water Board's Division of Drinking Water District offices provide technical support to public water systems and funding opportunities are available from the Division of Financial Assistance through loans and grants.

Commenter Name/ Organization	Comment Topic	Comment	Response
Adan Ortega Cal Mutuals	B - Adopt 5 ppt	Chair Marcus, members of the Board, thank you for conducting this hearing. I'm here to register the support of the California Association of Mutual Water Companies for the proposed MCL. We represent over 400 mutual water companies around the state. Some of these represent small systems that are not-for-profit enterprises that are owned by residents. And we have considered this such a priority that we have created a taskforce, it's headed by Van Grayer, on this issue.	Thank you for your support.
Adan Ortega Cal Mutuals	D - Compliance plans	I do want to emphasize some points with respect to the compliance period. With disadvantaged communities, an aggressive compliance period can have the effect of further disadvantaging them. Primarily, because it's not just about identifying technologies. It's about scalability. Many technologies depend on a broad ratepayer base in order to be affordable. That's not the case with many small systems and so having a reasonable compliance period that accounts for scalability is an important way of approaching the issue of disadvantaged communities in complying with safe drinking water standards.	The State Water Board recognizes that treating for challenging for small disadvantaged communities people in the community to share in the costs. The Division of Financial Assistance has loan and grant the financial impact of the proposed regulation. H Board is not proposing an extended compliance pe
Adan Ortega Cal Mutuals	P - Disproportionate Effect	And there is a financial consequence to being tagged with an NOV. To give you the example of hexavalent chromium, we have a company in the Coachella Valley that was tagged with the Notice of Violation. They were told by the enforcement agent, "Well, that's a good thing, because now you qualify for a grant from the state revolving fund in order to address the issue." But they still had to do a cost share and so when they went to try to finance their cost share, they were basically told, "Well, we can't loan you the money, because you can't pledge the sale of water that's out of compliance towards repayment of your loan, on the other end." And so from a very practical perspective it's important to have a reasonable compliance period that takes into account the scalability issues for small systems, especially those that are in disadvantaged communities, because it could have the effect of further disadvantaging them.	opportunities are available through the Division of through loans and grants. The State Water Board situation described, and notes that for systems ge Revolving Fund, systems pledge the revenue streat regardless of their compliance status.
Adan Ortega Cal Mutuals	B - Adopt 5 ppt	And so we support the MCL. We don't want any compromise in the safe drinking water standards, but we believe that small systems shouldn't be further disadvantaged when they're trying to comply.	Thank you for your support.

for any constituent is more es because there are less The State Water Board's nt programs that may offset However, the State Water period.

munities may be he proposed regulations, or ing Water District offices ms and funding of Financial Assistance rd is not aware of the getting loans from the State eam from their rates,

Commenter Name/ Organization	Comment Topic	Comment	Response
Adan Ortega Cal Mutuals	P - Disproportionate Effect	Absolutely, we believe that the MCL and the establishment of the MCL is critical, because of the statute of limitations concerning those that have already been sampling and that understand the impacts. But under federal guidelines, as I understand it, there is an automatic five-year compliance for new standards that are adopted by USEPA. When we look at the dynamics of what's happened with SB 38, for example, on the Hexavalent chrome front, what we had was a case where there were a lot of systems struggling to find affordable technologies. When SB 385 kicked in, a lot of the discussion on those affordable technologies started to take place. And so I think that if you were to target your approach to small systems, to disadvantaged communities in a manner that didn't further disadvantage them you would make headway in dealing with the issue that we have in California with small systems.	Granular activated carbon is neither a new nor a ne extensive preliminary planning and design to imple Board is aware that some communities may be dis by either 1,2,3-TCP, the proposed regulations, or b Board's Division of Drinking Water District offices p to public water systems and funding opportunities Division of Financial Assistance through loans and g
Andria Ventura Clean Water Action	B - Adopt 5 ppt	Obviously I'm here to support the five parts per trillion proposed MCL. But I don't come alone. I did hand in a hard copy, which I will submit electronically tomorrow, a letter that was signed by over 50 environmental, environmental justice, health-based, social justice and agricultural groups that support this MCL. And I'll be handing in about letters from Clean Water Action members, residents of the State of California that support this as well.	
Andria Ventura Clean Water Action	A - Cost Recovery	You know, we've heard about the need for resources to meet these standards. This is a great opportunity to make sure that the responsible parties are held accountable, because of the vast majority of cases here, not all of them but most of them are this is an avoidable problem caused by a faulty pesticide that was sold knowingly. And we do believe that those companies that acted as such bad actors should be held accountable for the costs of this treatment.	

