

INITIAL STATEMENT OF REASONS
Point-of-Use and Point-of-Entry Regulations
Title 22, California Code of Regulations

PROBLEM STATEMENT

The California Safe Drinking Water Act (Health and Safety Code, division 104, part 12, chapter 4 (commencing with section 116270)) requires that each public water system comply with standards for contaminants in drinking water. (Health & Saf. Code § 116555.) Public water systems (PWS) commonly deliver drinking water to consumers via distribution systems, with consumers' service lines being connected to the distribution system. When treatment is necessary due to contamination, centralized treatment is typically utilized, ensuring the drinking water within the distribution system, as a whole, meets all drinking water standards. Alternatively, Point-of-Use treatment (POU) does not provide centralized treatment for the entire distribution system, with the POU(s) being applied to a single tap (or taps) used to reduce the contaminants at that tap only. Similarly, Point-of-Entry treatment (POE) provides necessary treatment of the distribution system water at or near the point the water enters a consumer's house or a building, as opposed to providing centralized treatment for the entire distribution system. The State Water Resources Control Board (State Water Board) is required to adopt regulations governing POU and POE treatment, subject to certain limitations, including that they apply only to systems with less than 200 service connections. (Health & Saf. Code § 116380.)

BACKGROUND/AUTHORITY

The State Water Resources Control Board (State Water Board) proposes to adopt regulations governing the use of POU and POEs by a PWS, in lieu of centralized treatment. The proposed regulations would establish criteria for applicable PWS that *choose* to provide treatment for drinking water through the use of POU and POE treatment devices, rather than through centralized treatment. The State Water Board is required to adopt regulations governing POU and POE treatment, in lieu of centralized treatment. (Health & Saf. Code § 116380.) The statute limits the scope of the regulations to systems with less than 200 service connections, and imposes other criteria.

The State Water Board was required to adopt the regulations as emergency regulations, exempt from the rulemaking provisions of the Administrative Procedures Act (APA) and to adopt subsequent regular regulations in accordance with the APA. The emergency provisions are to remain in effect until the earlier of January 1, 2018, or the effective date of the permanent regulations adopted by the State Water Board in accordance with the APA.

The net effect of the proposed regulations would be to establish specific regulatory criteria for general application of PWSs choosing to utilize POUUs and/or POEs in lieu of installation and operation of more costly centralized treatment, within the scope set out in section 116380.

BENEFITS

The benefits to be provided by the regulation are that the legislative mandate will be carried out and public water systems will have an additional option to achieve compliance with drinking water standards.

PURPOSE AND RATIONALE OF PROPOSED REGULATION

The proposed regulations would be contained in California Code of Regulations (CCR), title 22, division 4, chapter 15, articles 2.5 and 2.7. Regardless of whether the previously adopted emergency regulations are in effect at the time the Notice of Proposed Rulemaking is issued for these proposed regulations, the Notice will encompass the proposed regulatory text for this package, and the text will be shown as new, i.e. underlined. The following provides a detailed discussion of the proposed regulations.

CCR, TITLE 22, DIVISION 4, CHAPTER 15, ARTICLE 2.5 (POINT-OF-USE TREATMENT)

Section¹ 64417, Definitions

Section 64417 would be added to provide a definition of a point-of-use treatment device, consistent with the federal definition of “point-of-use treatment device (POU)” in 40 Code of Federal Regulations (C.F.R.) section 141.2. This definition is necessary to ensure that the regulation will be applied in a manner consistent with the federal definition and to clarify the kinds of devices addressed in the regulations.

Section 64418, General Provisions.

Section 64418 would be added to provide a summary of general requirements that must be met for a PWS to utilize POUUs in lieu of installing centralized treatment, consistent with sections 116380 and 116552 of the Health and Safety Code, as well as federal laws, regulations, and/or guidance. Subsection (a) prohibits the use of POUUs for meeting drinking water standards for microbial contaminants, volatile chemicals, or radon. This is necessary because the federal Safe Drinking Water Act (federal SDWA) specifically prohibits the use of POUUs to meet microbial standards. Volatile organic chemicals and radon are either volatile and present inhalation or contact exposure risk, which are not addressed by POUUs. (42 U.S. C. section 300g-1(b)(4)(E)(II)). Subsection (a) also prohibits the use of POUUs for a proposed new community water system that does not have a domestic water supply permit. This is necessary to prevent new

¹ ‘Section’ refers to Title 22 of the California Code of Regulations unless otherwise specified

systems from being constructed with POU as the treatment when the drinking water source does not meet drinking water standards.

Subsection (a) also requires the water system to apply for funding, to demonstrate that centralized treatment for achieving compliance is not immediately economically feasible, to apply for a permit or permit amendment, and to determine that there is no substantial community opposition to the use of POU in lieu of centralized treatment, as confirmed following a public hearing. These requirements are either explicitly required by sections 116380 and 116552 of the Health and Safety Code or are indirectly required because they are contained in federal law, regulations and guidance. They are proposed to be repeated in the regulations for the convenience of PWSs subject to the regulations.

