

**CERTIFIED FOR PUBLICATION**

IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA  
FIFTH APPELLATE DISTRICT

CAMARILLO SANITARY DISTRICT et al.,

Plaintiffs and Appellants,

v.

STATE WATER RESOURCES CONTROL  
BOARD,

Defendant and Respondent.

F087362

(Super. Ct. No. 22CECG02195)

**OPINION**

APPEAL from a judgment of the Superior Court of Fresno County. Kristi Culver Kapetan, Judge.

Downey Brand, Melissa A. Thorne, Lauren M. Murvihill; Stoel Rives, Melissa A. Thorne, Kristen T. Castaños, Lindsay D. Puckett, and Monica Browner for Plaintiffs and Appellants.

Rob Bonta, Attorney General, Tracy L. Winsor, Assistant Attorney General, Gary E. Tavetian, John Sasaki, Benjamin Lempert, and Eric M. Katz, Deputy Attorneys General, for Defendant and Respondent.

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Protecting California's water is difficult. There are many laws and regulations covering a wide variety of federal, state, and local interests. Complexity also arises from the wide variety of pollutants and sources of potential pollution that need to be regulated, the unique cooperative federalism model embodied in the nationally governing Federal Water Pollution Control Act (the Clean Water Act; 33 U.S.C. § 1251 et seq.) and the many ways to challenge modifications to the rules.

This case focuses California's efforts to adopt a new statistical model when testing for a type of pollution known as whole effluent toxicity. Whole effluent toxicity is not dependent upon any specific chemical pollutant. Rather, whole effluent toxicity looks to the combined effect of all pollutants in the water and defines when that combination of pollutants is deemed toxic.

Unsatisfied with the existing testing for whole effluent toxicity, California looked to a model developed by the Environmental Protection Agency (the Agency) known as the Test of Significant Toxicity. This new model was designed to provide greater precision when analyzing test results, limit both the potential for false positives and false negatives, and encourage potential polluters to provide a higher quality and quantity of test data. To adopt this model, California's State Water Resources Control Board (the State Board) developed the State Policy for Water Quality Control: Toxicity Provisions (the Toxicity Provisions). Among other things, the Toxicity Provisions require analyzing whole effluent toxicity tests using the Test of Significant Toxicity.

This change affected many interested entities, including entities regulated under the National Pollutant Discharge Elimination System (NPDES). These entities are required to obtain permits to discharge wastewater. And these permits contain water testing and quality mandates that include whole effluent toxicity testing requirements. Appellants Camarillo Sanitary District, Central Valley Clean Water Association, and Clean Water SoCal are entities or representatives of entities affected by the Toxicity Provisions.

Appellants have challenged the Toxicity Provisions and the Test of Significant Toxicity in both federal and state courts over the years. In this case, appellants contend the Test of Significant Toxicity is not an approved method under federal law, that the Toxicity Provisions are not legally authorized, and that in adopting the Toxicity Provisions, the State Board violated state environmental and procedural laws. The trial court rejected appellants' arguments, holding that the Toxicity Provisions were properly adopted and the Test of Significant Toxicity was not an improper change to the controlling federal standards.

For the reasons set forth below, we find that the Test of Significant Toxicity cannot be utilized in NPDES proceedings to measure whole effluent toxicity but that the State Board has otherwise properly adopted the Toxicity Provisions. We therefore reverse in part, affirm in part, and remand for further proceedings.

#### **FACTUAL AND PROCEDURAL BACKGROUND**

Appellants challenge the Toxicity Provisions adopted by the State Board. We first outline that document before recounting relevant regulatory and procedural history.

##### **Overview of the Toxicity Provisions**

Initially adopted in December 2020 and revised to its current state in October 2021, the Toxicity Provisions comprise a combined state-wide water policy and state water quality control plan intended to apply to “all INLAND SURFACE WATERS, ENCLOSED BAYS, and ESTUARIES AND COASTAL LAGOONS of the state, including both waters of the United States and surface waters of the state.” The Toxicity Provisions recognize that they are intended to cover waters “for which water quality standards are required by the” Clean Water Act and specifically note that the policies will “be incorporated into the Water Quality Control Plan for Inland Surface Waters, Enclosed

Bays, and Estuaries of California.”<sup>1</sup> Relatedly, the Toxicity Provisions state that they “automatically supersede any Regional Water Quality Control Plans ... for waters of the United States” and “shall supersede any Regional Water Quality Control Plans ... for all waters of the state” to the extent of any conflict.

