

## MAJOR REGULATIONS STANDARDIZED REGULATORY IMPACT ASSESSMENT SUMMARY

DF-131 (NEW 11/13)

### STANDARDIZED REGULATORY IMPACT ASSESSMENT SUMMARY

Agency (Department) Name State Water Resources Control Board, Division of Drinking Water	Contact Person Cindy Forbes	Mailing Address 1001 I Street Sacramento, CA 95814
Email Address Cindy.Forbes@waterboards.ca.gov	Telephone Number (916) 341-5045	
<p>1. Statement of the need for the proposed major regulation.</p> <p>The Division of Drinking Water (DDW) of the State Water Resources Control Board (State Water Board) is responsible for adopting primary drinking water standards, which must be set in accordance with the requirements of section 116365 of the California Safe Drinking Water Act (SDWA)(Health &amp; Safety Code (HSC), div. 104, pt. 12, ch. 4, §116270 et seq.). Pursuant to California HSC section 116365, the State Water Board, when it establishes Maximum Contaminant Levels (MCLs), shall set the MCL as close to the Office of Environmental Health Hazard Assessment (OEHHA)-published Public Health Goal (PHG) as is technologically and economically feasible, placing primary emphasis on the protection of public health. The PHG was established in 2009 at 0.7 ppt.</p> <p>The purpose of the proposed regulation is to adopt an MCL for 1,2,3-Trichloropropane (1,2,3-TCP) in drinking water supplied by public water systems (PWS).</p>		
<p>2. The categories of individuals and business enterprises who will be impacted by the proposed major regulation and the amount of the economic impact on each such category.</p> <p>All PWS are subject to regulations adopted by the State Water Board under the SDWA. PWS with concentrations above the MCL will likely install Granular Activated Carbon (GAC) treatment systems and incur amortized capital and ongoing operations and maintenance costs resulting in an economic impact of approximately \$47 million in the highest year. The proposed drinking water regulation is expected to increase the costs to PWS which will likely be passed through to consumers and result in an increase in water rates to households. In the near future, businesses providing GAC and laboratory/monitoring services are likely to expand in size and/or number. There are also opportunities for companies to be created in California in response to the increased demand for GAC systems. The impact on the PWS and the individuals represents a zero percent change in employment, demand, output, and other economic indicators.</p>		
<p>3. Description of all costs and all benefits due to the proposed regulatory change (calculated on an annual basis from estimated date of filing with the Secretary of State through 12 months after the estimated date the proposed major regulation will be fully implemented as estimated by the agency).</p> <p>PWS will incur capital costs for the installation of GAC treatment facilities, monitoring and analytical costs, operation and maintenance costs (including GAC replacement). The economic impact is \$47 million in the highest year. Exposure to concentrations of 1,2,3-TCP in drinking water that exceed the PHG results in an increased risk for cancer. Establishing the MCL at the preliminary staff recommendation of 5 ppt could potentially lead to a reduction of approximately 2.5 cancer cases per year for 70 years. The treatment for 1,2,3-TCP may, in some cases, provide a secondary benefit by removing other contaminants in drinking water. The health concerns associated with such contaminants would be reduced.</p>		
<p>4. Description of the 12-month period in which the agency estimates the economic impact of the proposed major regulation will exceed \$50 million.</p> <p>The proposed regulation is determined to be a major regulation requiring a Standardized Regulatory Impact Assessment (SRIA) as the estimated economic impacts of the regulation exceed \$50 million in a 12-month period after full implementation. The State Water Board has estimated that the proposed regulation could result in direct costs to regulated parties that increase demand for GAC systems. The economic impacts would be highest in the first three years of implementation of the regulation. The analysis in the SRIA represents a snapshot of the proposed regulation, with the cost and compliance requirements representing the best information available to the State Water Board at the time of the SRIA submittal.</p>		

## MAJOR REGULATIONS STANDARDIZED REGULATORY IMPACT ASSESSMENT SUMMARY

DF-131 (NEW 11/13)

### 5. Description of the agency's baseline:

The State Water Board, as well as the U.S. Environmental Protection Agency (EPA), establishes drinking water standards to ensure the drinking water provided to the public by each PWS is safe, potable, reliable, and protective of public health. A drinking water standard for 1,2,3-TCP does not exist at the national level. For drinking water supplied by a PWS to the public, the State Water Board establishes maximum allowable levels for various contaminants that may be present in drinking water sources, whether man-made or naturally-occurring. Based on monitoring for 1,2,3-TCP conducted between 2001 and 2015, the State Water Board has identified 289 PWS wells that exceed the preliminary staff recommendation for an MCL of 5 ppt. In the absence of a state or federal drinking water standard, PWS are not required to monitor or provide treatment for 1,2,3-TCP. Therefore, some impacted PWS in California are currently delivering water to the public containing 1,2,3-TCP above 5 ppt. This contaminant has been found by the U.S. EPA to likely be carcinogenic in humans and hence, there is increased public health risk for cancer associated with exposure to this contaminant. Some segment of the population (that is aware of the contamination and can afford it) has likely chosen to use alternate sources of drinking water, for example bottled water and those communities are burdened with the cost of their monthly water bill in addition to purchasing bottled water.