Subsection (a) would require a community PWS to conduct a public hearing and determine that there is no substantial opposition. Non-community systems such as businesses or schools would not need to conduct a public hearing because they do not serve a community of residents. Subsection (a) would also require the PWS to have a State Water Board-approved POU Treatment Strategy, Operations and Maintenance Program, and Monitoring Program. These are required to be consistent with federal guidance and to ensure the PWS can appropriately operate, maintain, and monitor POU. Lastly, subsection (a) requires that for the PWS to achieve compliance with drinking water standards by utilizing POU, a POU must be installed in each building and each dwelling unit connected to the PWS. This is necessary because it is a requirement of 40 C.F.R. section 141.100.

The State Water Board recognizes that a PWS may wish to use POU as a means for providing some or all of their customers with an alternative drinking water (i.e. rather than bottled water, hauled water, etc.) however they cannot obtain 100% participation. Subsection (b) addresses the issue, and provides that the State Water Board can agree to waive or modify the regulations as required by PWS-specific circumstances. Subsection (c) would clarify when funding for centralized treatment is considered available. This is necessary to clarify the phrase used in the legislation, which is unclear. Subsection (d) clarifies the information to be considered when a PWS estimates the cost of centralized treatment and POU treatment.

Section 64418.1, Economic Feasibility of Centralized Treatment.

Section 116380 of the Health and Safety Code includes the criterion that a PWS demonstrate that centralized treatment is not immediately economically feasible. Subsection (a) would establish economic feasibility criteria applicable to community water systems, when comparing the costs of centralized treatment to the use of POU treatment, to effectuate the statutory requirement. The criterion in paragraph (a)(1) is consistent with the recommendations developed by the National Drinking Water Advisory Council (NDWAC) to U.S. EPA on its national small systems affordability criteria (NDWAC, 2003). The State Board considers that the NDWAC affordability criteria are a suitable basis for evaluating a PWS's ability to pay for treatment. The criteria in paragraphs (a)(1) and (a)(2) uses median household income (MHI). The MHI

limit(s) considers the cost of public drinking water supply and other household expenditures, and was set high enough to allow POUs to be designated as a compliance technology option without causing hardship to low-income households. MHI, which is incorporated in the definition of disadvantaged community in Section 79505.5 of the Water Code, has been adopted in other statutes and regulations, and is a common measurement of affordability.

Subsection (b) establishes the need for a non-community water system to provide supporting documentation that demonstrates to the State Water Board that centralized treatment is not immediately economically feasible. These subsections are needed to provide clarity and consistency, along with ensuring proper documentation will be submitted for the cost calculations.

Section 64418.2, POU Requirements.

Subsection (a) would establish the physical criteria for a POU treatment device, as well as clarify that the POUs must be owned, controlled, and maintained by the PWS (or by a person under contract with the PWS). The criteria are necessary to provide consistency with 42 U.S.C. section 300g-1 (b)(4)(E)(ii), but have been modified to provide sufficient clarity. Paragraph (a)(1) reiterates that, if the American National Standard Institute (ANSI) has issued a standard applicable to the POU, the POU must be certified to that standard by an independent organization. Paragraph (a)(2) addresses the potential use of POUs for which ANSI has not issued a standard; an issue on which the federal SDWA is silent, and allows, with State Water Board approval, a PWS to use a POU under circumstances in which an ANSI-issued standard does not adequately address a California drinking water standard. California has over 35 contaminants with maximum contaminant levels (MCLs) that are more stringent than federal levels. As a result, with ANSI standards typically reflective of federal standards, ANSI-issued standards may not adequately address a California drinking water standard. To provide consistency with the federal SDWA, paragraph (a)(3) would require POUs to be “owned, controlled and maintained by the PWS or by a person under contract with the PWS.” Paragraph (a)(4) would require a POU to be equipped with a mechanical warning, as required by the federal SDWA, but would also allow the option of having the device equipped with an automatic shut-off mechanism. The additional shut-off option may be considered as another form of mechanical warning that meets the intent of the federal SDWA requirement. Paragraph (a)(5) would require a POU to be equipped with a totalizing flow meter, if requested by the State Water Board. Adequate treatment and the useful life of many components pertaining to adequate treatment is related to the total flow having been treated (many POUs, but not all, are rated by total flow treated). As a result, a totalizing flow meter is often necessary to determine needed replacement of parts and address other operations and maintenance concerns.

Subsection (b) would establish requirements for pilot testing of POUs. Pilot testing verifies a POU’s ability to treat contaminants under expected use conditions, which may vary from the conditions in which the POU was tested by the manufacturer.

Additionally, pilot testing provides a means of establishing operations and maintenance limitations and scheduling activities. The pilot testing requirement is needed because the performance of POU varies depending on general water chemistry and other operational characteristics at a given location. Subsection (c) would allow an exemption from, or a reduction of the frequency of, pilot testing, if approved by the State Water Board. This is needed to eliminate the workload that would be imposed if the PWS had to perform pilot testing when the same POU has been tested for similar source water.