At their most simplified, the Toxicity Provisions are designed to implement the Test of Significant Toxicity for both acute and chronic toxicity water quality standards in California.<sup>2</sup> The Toxicity Provisions self-define as numeric toxicity objectives based on the regulatory management decisions implemented for each test. For example, in chronic testing, the toxicity objective is described through the following hypothesis: “[T]he ambient water is toxic because the RESPONSE (e.g., survival, reproduction, growth) of the test organisms in the ambient water sample is less than or equal to 75 percent of the test organisms’ RESPONSE in the control water sample.”<sup>3</sup> When this statement is disproven through the testing, the water is considered nontoxic.

The Toxicity Provisions thus detail a testing procedure that compares an ambient water sample, which is representative of the water body, to a control sample. This testing procedure must be conducted using one of the Agency’s testing methods “and shall follow methods identified in the Code of Federal Regulations, title 40, part 136,” or other Agency-approved methods, such as those disclosed in a document named “Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition (EPA-821-R-02-013)” (the 2002 Methods

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<sup>1</sup> The State Board appears to have ceased efforts to develop this water quality control plan. No argument has been made regarding the effect of this decision on the claimed authority to enact the Toxicity Provisions, and we take no position on this point.

<sup>2</sup> For simplicity this court will utilize examples and generally discuss issues from the perspective of chronic toxicity. Unless specifically noted, the court’s analysis is equally applicable to issues arising in acute toxicity testing.

<sup>3</sup> The Toxicity Provisions define “RESPONSE” as a “measured biological effect (e.g., survival, reproduction, growth) as a result of exposure to a stimulus.”

Manual). In the case of chronic freshwater toxicity, this means using one of the water flea, fathead minnow, or green alga testing methods. However, the Toxicity Provisions require that test “results shall be analyzed using the [Test of Significant Toxicity]” and that to the extent the Agency procedures “require that observations be made of organisms’ RESPONSE in multiple concentrations of effluent or receiving water, the INSTREAM WASTE CONCENTRATION (IWC) shall be included as one of the selected concentrations” so that the Test of Significant Toxicity can “be conducted using the IWC and control” as the relevant samples.

The Toxicity Provisions then confirm that “toxicity test data shall be analyzed using the” Test of Significant Toxicity and provides a seven-step process for conducting the statistical analysis required. This analysis compares a calculated value with a predefined critical value and results in a pass or fail conclusion. The method also requires calculating the percent effect at the instream waste concentration (IWC) and reporting both the pass or fail result and the percent effect result to relevant authorities.

Following these descriptions, the Toxicity Provisions include implementation plans for “Non-Storm Water NPDES Dischargers,” “Storm Water Dischargers Regulated Pursuant to NPDES Permits,” and “Nonpoint Source and Other Non-NPDES Dischargers.” The most significant discussions relate to non-storm water NPDES dischargers.

For non-storm water NPDES dischargers, the Toxicity Provisions first provide information on determining the proper IWC for each permitted discharger. The Toxicity Provisions then discuss various screening requirements for sensitive species, including provisions on identifying the most sensitive species and the regularity of testing. Following this, the Toxicity Provisions set requirements for determining whether certain dischargers have a reasonable potential for violating water quality standards. For chronic toxicity, these requirements specifically exempt “[publicly owned treatment works]

dischargers that are authorized to discharge at a rate equal to or greater than 5.0 million gallons per day ... and are required to have a pretreatment program.”

The next three subsections provide detailed information on aquatic toxicity monitoring and both chronic and acute toxicity effluent limitations. The Toxicity Provisions require “aquatic toxicity monitoring requirements in an NPDES permit or Water Code Section 13383 Order for all NON-STORM WATER NPDES DISCHARGERS,” including routine monitoring and either median monthly effluent target tests or median monthly effluent limitation tests. Notably, the Toxicity Provisions allow for “additional toxicity testing,” including “special studies, additional test species, testing with additional dilutions,” or similar requirements if desired and documented. The regularity of such tests generally depends on the amount of discharge that regularly occurs but can change based on various discussed factors. Notably, with respect to both chronic and acute toxicity, certain dischargers—i.e., those with a reasonable probability finding or those that discharge more than 5 million gallons per day and have a treatment program—are also subjected to a maximum daily effluent limitation test requirement. The remaining subsections discuss toxicity reduction evaluations, reporting requirements, exemptions, and other similar matters.