a novel technology requiring plement. The State Water disproportionally affected r both. The State Water es provide technical support ies are available through the nd grants.

ic Water Systems have been ent from responsible parties. may provide clarity and negotiations with atment costs, that is not the pting the regulations. Any t in recouping costs of aken outside of this the scope of these

Commenter Name/ Organization	Comment Topic	Comment	Response
Andria Ventura Clean Water Action	D - Compliance plans	I do want to address the issue of the extended compliance interim. We do oppose that, but let me be clear as to why and give you a little bit different perspective. I was very disappointed to hear SB 385 invoked. That was the process that we supported to create a process to extend the compliance period with an oversight by the Board that was passed through the Legislature. When the process for setting drinking water standards was first established it was established with the reality in mind that what water providers need to go through to get there, to be in compliance. There is a buffer time. Monitoring has been happening. They can't start treatment until they know what the standard is, but there's a lot of thought that goes in behind that and we're very glad that the water community is supporting this MCL. However, we hear this every drinking water standard that comes up and the reality is the system has worked okay, with Perchlorate which is not regulated federally, with other drinking water contaminants that I've worked on. With Hex chrome the water community actually came to us and said, "This one is unique. This one is not activated carbon. This one is far more complex, financially as well as technologically. Would you work with us?" And we were very reluctant, if I may just for likeWe were very reluctant to do that at first, because we were afraid that would be used again as a precedent. And we were very clear that if we worked on Hex chrome, "Do not expect us to support this in the future." We said that publicly. We said that to the water community. We were told, "Yes, we understand that, but we do need your help on this one."	
Andria Ventura		This has been delayed long enough, not because of the Board, but because	Thank you for your comment. The State Board agr

plan period, similar to ere and not in the public new nor a novel technology ign to implement.

grees and has therefore its highest priorities.

Commenter Name/ Organization	Comment Topic	Comment	Response
Asha Kreiling General public	B - Adopt 5 ppt	And I'm happy to be here today to support the staff's draft regulation and recommendation of a five part per trillion MCL. When we can easily and reliably detect TCP in water at the detection limit; and when the cost to comply is irrelevant, because of the presence of responsible parties; and when the theoretical cost to the states do not change drastically from five parts per trillion to an alternative number, the proposed MCL of five parts per trillion is really the only option. As the Initial Statement of Reasons says clearly reduced exposure to 1,2,3-TCP results in reduced risks to cancer. Reducing the exposure as much as is feasible is required by Health and Safety Code 116365 and is of benefit to public health. Not only should a five part per trillion MCL be adopted, but it should be adopted as soon as possible. It's been 10 years since the state set a 0.7 part per trillion public health goal. And it's been 25 years since the state has called it a known human carcinogen. This regulation will literally save lives from a contaminant that should have never been in our drinking water in the first place.	Thank you for your comments and your support.
Bartolo Chavez General public	B - Adopt 5 ppt	And I come in support of a strict regulation on 1,2,3-TCP.	Thank you for your support.
Bartolo Chavez General public	R - Outreach/Education	In addition to the limit we need more information in our communities about how to limit our exposure. We need people to come and explain to us about the problem, about the risks, and how we can minimize our risks.	
Bartolo Chavez General public	K - Financial Assistance	So I'm here just to remind you that you're the ones that have the power to change the situation. You're the ones that have the funding to change with the situation. So many communities would say, "We'd love to do something to do something about it, but we don't have the funds." And you guys can make that funding available to solve this problem.	The State Water Board is aware that some commun disproportionally affected by either 1,2,3-TCP, the both. The State Water Board's Division of Drinking provide technical support to public water systems a opportunities are available from the Division of Fin- through loans and grants.
Beth Smoker PAN North America	B - Adopt 5 ppt	PAN and our statewide coalition, Californians for Pesticide Reform, support the proposed five parts per trillion MCL and we urge you to not extend the compliance period.	Thank you for your support.