Section 64418.3, POU Treatment Strategy.

Utilizing POU in lieu of centralized treatment brings with it a host of issues and concerns that must be considered prior to implementation. To ensure a PWS has considered and addressed such concerns, section 64418.3 would require a PWS to develop a POU treatment strategy and submit the strategy for State Water Board review and approval. Subsection (a) paragraphs (1) through (10) include the minimum elements to be considered as part of a POU treatment strategy, including: a description of the problem to be addressed; the type of POU to be installed; employee qualifications; mandated customer use; legal obligations and authority limitations; customer education and notification; and scheduling of milestones. These elements are needed to ensure that the various aspects are considered prior to implementing a POU treatment program. Subsection (b) is needed to explicitly require the PWS to comply with the most current version of the treatment strategy that has been approved by the State Water Board.

Section 64418.4, POU Operations and Maintenance (O&M) Program.

PWS develop and maintain O&M programs for their centralized treatment facilities, which include frequent oversight and maintenance by trained and certified water treatment operators. Similarly, O&M programs for utilization of POU are needed to assure POU are reliably treating and providing water meeting drinking water standards. Section 64418.4 would require a PWS utilizing POU to develop and implement an O&M program. Although the O&M for a POU may not be as formidable as the O&M for a centralized treatment facility, the number of POU needing oversight, along with POU being located in a variety of premises not under the ownership of the PWS and not necessarily readily accessible to PWS staff, necessitate a comprehensive O&M plan. Subsection (a) would require a POU O&M program to address concerns such as: staffing, installation, inspection, tracking of maintenance and part replacements, and waste-handling and disposal procedures. Subsection (b) would establish the minimum frequency at which each POE must be inspected. Subsections (c) and (d) would require the PWS to maintain an updated O&M program and implement the program. A written document detailing the O&M program will help ensure the PWS consistently performs the needed O&M, even in the event of PWS staff turnover. In addition, the O&M program document will provide the information necessary for State Water Board staff to provide oversight and guidance. These elements are needed to ensure that the various operation and maintenance aspects are defined and approved prior to implementing a POU treatment program to ensure the treatment program is health protective.

Section 64418.5, POU Monitoring Program.

As with a centralized treatment facility, POU effluent water quality monitoring is needed to verify the efficacy of treatment and determine compliance with drinking water standards. Section 64418.5 would establish baseline monitoring requirements for a PWS utilizing POUs and require the PWS to develop and implement a monitoring program. Subsection (a) establishes minimum monitoring frequencies for source water, as well as initial and on-going monitoring of installed POUs. A POU's effluent quality and O&M needs can be directly affected by variations in source water. Therefore, paragraph (1) would require quarterly monitoring to capture potential variations, which are often seasonal. Paragraph (2) would require initial monitoring upon installation, and paragraph (3) would require rotational on-going monitoring of POUs to assure each POU is monitored at least annually. With approval, a more flexible on-going monitoring scheme (one quarter of units, each quarter) would be available following the completion of one year of monitoring where one-twelfth of all units are monitored each month. Requiring specific monitoring frequencies is necessary to ensure adequate performance of the POUs.

With the understanding that on-going monitoring can be onerous, subsection (b) would allow a PWS to apply for reduced on-going monitoring following no less than one year of evidence demonstrating the POUs can reliably and consistently produce water meeting drinking water standards. However, because nitrate, nitrite, nitrate plus nitrite, and perchlorate are considered to be acute contaminants, the potential for reducing the monitoring frequency to anything less than annually would not be appropriate for such contaminants. Conversely, subsection (c) clarifies that on-going monitoring results and other circumstances may necessitate additional monitoring to further evaluate whether adequately treated water is being provided. These subsections are necessary to provide flexibility regarding the monitoring frequencies so a PWS would not be required to perform unwarranted monitoring and would be required to monitor when there is a risk to public health.

Subsections (d) and (e) would require the PWS to maintain an updated monitoring program and implement the program. A written document detailing the monitoring program will help ensure the PWS consistently performs the needed monitoring, even in the event of PWS staff turnover. In addition, a written document will provide the information necessary for State Water Board staff to provide oversight and guidance. Subsections (f) and (g) set forth the immediate actions to be taken in the event a monitoring result exceeds an MCL, consistent with existing statutory and regulatory requirements that are imposed on PWS when MCLs are exceeded.

Section 64418.6, Public Hearing and Acceptance.

Section 116552 of the Health and Safety Code specifically restricts the State Water Board from permitting a PWS to use POUs in lieu of centralized treatment, unless a public hearing has been held in the community and there is no substantial community opposition. There are three categories of public water systems, community water

systems, and two types of non-community water systems. Non-community water systems do not serve a community, and there is no community that the PWS could survey for its approval. Therefore, this regulation clarifies that the public hearing and acceptance requirements do not apply to non-community water systems. Section 64418.6 would establish the minimum requirements necessary to effectuate the statutory requirements. To minimize the likelihood of a PWS having to repeat the required activities related to a public hearing and public acceptance of using POUs, as a result of potentially failing to adequately address the requirements, section 64418.6 would require the PWS to first submit a protocol to the State Water Board for review describing the PWS's plan for meeting the requirements.