Storm water dischargers regulated pursuant to NPDES permits and nonpoint source and other non-NPDES dischargers are given less specific requirements. For both, however, the Toxicity Provisions provide that the permitting authority “may require toxicity monitoring” and “shall issue” orders that require “the statistical approach, PERCENT EFFECT, and reporting to be conducted in accordance with” the Toxicity Provisions statistical model. Notably, for both, the Toxicity Provisions note that “[m]ulti-concentration testing is not required except to the extent required by federal law or specified by the PERMITTING AUTHORITY.”

### **Regulatory Adoption**

The process leading to the State Board adopting the Toxicity Provisions was extensive and long. Although beginning in 2003 with attempts to combat perceived issues with narrative toxicity standards, the Test of Significant Toxicity was not identified as part of the proposed regulatory response until 2011. Public hearings and additional regulatory work occurred between 2011 and 2018, when a draft of the Toxicity Provisions and a related staff report were circulated for public comments. Additional changes and revisions occurred until the proposed final Toxicity Provisions and staff report were released in October 2020. The Toxicity Provisions were then adopted in December 2020 in conjunction with the then pending efforts to adopt a water quality control plan for inland surface waters, enclosed bays, and estuaries of California. A subsequent court order, unrelated to the Toxicity Provisions, resulted in readopting the Toxicity Provisions separately from the water quality control plan in October 2021. This order stated that the Toxicity Provisions had been expressly adopted under Water Code section 13140 as a “state policy for water quality control for all inland surface waters, enclosed bays, estuaries and coastal lagoons of the state.” It also affirmed that because the Toxicity Provisions had also been adopted, in part, under Water Code section 13170, they would continue to apply to waters of the United States under that authority.

The final staff report related to the Toxicity Provisions reaches 497 pages and includes a regulatory history, a description of the project and relevant existing regulatory requirements and actions, an analysis of project options and reasonably foreseeable methods of compliance, an environmental effects analysis and checklist, a discussion of project alternatives, and a consideration of relevant laws. To the extent relevant to issues raised in this case, this court will provide additional factual detail from the staff report when discussing those issues.

### **Procedural History**

Appellants initially filed suit shortly after the Toxicity Provisions were first adopted. The operative filing, a first amended verified petition for writ of mandate and complaint for declaratory and injunctive relief was subsequently filed in 2022. After briefing and argument, the trial court entered an order denying appellants' writ request. Judgment was entered and this appeal timely followed.

### **DISCUSSION**

The operative filing contains four core claims that the Toxicity Provisions fail to comply with (1) the relevant federal laws and regulations of the Clean Water Act, (2) state water laws, (3) California's Administrative Procedure Act (APA; Gov. Code, § 11340 et seq.), and (4) the California Environmental Quality Act (CEQA; Pub. Resources Code, § 21000 et seq.). We analyze the issues raised on appeal in this same order.

### **Standard of Review**

For all claims, appellants sought a writ of mandate and declaratory and injunctive relief. "An ordinary mandamus action under Code of Civil Procedure section 1085 permits judicial review of ministerial duties as well as quasi-legislative acts of public agencies." (*Carrancho v. California Air Resources Board* (2003) 111 Cal.App.4th 1255, 1264–1265.) "Mandamus may issue to correct the exercise of discretionary legislative power, *but only* if the action taken is so palpably unreasonable and arbitrary as to show an abuse of discretion as a matter of law. This is a highly deferential test." (*Id.* at p. 1265.)

"In reviewing such a petition under Code of Civil Procedure section 1085, a trial court's role generally is to 'determine whether the agency's action was arbitrary, capricious, or without evidentiary support, and/or whether it failed to conform to the law. The trial court may not substitute its judgment for that of the agency or force the agency to exercise its discretion in a certain way.'" (*California Assn. of Medical Products Suppliers v. Maxwell-Jolly* (2011) 199 Cal.App.4th 286, 302–303.) "In reviewing the trial court's ruling, ' "the appellate court may make its own determination when the case

involves resolution of questions of law where the facts are undisputed.’ ” ’ [Citation.] Also, ‘[w]hen administrative agency action is judicially reviewable under a substantial evidence standard, the rule for the reviewing trial court and appellate court is the same.’ ” (*Id.* at p. 303, first bracketed insertion added.) As the issues in this case challenge several aspects of the State Board’s actions, additional relevant standards of review and applicable laws will be discussed as needed.