3-TCP contains information exposure to drinking water part of the implementation ate Frequently Asked vill be posting that le. Additionally, once the completed initial ter exceeding the 1,2,3-TCP ion as established in

munities may be the proposed regulations, or ing Water District offices ms and funding Financial Assistance

Commenter Name/ Organization	Comment Topic	Comment	Response
Carlos Arias Del Rey Community Services District	P - Disproportionate Effect	Del Rey, we thought that we had pretty good water until we started drilling a little bit deeper wells to avoid the contaminants in the area. And now we find out that we have TCP and it's even in the newer wells we have it. This chemical causes cancer and it's very unpleasant for me, and frustrating sometimes to have to tell the people that the water is not good. Like I said, we are a we have been very upfront with our community about the water. And it has been very painful for us to have to tell even the school, which is just across from my office, to tell them the water that they're drinking is not safe We are trying to do the best that we can with MCLs or not. My idea or our idea is to bring water that is drinkable to our town, but we know that it's very expensive. And we need those MCLs to help us bring some of the costs paid by the responsible parties, and not by the people who can't actually afford it. It's a very, very poor community that can't afford to have these charges on the water bill.	The State Water Board is aware that some commun disproportionally affected by either 1,2,3-TCP, the p both. The State Water Board's Division of Drinking provide technical support to public water systems a opportunities are available from the Division of Fina through loans and grants.
Cecy Gonzalez General public	R - Outreach/Education	So I'm speaking on behalf of the people that are exposed to this contaminated water. We have so many clinics in our town, and how many more clinics are we going to need, because nobody has taken the time to inform residents about the problem? Nobody has informed them about the risks of drinking this contaminated water, or how to mitigate exposure when bathing by limiting the length of your shower and keeping a window open. So for our people, for our gente, it's incredibly difficult and unrealistic to bathe in just five minutes. They are working out in the field for eight hours exposed to dirt and chemicals. And how can we possibly tell them that they need to come home and not bathe in their own water? So I'm here today only to touch your minds and your hearts about this risk, because there's so many people that have been exposed and nobody has taken the time to inform them. Nobody has told them about this risk or mitigating their exposure. How many more clinics are we going to need, and I'm just here because I worry about the statistics as well.	Questions (FAQs) on inhalation exposure and will be information on the program page when available. A MCL becomes effective and water systems have con- monitoring, those water systems that serve water e MCL will be required to perform public notification existing regulations.
Cecy Gonzalez General public	B - Adopt 5 ppt	So we, the people in this country, we have been neglected for such a long time and we're concerned that our needs aren't being met. My only concern is that today, you guys make a decision to limit this exposure, because tomorrow may be too late.	Thank you for your support.
Jack Hawks CA Water Association	B - Adopt 5 ppt	CWA supports the MCL development for 1,2,3-TCP.	Thank you for your support.

nunities may be ne proposed regulations, or ng Water District offices ns and funding inancial Assistance

TCP contains information exposure to drinking water art of the implementation te Frequently Asked I be posting that Additionally, once the completed initial er exceeding the 1,2,3-TCP on as established in

Commenter Name/ Organization	Comment Topic	Comment	Response
Jack Hawks CA Water Association	D - Compliance plans	And we respectfully offer two additions to the final regulation. The first one you've heard already, with respect to a compliant strategy that will be more progressive in nature, more akin to the compliant strategy adopted for Hexavalent chromium.	
Jack Hawks CA Water Association	G - CEQA	 with the GAC treatment as the best available technology. The Public Resources Code Section 21-21159 obliges the Board to perform at the time of the adoption of a regulatory standard, an environmental analysis of the reasonably foreseeable methods of compliance. So accordingly, CWA believes that the Initial Statement/Mitigated Negative Declaration should be strengthened to clarify that the environmental analysis does in fact consider the likely environmental impacts of a statewide implementation of GAC as the reasonably foreseeable method of compliance required by the section. We think the Board needs to ensure that the IS/MND analyzes implementation of GAC with respect to the environmental impacts of installing and operating the GAC equipment. We think the economic 	The CWA is mistaken that GAC is required to be use Although it was identified as the BAT, and it is assu with 1,2,3-TCP contamination will need to impleme can employ whatever strategies or treatment they TCP. The IS/MND analyzes potential environmenta implementing GAC, and demonstrates that GAC we environmental impacts. Nonetheless, there is the circumstances at specific water systems to necessi and mitigation to address site-specific concerns. T therefore, disagrees that there are changes that sh document to ensure that it would be able to be rel systems that may implement GAC, and that site-sp require that additional analyses be completed.