Prior to a public hearing and the decision-making process for the community to either accept or reject POU treatment in lieu of centralized treatment, it is necessary that the community be provided ample information and time to review the information in order to make a well-informed decision. As such, subsection (a) would establish the minimum type of information necessary to be disseminated to the public. Subsection (a)(1) requires a PWS to submit supporting documentation for the potential costs to be provided by the PWS to customers in the survey and during the public hearing required in section 64418.6. Subsection (a) (2) would establish the logistical requirements for assuring the community has reasonable access to the information and ample time to review the information prior to decision-making.

To determine whether there is no substantial community opposition following the public hearing, the PWS would be required to survey its customers, with the customers voting 'for' or 'against' the use of POUs in lieu of centralized treatment. Subsection (a)(3) would set forth the process for conducting such a survey. To help assure the language used in a survey is consistent and would not be worded in a manner that may skew the customers' opinion, paragraph (a)(3) would require specific language to be used for the survey. Subsection (b) explicitly requires the PWS to comply with the State Board-approved protocol. Subsection (c) provides the means for determining whether there is no substantial community opposition. In short, at least 50 percent of all customers must have voted for the use of POU treatment, and no more than 25 percent of the total customers that voted can have voted against the proposition. This ensures adequate customer participation in the survey. Twenty-five percent was selected because the statute does not define "substantial," but the term is sometimes defined as "more than a scintilla" and less than a preponderance (which is more than 50 %). The regulation is necessary to clarify what is meant by "no substantial community opposition."

Section 64418.7, Recordkeeping and Reporting.

Section 64418.7 would establish recordkeeping and reporting requirements for a PWS utilizing POU treatment. Subsection (a) would require a PWS to maintain, and make available to the State Water Board on request, the records described in paragraphs (1) through (4) for a period of no less than ten years. The ten year timeframe is consistent with other recordkeeping requirements.

Subsection (b) would establish the frequencies at which a PWS would be required to report treated water and source water monitoring results; monthly and quarterly, respectively, consistent with the timeframe of the required monitoring. Additionally, a PWS would be required to submit information related to PWS investigations and/or corrective actions, POU maintenance, customer complaints, inspection results, and a POU's manufacturers' operational notices, to the State Water Board quarterly to assure availability of information for regulatory staff oversight. Consistent with most of the reporting deadlines for PWS (see section 64469), subsection (c) would require the reports in subsection (b) to be submitted to the State Water Board no later than ten days following each reporting period.

CCR TITLE 22, DIVISION 4, CHAPTER 15, ARTICLE 2.7 (POINT-OF-ENTRY TREATMENT)

Section 64419, Definitions.

Section 64419 would be added to provide a definition of a point-of-entry treatment device, consistent with the federal definition of "point-of-entry treatment device (POE)" in 40 C.F.R. section 141.2. This definition is necessary to ensure that the regulation will be applied in a manner consistent with the federal definition.

Section 64420, General Provisions.

Section 64420 would be added to provide a summary of general requirements that must be met for a PWS to utilize POEs in lieu of installing centralized treatment, consistent with section 116380 of the Health and Safety Code, as well as federal laws, regulations, and/or guidance. It should be noted that, unlike POU's, POEs are not prohibited from being used for meeting drinking water standards for microbial contaminants, volatile chemicals, or radon. Subsection (a) also prohibits the use of POEs for a proposed new community water system that does not have a domestic water supply permit. This is necessary to prevent new systems from being constructed with POE as the treatment when the drinking water source does not meet drinking water standards.

Subsection (a) also requires the water system to apply for funding, to demonstrate that centralized treatment for achieving compliance is not immediately economically feasible, to apply for a permit or permit amendment, and to determine that there is no substantial community opposition to the use of POEs in lieu of centralized treatment, as confirmed following a public hearing. These requirements are either explicitly required by sections 116380 and 116552 of the Health and Safety Code or are indirectly required because they are contained in federal law, regulations and guidance.

Subsection (a) would require a community PWS to conduct a public hearing and determine that there is no substantial opposition. Non-community systems such as businesses or schools would not need to conduct a public hearing because they do not serve a community of residents. Subsection (a) would also require the PWS to have a State Water Board-approved POU Treatment Strategy, Operations and Maintenance

Program, and Monitoring Program. These are required to be consistent with federal guidance and to ensure the PWS can appropriately operate, maintain, and monitor POEs.