### **The Toxicity Provisions Are Inconsistent with the Clean Water Act**

In the first core claim, appellants contend that the Toxicity Provisions must be set aside because they are inconsistent with the statutory and regulatory requirements of the Clean Water Act. Appellants put forward three main arguments, each with several subparts. First, appellants focus on the Test of Significant Toxicity. Appellants contend the test is not approved under 40 Code of Federal Regulations part 136 and inherently invalid, rendering it improper to use under the Clean Water Act. In doing so, appellants identify several ways in which the Test of Significant Toxicity differs from testing methods disclosed in the 2002 Methods Manual. Second, appellants challenge the use of maximum daily limits for publicly owned treatment works, contending that federal rules require monthly and weekly average effluent limitations absent a finding—allegedly not properly made in this case—that such averages are impracticable. Third, appellants contend that the regulations improperly impose requirements on publicly owned treatment works without the legally required finding that those dischargers have a reasonable potential of discharging toxic waters. Upon review, this court agrees that the Test of Significant Toxicity cannot be used to comply with NPDES permitting requirements under the Clean Water Act. Upon reaching this conclusion, the court does not consider appellants’ remaining alleged conflicts with the Clean Water Act.

#### *Statutory and Regulatory Background*

The Clean Water Act is a “ ‘comprehensive water quality statute designed to “restore and maintain the chemical, physical, and biological integrity of the Nation’s

Waters.” ’ ’ ” (*City of Burbank v. State Water Resources Control Bd.* (2005) 35 Cal.4th 613, 620 (*City of Burbank*)). The Clean Water Act establishes a permitting system (the NPDES) that “prohibits pollutant discharges unless they comply with: (1) a permit [citation]; (2) established effluent limitations or standards [citation]; or (3) established national standards of performance [citation].” (*Department of Finance v. Commission on State Mandates* (2016) 1 Cal.5th 749, 756.) Administered by the Agency, the NPDES allows the Agency to either issue these permits or to authorize states to do so. (*Ibid.*) California was the first state so authorized. (*Id.* at p. 757.)

Although authorized to issue permits, California must still generally adhere to federal regulations issued by the Agency. (See *Bell v. Cheswick Generating Station* (3d Cir. 2013) 734 F.3d 188, 197–198 [describing how the United States Supreme Court found “the ‘cooperative federalism’ structure of the Clean Water Act served as a regulatory floor, not a ceiling, and expressly held that states are free to impose higher standards on their own sources of pollution”].) Most relevant to this case, these regulations consist of effluent limitations and related methods for testing effluent concentrations in regulated waters. (See *City and County of San Francisco v. EPA* (2025) 604 U.S. \_\_\_ [145 S.Ct. 704, 711–712, 211 L.Ed.2d 166] [providing brief overview of NPDES permitting system, effluent limitations, and water quality based effluent limitations].) California may deviate from federally set effluent limitations but “may not adopt or enforce any effluent limitation ... which is less stringent than the effluent limitation” set under the Clean Water Act. (33 U.S.C. § 1370.)

#### Federal Water Quality Standards Generally

Under the Clean Water Act, states are ultimately responsible for adopting the water quality standards necessary to implement the federal permitting process. (*Communities for a Better Environment v. State Water Resources Control Bd.* (2003) 109 Cal.App.4th 1089, 1092.) Water quality standards are implemented through effluent limitations, which can be technology based or water quality based and expressed either in numeric

concentrations (e.g., 3.1 micrograms per liter as a monthly average) or narrative statements (e.g., no discharge of toxic pollutants in toxic amounts). (*Id.* at pp. 1092–1094; see 40 C.F.R. § 131.3(b).)

Federal law requires certain base water quality standards be developed. (See 33 U.S.C. §§ 1311, 1312.) For these standards, the Agency “promulgate[s] guidelines establishing test procedures for the analysis of pollutants that shall include the factors which must be provided in any certification” under the statutory scheme. (33 U.S.C. § 1314(h).) Consistent with these requirements, 40 Code of Federal Regulations part 122.44 requires all NPDES permits to include conditions meeting the developed federal effluent limitations, including any narrative limitations.