a novel technology requiring plement. A compliance into compliance with the part of the regulations. I noncompliant with the ng a source out of f treatment or other k into compliance, and not in the public nancial Assistance has loan l impact of the proposed

used to treat 1,2,3-TCP. ssumed that most systems ement GAC, water systems ney want to address 1,2,3ntal impacts of would not have significant he potential for unique ssitate additional analysis The State Water Board, should be made to the relied upon by all water -specific conditions may

Commenter Name/ Organization	Comment Topic	Comment	Response
Jose Gurrola Mayor of Arvin	B - Adopt 5 ppt	And it's a public health issue when families and children stop drinking something healthy like water and turn towards unhealthy beverages. It's an environmental justice issue when a lot of these communities are communities of color and low income. It's a quality of life issue. And especially when it's at the hands of some corporations' activities that pollute the water it's an environmental justice and it's a human rights issue. And so I stand here in support of the proposed MCL.	Thank you for your support
Jose Gurrola Mayor of Arvin	K - Financial Assistance	And I'm sure that if that is proposed, it's going to give water districts, cities, agencies, the ability to identify whether or not they have this contaminant in their water, give information to the public as to whether that contamination is there and hopefully provide resources to mitigate that contamination.	The State Water Board is aware that some commu disproportionally affected by either 1,2,3-TCP, the both. The State Water Board's Division of Drinking provide technical support to public water systems opportunities are available through the Division of
Jose Gurrola Mayor of Arvin	B - Adopt 5 ppt	And I urge you to adopt, eventually adopt this health protective MCL.	Thank you for your support.
Kena Cador ACLU of CA	B - Adopt 5 ppt	The ACLU of California supports the Board's proposal to establish the most stringent health protective maximum contaminant level possible for 1,2,3-TCP.	Thank you for your support.
Kena Cador ACLU of CA	P - Disproportionate Effect	the majority of contaminated sites are in Fresno, Kern, Tulare and Los Angeles counties and clustered in cities with disproportionate numbers of residents of color. Without any state or federal intervention requiring filtration or other systems of regulation, 1,2,3-TCP contamination will persist and it will continue to affect the drinking water of residents.	The State Water Board is aware that some commu disproportionally affected by either 1,2,3-TCP, the both. The State Water Board's Division of Drinking provide technical support to public water systems opportunities are available through the Division of
Kena Cador ACLU of CA	B - Adopt 5 ppt	California is the first state in the country to adopt the human right to water. Clean drinking water is not just a commodity, but it's a necessity. Given the dangers of 1,2,3-TCP, an enforceable drinking standard is imperative. And this Board has an obligation to set an enforceable standard that will protect all Californians. So California is long overdue for establishing a detectable standard for 1,2,3-TCP and the ACLU of California supports the adoption of the most stringent standard possible. The cost of not doing so is too great.	Thank you for your support.
Lucy Hernandez General public	B - Adopt 5 ppt	I would like the State Water Board to know that it's time to set a limit at five parts per trillion to keep our families safe. It's very important to protect our health and it's time to provide safe and affordable drinking water to our disadvantaged communities. I urge you to protect our communities' health, and it's time for every Californian to have access to safe and affordable drinking water.	, ,