Subsection (a)(4) would require a community PWS to conduct a public hearing and determine that there is no substantial opposition. Non-community systems such as businesses or schools do not need to conduct a public hearing. Although section 116380 does not mandate a public hearing and a determination of no substantial community opposition prior to being permitted for POE use, as is mandated by section 116552 for a PWS seeking to use POU in lieu of centralized treatment, the State Water Board considers these measures appropriate for a PWS planning to use POEs as well. Because POEs would be located on customers' premises, involves a unique method of supplying drinking water, and may affect customers' water bills, it is important that a substantial portion of the community has no opposition to using POEs. A public hearing would provide a forum for disseminating information and addressing questions the community may have, as well as a means for initiating a process to determine that there is no substantial community opposition for the use of POEs in lieu of centralized treatment. Subsection (a)(5) is required to assure the PWS has developed a POE strategy and can appropriately operate, maintain, and monitor POEs. For the PWS to achieve compliance utilizing POEs, a POE must be installed at each building connected to the water system, as indicated in subsection (a)(6). This is necessary because it is a requirement of 40 C.F.R. section 141.100.

The State Water Board recognizes that a PWS may wish to use POEs as a means for providing some or all of their customers with an alternative drinking water (i.e. rather than bottled water, hauled water, etc.) however they cannot obtain 100% participation. Subsection (b) addresses the issue, and provides that the State Water Board can agree to waive or modify the regulations as required by PWS-specific circumstances. Subsection (c) would clarify when funding for centralized treatment is considered available. This is necessary to clarify the phrase used in the legislation, which is unclear. Subsection (d) clarifies the information to be considered when a PWS estimates the cost of centralized treatment and POE treatment.

Section 64420.1, Immediate Economic Feasibility of Centralized Treatment.

Section 116380 of the Health and Safety Code includes the criterion that a PWS demonstrate that centralized treatment is not immediately economically feasible. Subsection (a) would establish economic feasibility criteria applicable to community water systems to clarify the statutory requirement. The criterion in paragraph (a)(1) is consistent with the recommendations developed by the National Drinking Water Advisory Council (NDWAC) to U.S. EPA on its national small systems affordability criteria (NDWAC, 2003). The State Water Board considers that the NDWAC affordability criteria are a suitable basis for evaluating a PWS's ability to pay for treatment. The criteria in paragraphs (a)(1) and (a)(2) uses median household income (MHI). The MHI limit(s) considers the cost of public drinking water supply and other household expenditures, and was set high enough to allow POEs to be designated as a

compliance technology option without causing hardship to low-income households. MHI is used in the definition of disadvantaged community in Section 79505.5 of the Water Code, and thus is a common measurement of affordability.

Subsection (b) establishes the need for a non-community water system to provide supporting documentation that demonstrates to the State Water Board that centralized treatment is not immediately economically feasible. Subsection (b) is needed to provide clarity and to ensure that the State Water Board has sufficient documentation to determine whether centralized treatment is not immediately economically feasible. Subsection (c) clarifies the information to be considered when a PWS estimates the cost of centralized treatment and POE treatment.

Section 64420.2, POE Requirements.

Subsection (a) would establish the physical criteria for a POE, as well as clarify that the POEs must be owned, controlled, and maintained by the PWS (or by a person under contract with the PWS). The criteria are consistent with the federal SDWA, 42 U.S.C. section 300g-1 (b)(4) (E) (ii), but have been modified to provide sufficient clarity. Paragraph (a)(1) provides, as required by the federal law that, if ANSI has issued a standard applicable to the POE, the POE must be certified to that standard by an independent organization. Paragraph (a)(2) addresses the potential use of POEs for which ANSI has not issued a standard, an issue on which the federal SDWA is silent and allows, with State Water Board approval, a PWS to use a POE under circumstances in which an ANSI-issued standard does not adequately address a California drinking water standard. California has over 35 contaminants with maximum contaminant levels (MCLs) more stringent than federal levels. As a result, with ANSI standards typically reflective of federal standards, ANSI-issued standards may not adequately address a California drinking water standard. In addition, 40 C.F.R. 141.100(d) includes criteria and procedures for a PWS using POEs, which includes the need for primacy state approval and assurance of adequate certification of POE performance and field testing. Consistent with the federal SDWA, proposed paragraph (a)(3) would require POEs to be “owned, controlled and maintained by the PWS or by a person under contract with the PWS.” Paragraph (a)(4) would require a POE to be equipped with a mechanical warning, as required by the federal SDWA, but would also allow the option of having the device equipped with an automatic shut-off mechanism. The additional shut-off mechanism option may be considered as another form of mechanical warning that meets the intent of the federal SDWA requirement. Paragraph (a)(5) would require a POE to be equipped with a totalizing flow meter. Adequate treatment and the useful life of many components pertaining to adequate treatment is related to the total flow having been treated (many POEs are rated by total flow treated). As a result, the State Water Board believes a totalizing flow meter is necessary to determine needed replacement of parts and address other operations and maintenance concerns.

Subsection (b) would establish requirements for pilot testing of POEs. Pilot testing verifies a POE’s ability to treat contaminants under expected use conditions, which may

vary from the conditions in which the POE was tested by the manufacturer. Additionally, pilot testing provides a means of establishing operations and maintenance limitations and scheduling activities. Subsection (c) would allow an exemption from or a reduction of pilot testing, if approved by the State Water Board. This is needed to eliminate undue burden on a PWS to perform pilot testing when the same POE has been tested for similar source water.