#### Whole Effluent Toxicity Testing Generally

Whole effluent toxicity testing is designed to ensure there is no overall toxicity in tested waters. In other words, “even if a discharge complies with the limits on individual pollutants, it might still be toxic because it contains a combination of pollutants, or because it contains substances that federal or state regulators have not yet found to be toxic. To address those possibilities, the [Agency] also requires certain permit holders to pass a test called a ‘whole effluent toxicity’ ... test. [Citation.] A [whole effluent toxicity] test measures the aggregate effect of a discharge on aquatic organisms such as minnows by exposing a test population of organisms to a discharge and counting how many die or become immobilized.” (*Southern California Alliance of Publicly Owned Treatment Works v. U.S. Environmental Protection Agency* (9th Cir. 2021) 8 F.4th 831, 834.)

Whole effluent toxicity testing is unique. “First, while most tests rely on instrumentation to conduct chemical-specific numerical measurements, [whole effluent toxicity] testing is biological, using live organisms that cannot be, for example, calibrated. Second, unlike properties such as chemical concentration, toxicity is both measured and *defined* by the [whole effluent toxicity] tests (*i.e.*, it is a ‘method-defined

analyte’).” (*Edison Electric Institute v. Environmental Protection Agency* (D.C. Cir. 2004) 391 F.3d 1267, 1270.)

A method-defined analyte is defined by regulations covering potential changes to approved methods initiated by an analyst as “an analyte defined solely by the method used to determine the analyte. Such an analyte may be a physical parameter, a parameter that is not a specific chemical, or a parameter that may be comprised of a number of substances. Examples of such analytes include temperature, oil and grease, total suspended solids, total phenolics, turbidity, chemical oxygen demand, and biochemical oxygen demand.” (40 C.F.R. § 136.6(a)(5); see also *id.* § 136.6(a)(1) [defining analyst as “the person or laboratory using a test procedure (analytical method) in this part”].) When discussing permissible and impermissible modifications to such methods, the regulations state, “An analyst may not modify an approved Clean Water Act analytical method for a method-defined analyte. In addition, an analyst may not modify an approved method if the modification would result in measurement of a different form or species of an analyte.” (40 C.F.R. § 136.6(b)(3).)

#### Approved Methodologies for Whole Effluent Toxicity Testing

In line with its statutory obligations to establish test procedures, the Agency first included whole effluent toxicity testing guidelines in a 1995 regulatory update (Whole Effluent Toxicity: Guidelines Establishing Test Procedures for the Analysis of Pollutants, 60 Fed.Reg. 53529 (Oct. 16, 1995)). The testing methods were later modified and repromulgated in 2002 (Guidelines Establishing Test Procedures for the Analysis of Pollutants; Whole Effluent Toxicity Test Methods; Final Rule, 67 Fed.Reg. 69952 (Nov. 19, 2002)). Title 40 Code of Federal Regulations part 136.3(a), identifies the federally approved testing methods for whole effluent toxicity.

Within that regulation, table IA contains “[p]arameters or pollutants, for which methods are approved” related to “Biological Methods for Wastewater” and lists those parameters and pollutants “together with test procedure descriptions and references.”

(40 C.F.R. § 136.3(a) & table IA.) Relevant to this case, line 10 of table IA contains the approved chronic whole effluent toxicity methods for freshwater organisms. The “Parameter and units” entry describes the methods as “Toxicity, chronic, fresh water organisms, NOEC<sup>[4]</sup> or IC25,<sup>[5]</sup> percent effluent.” Four Agency method numbers are then disclosed for two fathead minnows, a water flea, and a green alga method. A footnote is attached to each Agency method number, which refers the reader to the 2002 Methods Manual for additional directions.

#### The 2002 Methods Manual

The 2002 Methods Manual states that it “constitute[s] approved methods for chronic toxicity tests.” The methods’ “data are used for NPDES permits” and “can also be used to predict potential acute and chronic toxicity in the receiving water, based on the LC50,<sup>[6]</sup> NOEC, IC50<sup>[7]</sup> or IC25 ... and appropriate dilution, application, and persistence factors.” Four approved test methods are then disclosed for the four method numbers identified, utilizing the chronic endpoints of growth, lethality, and reproduction.