### 6. For each alternative that the agency considered (including those provided by the public or another governmental agency), please describe:

- All costs and all benefits of the alternative
- The reason for rejecting alternative

Alternative 1, No Proposed Regulation, would not impose any cost on PWS or consumers/customers. This scenario would not result in a change to existing drinking water standards (SDWA) and 1,2,3-TCP-contaminated drinking water would continue to be delivered to customers and consumers. With this alternative, there would be no reductions in theoretical cancer cases and therefore, no health benefit would be achieved. Alternative 1 does not sufficiently address the requirement in the HSC of setting the MCL as close to the PHG as is technologically and economically feasible, placing primary emphasis on the protection of public health. Therefore, Alternative 1 is not a viable alternative.

Alternative 2, Setting the MCL at 15 ppt, would result in a less stringent MCL and would impose reduced cost (\$25.6 Million during the highest year) based on: 1) a reduced number of impacted drinking water sources requiring treatment, thus reducing the total number of treatment facilities constructed; 2) a reduction of operation and maintenance costs associated with drinking water treatment; and 3) a reduction in the cost of monitoring and laboratory analyses. Alternative 2 would offer a cancer risk reduction for approximately 57% of the total population that benefit from the proposed regulation. Relative to the proposed MCL, this alternative would result in higher concentrations of 1,2,3-TCP in drinking water and a lower health benefit (an increased number of theoretical cancer cases). While Alternative 2 is more affordable, the MCL can be set at a lower level to reduce exposure and theoretical cancer cases in a lifetime. Therefore, the proposed regulation is preferred to achieve the maximum protection of public health given the current technology.

### 7. A description of the methods by which the agency sought public input. (Please include documentation of that public outreach).

In May and early June 2016, the State Water Board held three focused stakeholder meetings on the proposed regulation. These focused stakeholder meetings engaged representatives from public water systems most impacted by 1,2,3-TCP contamination in their drinking water supply. The meetings were held in Visalia, Bakersfield, and Fresno on May 17, May 19 and June 2, 2016, respectively. Additionally, publicly noticed workshops were held in Sacramento, Bakersfield, and Fresno on July 20, July 26, and July 28, 2016, respectively, when the preliminary staff recommendation for the MCL for 1,2,3-TCP was released. These forums, held outside of the rulemaking process, provided opportunity for stakeholder comment and for the solicitation of alternatives to the proposed regulation. State Water Board staff noted comments and concerns raised at the workshops. The timeframe of the stakeholder meetings and public workshops allowed the State Water Board to incorporate comments into this analysis. After the regulation is proposed, a public comment period will be held as provided for in the Administrative Procedure Act (APA). Announcements and materials related to the workshop were publicly posted on State Water Board websites and distributed at the stakeholder meetings and workshops:

[http://www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/123TCP.shtml](http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/123TCP.shtml); [http://www.waterboards.ca.gov/board\\_info/video.shtml](http://www.waterboards.ca.gov/board_info/video.shtml)

### 8. A description of the economic impact method and approach (including the underlying assumptions the agency used and the rationale and basis for those assumptions).

There were two data sources used in the cost estimating method: 1) the output from U.S. EPA's Work Breakdown Structure (WBS) Model for Drinking Water Treatment, specifically GAC and 2) Division of Drinking Water staff recommendations based on standard business practices. The WBS model was designed to assist U.S. EPA in estimating national compliance costs for drinking water regulations. The model is used to determine the required building materials/components and associated costs of a typical GAC treatment, which is being proposed as the best available technology (BAT) for the removal of 1,2,3-TCP. The model allows for the adjustment of parametric values to optimize a typical treatment system. The WBS model assumes the source initially has no GAC equipment and no staff dedicated to operating the new infrastructure. Thus, the cost estimate generated by the model is for full installation of the treatment system, including the corresponding operations and maintenance costs necessary for that system. The analysis assumed that PWS would choose the GAC system for removal of the contaminant; the WBS model provided by the U. S. EPA is accurate for the costs of GAC systems; and two flow rates (in millions of gallons per day (MGD)) are used to group PWS for this preliminary analysis: small (0.45 MGD) and medium (1.9 MGD). The WBS model does not estimate monitoring costs; instead, these costs were compiled manually based on the proposed regulation. The State Water Board consulted with economists who utilized the REMI model to calculate the indirect and induced economic impacts and job gains/losses.

Agency Signature 	Date 10/6/16
Agency Head (Printed) Thomas Howard	