Section 64420.3, POE Treatment Strategy.

Utilizing POEs in lieu of centralized treatment brings with it a host of unique issues and concerns that must be considered prior to implementation. To ensure a PWS has considered and addressed such concerns, subsection (a) would require a PWS to develop a POE treatment strategy and submit the strategy for State Water Board review and approval. Subsections (a) (1) through (a) (13) include the minimum elements to be considered as part of a POE treatment strategy, including: a description of the problem to be addressed; the type of POE to be installed; employee qualifications; mandated customer use; legal obligations and authority limitations; customer education and notification, scheduling of milestones, and addressing the need for the customers' rights and responsibilities being conveyed with the sale of property, consistent with 40 C.F.R. Section 141.100(e) and federal guidance. These elements are needed to ensure that the PWS is proposing a program that is consistent with federal state requirements, and that the PWS obtain approval prior to implementing a POE treatment program. Subsection (b) is needed to explicitly require the PWS to comply with the most current version of the treatment strategy that has been approved by the State Water Board.

Section 64420.4, POE Operations and Maintenance (O&M) Program.

Centralized treatment facilities develop and implement O&M programs, which include frequent oversight and maintenance by trained and certified water treatment operators. Similarly, O&M programs for utilization of POEs are needed to assure POEs are reliably treating and providing water meeting drinking water standards. Section 64420.4 would require a PWS utilizing POEs to develop and implement an O&M program. Although the O&M for a POE may not be as formidable as the O&M for a centralized treatment facility, the number of POEs needing oversight, along with POEs being located in a variety of premises not under the ownership of the PWS and not necessarily readily accessible to PWS staff, necessitate a comprehensive O&M plan. Proposed section 64420.4 would require a POE O&M program to address concerns such as: staffing, installation, inspection, tracking of maintenance and part replacements, and waste-handling and disposal procedures. Subsection (b) would establish the minimum frequency each POE must be inspected. Subsections (c) and (d) would require the PWS to maintain an updated O&M program and implement the program. A written document detailing the O&M program will help ensure the PWS consistently performs the needed O&M, even in the event of PWS staff turnover. In addition, the O&M program document will provide the information necessary for State Water Board staff to provide oversight and guidance. These elements are needed to ensure that the various operation and maintenance aspects are defined and approved prior to implementing a POU treatment program to ensure the treatment program is health protective.

Section 64420.5, POE Monitoring Program.

As with a centralized treatment facility, POE effluent water quality monitoring is needed to verify the efficacy of treatment and determine compliance with drinking water standards. Additionally, 40 C.F.R. Section 141.100(c) requires a state's approval of a monitoring plan prior to allowing POE use for compliance. Section 64420.5 would establish baseline monitoring requirements for a PWS utilizing POEs and require the PWS to develop and implement a monitoring program. Subsection (a) establishes minimum monitoring frequencies for source water, as well as initial and on-going monitoring of installed POEs. A POE's effluent quality and O&M needs can be directly affected by variations in source water. Therefore, paragraph (1) would require quarterly monitoring to capture potential variations, which are often seasonal. Paragraph (2) would require initial monitoring upon installation, and paragraph (3) would require rotational on-going monitoring of POEs to assure each POE is monitored at least annually. With approval, a more flexible on-going monitoring scheme (one quarter of units, each quarter) would be available following the completion of one year of monitoring where one twelfth of all units are monitored each month.

With the understanding that on-going monitoring can be onerous, subsection (b) would allow a PWS to apply for reduced on-going monitoring following no less than one year of evidence demonstrating the POEs can reliably and consistently produce water meeting drinking water standards. However, because nitrate, nitrite, nitrate plus nitrite, and perchlorate are considered to be acute contaminants, the potential for reducing the monitoring frequency to anything less than annually would not be appropriate for such contaminants. Conversely, subsection (c) clarifies that on-going monitoring results and other circumstances may necessitate additional monitoring to further evaluate whether adequately treated water is being provided. These subsections are necessary to provide flexibility regarding the monitoring frequencies so a PWS would not be required to perform unnecessary monitoring and would be required to monitor when there is a risk to public health.

Subsections (d) and (e) would require the PWS to maintain an updated monitoring program and implement the program. A written document detailing the monitoring program will help ensure the PWS consistently performs the needed monitoring, even in the event of PWS staff turnover. In addition, a written document will provide the information necessary for State Water Board staff to provide oversight and guidance. Subsections (f) and (g) set forth the immediate actions to be taken in the event a monitoring result exceeds an MCL, consistent with existing statutory and regulatory requirements that are imposed on PWS when MCLs are exceeded.

Section 64420.6, Public Hearing and Acceptance.