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Commenter Name/ Organization	Comment Topic	Comment	Response
Lucy Hernandez General public	P - Disproportionate Effect	And it's very devastating to see our families, how we struggle to pay for water that we cannot use to drink or cook. Plus, it breaks my heart to hear some families tell their children to stop drinking all that water, because it's expensive to go and purchase water. And it shouldn't get to the point.	The State Water Board is aware that some commu disproportionally affected by either 1,2,3-TCP, the both.
Mariah Thompson California Rural Legal Assistance, Inc.	B - Adopt 5 ppt	The first is that the state must establish the MCL at five parts per trillion in order to comply with legal requirements of the Health and Safety Code. The Health and Safety Code requires that a contaminant MCL be established as close to the public health goal, and as protective for human health as is technologically and economically feasible. And the proposed MCL of five parts per trillion is generally considered to be the lowest concentration of TCP that can be both reliably and economically detected. And is as close to the public health goal as is technologically and economically feasible and therefore the state does have a legal obligation to adopt at five parts per trillion. And so therefore we support it.	
Mariah Thompson California Rural Legal Assistance, Inc.	I - Grandfathering	Our second comment is that public water systems that have previously detected contaminants in their water should not be permitted to substitute past testing data in their initial MCL reporting requirements. So proposed changes to 22 CCR 64445 would permit water systems to substitute existing monitoring data to satisfy the initial monitoring requirements when a new MCL is established.	sources in advance of drinking water standards; th
Mariah Thompson California Rural Legal Assistance, Inc.	I - Grandfathering	CRLA appreciates cost-saving mechanisms generally as they can reduce the chances that extra financial burdens from remediation efforts will be passed on to low-income communities and on to the residents themselves in the form of rate increases. However, this particular proposal to allow water systems to save money by substituting old data comes at the price of endangering the health of residents. 1,2,3-TCP levels can vary drastically across quarters and even across the same quarter across years. We submitted a comment letter with specific data that shows from one of the communities that we work with, quarterly reporting across years. And demonstrates that even within the same quarter across years it can double or triple at any given time.	-

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on should be prohibited. nitor their drinking water this early sampling helps ure compliance actions and date of the regulations. Not some PWS from performing ducing the amount of

ario described in the o very unlikely, and the submit a request to the nat substitution may only te Water Board is not nd during review may

Commenter Name/ Organization	Comment Topic	Comment	Response
Mariah Thompson California Rural Legal Assistance, Inc.	I - Grandfathering	And so allowing systems that have a history of TCP contamination to substitute past data will not provide a clear picture of the current status of TCP in the well systems and in groundwater sources. This can ultimately lead to underestimating the amount of TCP that is present in the water systems. And could ultimately deprive residents of the Notice of Contamination to which they have a legal right. And of the benefits of remediation efforts to reduce the levels of the contaminant in the water. Permitting such a scenario runs counter to the state's obligations under Health and Safety Code to place a primary emphasis on the protection for public health and to take measures to avoid any significant risk to public health, caused by carcinogenic contaminants. So in order to strike a balance between protecting theto strike a balance between protecting the health of residents in communities with contaminated groundwater sources. And to relax financial burdens on disadvantaged communities, the Board should only permit data substitutions for public water systems if the systems have actively tested for a contaminant for previous years, for example, for three years and have not found a contaminant in their water systems.	Substitution of samples encourages PWS to monitor sources in advance of drinking water standards; thi PWS with contaminated sources prepare for future begin planning well in advance of the effective date allowing substitution of results may discourage som early sampling, leading to increased delays in reduc contamination in drinking water.
Mariah Thompson California Rural Legal Assistance, Inc.	P - Disproportionate Effect	And then our last comment is that the state should make sure throughout this process that low-income communities are not left behind, just based on their low-income status. There's been a lot of conversation here today about the human right to water, which guarantees that residents have a right not only to affordable water, but to affordable water that is clean. And throughout this process, we recognize that there are responsible parties that folks have been talking about a lot today. But we just want the Board to know that they do have an obligation to make sure that regardless of what happens with that, communities are not being left behind based on their low-income status. And it is likely that state resources will be necessary to ensure that this right is upheld. Thank you.	both. The State Water Board's Division of Drinking provide technical support to public water systems
Martha Davis Inland Empire Utilities Agency	B - Adopt 5 ppt	Number one, we support the MCL. I'm not a scientist, but this is clearly bad stuff. And we need to protect our public, so the direction that your staff is proposing is the right thing to do.	Thank you for your support.

nitor their drinking water this early sampling helps ure compliance actions and ate of the regulations. Not some PWS from performing ducing the amount of

nunities may be ne proposed regulations, or ng Water District offices ns and funding of Financial Assistance.