Although state law does not mandate a public hearing and a determination of no substantial community opposition prior to being permitted for POE use, as is mandated by section 116552 of the Health and Safety Code for a PWS seeking to use POUs in

lieu of centralized treatment, the State Water Board considers these measures appropriate for a PWS planning to use POEs as well. Because POEs would be located on customers' premises, involve a unique method of supplying drinking water, and may affect customers' water bills, it is important that a substantial portion of the community has no opposition to using POEs. A public hearing would provide a forum for disseminating information and addressing questions the community may have, as well as a means for initiating a process to determine that there be no substantial community opposition to the use of POEs in lieu of centralized treatment. Section 64420.6 would establish the minimum requirements necessary for the public hearing the public's acceptance. To minimize the likelihood of a PWS having to repeat the required activities related to a public hearing and public acceptance of using POEs, as a result of potentially failing to adequately address the requirements, subsection (a) would require the PWS to first submit a protocol to the State Water Board for review describing the PWS's plan for meeting the requirements.

The community should be provided ample information and time to review the information in order to make a well-informed decision prior to a public hearing and the decision-making process for the community to either accept or reject POE treatment in lieu of centralized treatment. Therefore, subsection (a)(1) describes the information necessary to be disseminated to the public, while subsection (a)(2) would establish the logistical requirements for assuring the community has reasonable access to the information and ample time to review the information prior to decision-making.

To determine whether there is no substantial community opposition, following the public hearing the PWS would be required to survey its customers, with the customers voting 'for' or 'against' the use of POEs in lieu of centralized treatment. Subsection (a)(3) would set forth the process for conducting such a survey. To help assure the language used in a survey is consistent and would not be worded in a manner that may skew the customers' opinion, subsection (a) (3) would require specific language to be used for the survey. Subsection (b) explicitly requires the PWS to comply with the State Board-approved protocol. Subsection (c) provides the means for determining whether there is no substantial community opposition. In short, at least 50 percent of all customers must have voted for the use of POE treatment, and no more than 25 percent of the total customers that voted can have voted against the proposition. This ensures adequate customer participation in the survey, without a considerable number of customers opposing the proposition. Twenty-five percent was selected because the statute does not define "substantial," but the term is sometimes defined as "more than a scintilla" and less than a preponderance (which is more than 50 %). The regulation is necessary to clarify what is meant by "no substantial community opposition."

Section 64420.7, Recordkeeping and Reporting.

Section 64420.7 would establish recordkeeping and reporting requirements for a PWS that uses POE treatment. Subsection (a) would require a PWS to maintain, and make available to the State Water Board on request, the records described in paragraphs (1)

through (4) for a period of no less than ten years. The ten year timeframe is consistent with other recordkeeping requirements.

Subsection (b) would establish the frequencies at which a PWS would be required to report treated water and source water monitoring results; monthly and quarterly, respectively, consistent with the timeframe of the required monitoring. Additionally, a PWS would be required to submit information related to PWS investigations and/or corrective actions, POE maintenance, customer complaints, inspection results, and a POE's manufacturers' operational notices, to the State Water Board quarterly to assure availability of information for regulatory staff oversight. Consistent with most of the reporting deadlines for PWS, subsection (c) would require the reports in subsection (b) to be submitted to the State Water Board no later than ten days following each reporting period.

RESULTS OF THE ECONOMIC IMPACT ANALYSIS

The State Water Board has determined that the proposed regulations would not significantly affect the following:

- The creation or elimination of jobs within the State of California: The requirements previously summarized should not have any affect in that there would not be any significant change in PWS or regulatory personnel needed for compliance with the adoption of the proposed regulations. The proposed regulations are optional, and if a water system chose to comply with them, it would do so in lieu of complying with other requirements, namely installation of centralized treatment.
- The creation of new businesses or the elimination of existing businesses within the State of California: The nature of the drinking water industry is such that the adoption of the proposed regulations would not result in the creation or elimination of businesses. In addition, the proposed regulations are optional, and if a water system chose to comply with them, it would do so in lieu of complying with other requirements, namely installation of centralized treatment. The impact of the proposed regulations on new businesses or the elimination of existing businesses would be insignificant.
- The expansion of businesses currently doing business within the State of California: The nature of the drinking water industry is such that the adoption of the proposed regulations would not result in the creation or elimination of businesses. In addition, the proposed regulations are optional, and if a water system chose to comply with them, it would do so in lieu of complying with other requirements, namely installation of centralized treatment. Since PWS size is basically a function of the number of service connections (consumers) served, the proposed regulations should not have any effect on expansion.
- The benefits of the regulation to the health and welfare of California residents, worker safety, and the state's environment: The proposed regulations would improve the protection of the public's health and welfare by allowing public water systems an affordable alternative means of providing customers a drinking water

supply meeting all drinking water standards, with no adverse impacts to worker safety.

BENEFITS

The benefits to be provided by the regulation are that the legislative mandate will be carried out and public water systems will have an additional option to achieve compliance with drinking water standards.

REASONABLE ALTERNATIVES TO THE REGULATIONS THAT WOULD LESSEN ANY ADVERSE IMPACT ON SMALL BUSINESS

No alternatives were proposed to the State Water Board that would lessen an adverse impact on small business.

REASONABLE ALTERNATIVES TO THE REGULATION AND THE AGENCY'S REASONS FOR REJECTING THOSE ALTERNATIVES

The State Water Board has determined that no alternative it considered or that was otherwise identified and brought to its attention would be more effective in carrying out the purpose for which this action is proposed, would be as effective and less burdensome to the regulated water systems and affected private persons, or would be more cost-effective to the regulated water systems and affected private persons, yet equally effective in implementing statutory requirements or other provisions of law, than the proposed action. The proposed regulations do not mandate the use of specific technologies or equipment nor do they prescribe specific actions or procedures.

EVIDENCE SUPPORTING FINDING OF NO SIGNIFICANT ADVERSE ECONOMIC IMPACT ON BUSINESS

The State Water Board has determined that the proposed regulatory action would not have a significant adverse economic impact on business.

The only entities that are required to comply with the proposed regulations are public water systems, some of which are businesses, and others of which are public entities. The proposed regulations apply only to those PWS that choose to install POU or POE devices in lieu of installing centralized treatment of contaminants, which they would otherwise be required to do. The regulations provide that a PWS can use POU or POE only if centralized treatment is not immediately economically feasible. Thus, it is likely that installation and operation of POU or POE will be less expensive than construction and operation of centralized treatment.

The State Water Board recognizes that many PWS likely provide water to businesses. However, just as the PWS that are businesses are likely to see reduced costs if they implement the proposed regulations, so, too are the customers who are businesses likely to have lower costs. Even if the cost of POU or POE did prove to be higher than the cost of installing centralized treatment, the impact would not be significant. For most businesses, the amount they pay for drinking water is a small share of their overall operating costs. And, businesses for whom the cost of water is a large share of their overall costs may be able to separate their drinking water from their other uses and use water not meant for public consumption (e.g., cooling, construction), thus reducing the cost of drinking water.

EVALUATION AS TO WHETHER THE PROPOSED REGULATIONS ARE INCONSISTENT OR INCOMPATIBLE WITH EXISTING STATE REGULATIONS

The State Water Board evaluated this proposal as to whether the proposed regulations are inconsistent or incompatible with existing California state regulations. This evaluation included a review of the State Water Board's existing general regulations and those regulations specific to use of POU's and POE's by a PWS. It was determined that, with the exception of the existing POU POE regulations discussed above, no other state regulation addressed the same subject matter and that this proposal was not inconsistent or incompatible with other state regulations. Therefore, the State Water Board has determined that this proposal, if adopted, would not be inconsistent or incompatible with existing state regulations.

EFFECT ON SMALL BUSINESS

The State Water Board has determined that the proposed regulations would not affect small business because Government Code section 11342.610 excludes drinking water utilities from the definition of small business.

DUPLICATION OR CONFLICT WITH FEDERAL REGULATIONS

Although there are federal regulations that address some of the same issues as are addressed by these proposed regulations, the California legislature mandated that the State Water Board adopt regulations. (Health & Saf. Code § 116380.) That mandate directed the State Water Board to adopt regulations that are "not prohibited by the federal Safe Drinking Water Act and its implementing regulations and guidance." Both section 116380 and Health and Safety code section 116552 imposed additional requirements that the regulations had to meet. The State Water Board has attempted to avoid duplication of, and conflict with, federal regulations, while complying with the legislative mandate.

STATE WATER POLICY CODE SECTION 106.3 CONSIDERATION

In drafting the proposed regulations, the State Water Board considered the statewide policy set forth in section 106.3 of the Water Code and determined the proposed regulations will further the stated policy.

REFERENCES/DOCUMENTS RELIED ON

- Federal Register, Vol. 52, No. 130, 25690 – 25717, July 8, 1987, “Synthetic Organic Chemicals; Monitoring for Unregulated Contaminants: Final Rule”, 40 C.F.R. Parts 141 and 142.
- Federal Register, Vol. 53, No. 127, 25108 – 25111, July 1, 1988, “Synthetic Organic Chemicals; Monitoring for Unregulated Contaminants; Correction; Final Rule”, 40 C.F.R. Parts 141 and 142.
- Federal Register, Vol. 63, No. 151, 42032 – 42048, June 11, 1998, “Removal of the Prohibition on the Use of Point of Use Devices for Compliance with National Primary Drinking Water Regulations”, Notice.
- Federal Register, Vol. 63, No. 112, 31932 - 31934, August 6, 1998, “Announcement of Small System Compliance Technology Lists for Existing National Primary Drinking Water Regulations and Findings Concerning Variance Technologies”, Notice.
- NDWAC, 2003. Recommendations of the National Drinking Water Advisory Council to U.S. EPA on Its National Small Systems Affordability Criteria, July 2003 (http://www.epa.gov/safewater/ndwac/pdfs/report_ndwac_affordabilitywg_final_08-08-03.pdf).
- U.S. EPA, April 2006, EPA 815-R-06-010. U.S. EPA guidance, “Point-of-Use or Point-of-Entry Treatment Options for Small Drinking Water Systems” (http://www.epa.gov/ogwdw/smallsystems/pdfs/guide_smallsystems_pou-poe_june6-2006.pdf).