Commenter Name/ Organization	Comment Topic	Comment	Response
Martha Davis Inland Empire Utilities Agency	D - Compliance plans	If we have a concern it's just making sure that there is adequate compliance time for the agencies that are doing their due diligence, to build the granulated activated carbons or the other alternative technologies, to make sure that they are in compliance with the MCL.	extensive preliminary planning and design to impl
Martha Davia Inland Empire Utilities Agency	D - Compliance plans	So either take a look at the compliance period, or as an alternative at the very least take a look at SB-17 385 for the Hexavalent chromium. Because that allowed water agencies who recognized that they could be in violation to have a compliance plan that you approved. They would have proper notifications for the public, proper accommodation for the protection of public health, but it will enable them to go ahead and implement a it's a pathway to compliance and not be in violation of the standard. It's a common sense approach, it enable good actors to do the right thing, but do it within a timeframe that actually is realistic given all the things that have to go in to putting together a compliance plan.	The California legislature limited the scope of SB 3 chromium. Hexavalent chromium at the time of N considered both expensive and difficult to remove Granular activated carbon is neither a new nor a r extensive preliminary planning and design to impl Board does not consider allowing a water system while serving water that does not meet drinking w protective of public health. PWS concerned with begin taking actions to remain in compliance with advance of the regulation effective date
Martha Davis Inland Empire Utilities Agency	H - BAT	And then my other point, actually appreciate that the staff are recognizing all the alternative technologies. We'd simply ask that the regulation clearly call that out, because blending is a strategy. And we're dealing with an MCL that's right on the edge of detect guidance on how to do the blending with detect and non-detect water will be really important for agencies as they figure out a common sense compliance strategy.	BAT designation does not mandate use of the BAT alternative treatment options to the BAT when ap found acceptable by the District office, will be grad treatment other than GAC for the purposes of ren
Randy Reck Environmental Justice Coalition for Water	B - Adopt 5 ppt	And just in brief, EJCW is strongly in favor of the proposal as proposed. And including the current compliance schedule, so thank you.	Thank you for your support.
Raul Barraza Arvin Community Services District	B - Adopt 5 ppt	It's a tragedy that farm workers from a couple of decades ago busted their backs in the fields all day, were exposed to the pesticide on the job, and then years down the road find that their generations of their families are now in danger from the same chemicals that they used to make a living from. It's a disgrace and we need to do everything we can to protect public health and make the water safe. The MCL being set at five parts per trillion will help us to do that.	Thank you for your support.

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385 to hexavalent f MCL adoption was ove from drinking water. a novel technology requiring plement. The State Water m to remain in compliance water standards to be th noncompliance should th the proposed MCL in

BAT. PWS may propose applying for a permit and, if ranted a permit to operate emoving 1,2,3-TCP.

Commenter Name/ Organization	Comment Topic	Comment	Response
Raul Barraza Arvin Community Services District	P - Disproportionate Effect	Arvin is a disadvantaged community and we try to keep the rates as low as possible. It's going to be extremely expensive to put in filtration systems needed to get the TCP out of the water. Nonetheless, we are supporting the proposed MCL at five parts per trillion, because we believe that people should never be forced to choose between clean water and affordable water.	The State Water Board is aware that some comm disproportionally affected by either 1,2,3-TCP, the both. The State Water Board's Division of Drinkin provide technical support to public water systems opportunities are available through the Division of
Raul Barraza Arvin Community Services District	A - Cost Recovery	Like other Central Valley water systems who joined us in our comment letter, we are looking to Dow and Shell, the companies who well knowingly polluted our groundwater with their defective pesticide, which contain an unnecessary ingredient of 1,2,3-TCP, to step up and do the right thing. And pay for the damage they have caused. The MCL will help us in our fight against these companies and help us to bring water that is clean and affordable to the people of Arvin. Thank you.	The State Water Board is aware that some Public able to successfully recover the cost of treatment Although adoption of the proposed regulations m assist Public Water Systems in their litigation or n responsible parties over reimbursement for treat intent of the State Water Board's actions in adopt action the State Water Board could take to assist treatment for Public Water Systems would be tak regulatory process, and is, therefore, outside of th regulations.
Rebecca Franklin Association of CA Water Agencies		And we definitely support the Board's action on adopting an MCL for 1,2,3- TCP.	Thank you for your support.
Rebecca Franklin Association of CA Water Agencies		The second concern relates to implementation of the regulation. Again, as Martha stated there's real operational considerations both with granular activated carbon or other treatment methods. And having an MCL really close to a detection level creates some questions about things like how non- detect should be averaged into determining MCL compliance. So also concerns about how to establish blending targets if agencies pursue that path to compliance.	Criteria for blending and other operational conce part of the review performed by te Division of Dri offices when a permit application for blending is s operational factors in regulation may provide clar with necessary operational flexibility when establ that are adequately protective of public health
Rebecca Franklin Association of CA Water Agencies	D - Compliance plans	The first is the need for a reasonable compliance period. So as was mentioned by staff this morning, the anticipated adoption of this MCL is July or later this year with a compliance deadline of January 2018, which gives our agencies less than six months potentially to get their treatment in place. And even for those that are planning in advance, that's just not enough time probably. And so they may immediately be out of compliance in January, when they take that first sample.	Board does not consider allowing a water system while serving water that does not meet drinking water that d
Ryan Jensen Community Water Center	B - Adopt 5 ppt	Community Water Center, and our partners in 5 other environmental justice organizations have been strong advocates of a health protective MCL for 1,2,3-TCP since this regulatory process began.	Thank you for your support

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lic Water Systems have been ent from responsible parties. may provide clarity and negotiations with atment costs, that is not the opting the regulations. Any st in recouping costs of aken outside of this f the scope of these

cerns will be determined as Drinking Water District s submitted; defining larity but may also interfere ablishing operations plans

a novel technology requiring plement. The State Water m to remain in compliance water standards to be th noncompliance should ith the proposed MCL in

Commenter Name/ Organization	Comment Topic	Comment	Response
Ryan Jensen Community Water Center	B - Adopt 5 ppt	The sooner we can enact the health protective MCL, the sooner we can ensure that all Californians have access to safe drinking water that's not laced with a known carcinogen. Every time I talk to one of the communities that have been impacted, they always have the same questions. Can I buy a filter to take it out of my water? What is my public water system going to do about this? The answer to every single one of those questions is, "Until an MCL is set, none of those solutions are available to you. You need to buy bottled water." I also live in Visalia. And we know there's 1,2,3-TCP in the water. The most recent available TCR report has detection of 1,2,3-TCP at over 15 times the proposed MCL. That's over 100 times the public health goal. We spend about almost \$800 a year on bottled water living in Visalia.	
Ryan Jensen Community Water Center	K - Financial Assistance	Once the MCL is in place, the Board should ensure that resources are made available to help source, secure long-term drinking water solutions for communities that need them, both through its technical assistance programs and by looking to the responsible parties.	The State Water Board is aware that some community disproportionally affected by either 1,2,3-TCP, the both. The State Water Board's Division of Drinkin provide technical support to public water systems opportunities are available through the Division o
Ryan Jensen Community Water Center	B - Adopt 5 ppt	We urge a swift adoption of the proposed five 15 parts per trillion MCL for 1,2,3-TCP. Thank you.	Thank you for your support.
Susan Little Environmental Working Group	B - Adopt 5 ppt	The Environmental Working Group fully supports the proposed MCL of five parts per trillion. We believe it's a standard that's both protective of human health and technologically feasible. It is a reasonable standard to proceed with.	Thank you for your support.
Susan Little Environmental Working Group	B - Adopt 5 ppt	TCP, as we know, is a carcinogen and it's persistent in the environment and already communities have been exposed to this carcinogen for many decades. It's time to protect Californians, and protect them as soon as possible, from this carcinogen.	Thank you for your comment.
Susan Little Environmental Working Group	D - Compliance plans	In addition, EWG does not support any extension of the compliance period that's been discussed. Over the years we've been involved in the MCL processes for numerous contaminants. And we've come to find that the existing compliance timing works well, so again we just ask that you proceed with the MCL, the proposed MCL, and do it as soon as possible. Thank you.	Thank you for your comment. The State Water Bo compliance period for this regulation.
Tutuy	B - Adopt 5 ppt	So I do support the MCL five parts per trillion regulations. And hope that we all understand that water is sacred and it's life. Thank you.	Thank you for your support.

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munities may be the proposed regulations, or ing Water District offices ms and funding of Financial Assistance.

Board is not proposing a

Commenter Name/ Organization	Comment Topic	Comment	Response
Van Grayer Vaughn Water Company	C - Groundwater remediation	When it comes to TCP contamination, the undersigned water systems share the same two goals. First, we want 1,2,3-TCP removed from our groundwater supplies and public exposure to 1,2,3-TCP in our communities eliminated.	Thank you for your support. The proposed regula water served by Public Water Systems. While gro may result in improved source water, regulations groundwater remediation are outside the scope o
Van Grayer Vaughn Water Company	A - Cost Recovery	Second, we want the parties responsible for causing the 1,2,3-TCP contamination, rather than our water customers, to cover the cost of treatment. That is why we and dozens of similarly situated Central Valley water systems have turned to the courts seeking compensation from Shell and Dow to pay for, among other things the installation, operation and maintenance of TCP treatment facilities. Shell and Dow argue however that a maximum contaminant level to the bright line that should confine when a contaminant damages the water supply. And the absence of an MCL for 1,2,3-TCP is the single greatest uncertainty-generating factor impeding resolution of these lawsuits. Consequently, it is our hope that the adoption of the proposed MCL at five parts per trillion a level that is the equivalent of the detection limit for the reporting purposes, and is thus the level that is close as technically feasible to the public health goal will promote swift resolution of the 1,2,3-TCP cost recovery lawsuits. And strengthen our ability to hold the responsible parties accountable for the cost of TCP remediation, which in turn will help us achieve our shared goal of installing 1,2,3-TCP treatment with minimal impact on our ratepayers.	Thank you for your support. The State Water Boar Public Water Systems have been able to successfu treatment from responsible parties. Although add regulations may provide clarity and assist Public W litigation or negotiations with responsible parties treatment costs, that is not the intent of the State adopting the regulations. Any action the State Wa assist in recouping costs of treatment for Public W taken outside of this regulatory process, and is, th scope of these regulations.
Van Grayer Vaughn Water Company	B - Adopt 5 ppt	In contrast, setting the MCL higher than the detection limit on account of substantial cost of treatment, will only further enrich the responsible parties at the expense of public health. Maximum contaminant levels typically require a difficult choice between public health and affordability. But in the case of 1,2,3-TCP the choice in favor of public health should be an easy one to make. We urge the Board to adopt the proposed 1,2,3-TCP maximum contaminant level at five parts per trillion and to do so as soon as possible. Thank you so much for your time.	Thank you for your comment and support for the

ulations are for drinking roundwater remediation ns pertaining to e of this regulation.

oard is aware that some sfully recover the cost of adoption of the proposed Water Systems in their es over reimbursement for ate Water Board's actions in Water Board could take to Water Systems would be therefore, outside of the

he MCL at 5ppt.

Commenter Name/ Organization	Comment Topic	Comment	Response
Van Grayer Vaughn Water Company	D - Compliance plans	We don't believe the compliance timeline is an issue. The timeline is very short. I believe it's a January 2018 compliance. That leaves us very little time to purchase the equipment, supplies and material necessary to construct, and build these treatment facilities. Compliance issues, whenever a water supply receives a Notice of Non-compliance, undermines the integrity of the water system's ability to provide safe drinking water. I think the Board should consider expanding or modifying that timeline.	Board does not consider allowing a water system t while serving water that does not meet drinking w

a novel technology requiring plement. The State Water n to remain in compliance g water standards to be confidence in their water to know when their dards, and the hexavalent pliers to notify the public n at levels above the Board is also committed to