The 2002 Methods Manual explains that for these approved methods, the “objective of aquatic toxicity tests with effluents or pure compounds is to estimate the ‘safe’ or ‘no effect’ concentration of these substances, which is defined as the concentration which will permit normal propagation of fish and other aquatic life in the receiving waters.” Tests are “generally measured using a multi-concentration, or definitive test, consisting of a control and a minimum of five effluent concentrations” and

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4 “NOEC” is the highest concentration of toxicant to which organisms are exposed in a test that causes no observable adverse effects on the test organisms.

5 “IC25” is the toxicant concentration that would cause a 25 percent reduction in mean young per female or in growth for the test population.

6 “LC50” is the is the toxicant concentration that would cause death in 50 percent of the test population.

7 “IC50” is the toxicant concentration that would cause a 50 percent reduction in mean young per female or in growth for the test population.

“expressed in terms of the highest concentration that has no statistically significant observed effect on those responses when compared to the controls or the estimated concentration that causes a specified percent reduction in responses versus the controls.” The use of “pass/fail tests consisting of a single effluent concentration” are not recommended, although “[r]eceiving (ambient) water toxicity tests commonly employ two treatments” and are regularly discussed in the 2002 Methods Manual.

The 2002 Methods Manual then provides several chapters applicable to all approved methods, each of which contain multiple subparts disclosing requirements for conducting the tests. These are identified by section headings titled “Health and Safety,” “Quality Assurance”; “Facilities, Equipment, and Supplies”; “Test Organisms”; “Dilution Water”; “Effluent and Receiving Water Sampling, Sample Handling, and Sample Preparation for Toxicity Tests”; “Chronic Toxicity Test Endpoints and Data Analysis”; and “Report Preparation and Test Review.” The 2002 Methods Manual next provides instructions for each test method, identified by their name and relevant number, such as “Fathead Minnow, *Pimephales promelas*, Larval Survival and Growth Test Method 1000.0,” each of which include a specific subsection on “Data Analysis.”

Relevant to this case, the “Chronic Toxicity Test Endpoints and Data Analysis” section explains that the “objective of chronic aquatic toxicity tests with effluents and pure compounds is to estimate the highest ‘safe’ or ‘no-effect concentration’ of these substances.” “Safe [c]oncentration” is defined as the “highest concentration of toxicant that will permit normal propagation of fish and other aquatic life in receiving waters. The concept of a ‘safe concentration’ is a biological concept, whereas the ‘no-observed-effect concentration’ ... is a statistically defined concentration.” The 2002 Methods Manual also defines the “No-Observed-Effect-Concentration (NOEC)” as the “highest concentration of toxicant ... that causes no observable adverse effects on the test organisms” and notes this “value is used, along with other factors, to determine toxicity limits in permits.”

The 2002 Methods Manual notes that there “are inherent differences between the use of a NOEC ... derived from hypothesis testing to estimate a ‘safe’ concentration, and the use of ... point estimates.” Notably, the document explains that a statistical analysis cannot determine a safe or no-effect concentration without adopting certain assumptions. If these assumptions “are not deemed tenable, then estimates from a statistical analysis can only be used in conjunction with an assessment from a biological standpoint of what magnitude of adverse effect constitutes a ‘safe’ concentration,” meaning the result is not a no-effect concentration, “but rather a concentration at which the effects are judged to be of no biological significance.”

#### The Test of Significant Toxicity

“In June 2010, the [Agency] issued ... guidance ... explaining how to use a new statistical method called the Test of Significant Toxicity .... Among other things, the [Test of Significant Toxicity] aims to limit false *negative* results—results that incorrectly state that a sample is nontoxic—by adopting a null hypothesis that a sample is toxic. In other words, the [Test of Significant Toxicity] presumes that a sample is toxic absent statistically significant evidence to the contrary. The [Agency] explained that it believed adopting that null hypothesis increases the statistical power of the [Test of Significant Toxicity]—the likelihood that it will correctly classify samples as toxic or nontoxic—compared to the methods authorized by the 1995 and 2002 regulations, which did not control for false negatives. The [Agency] has amended the relevant regulations governing [whole effluent toxicity] tests several times since issuing the 2010 guidance, but it has never promulgated the [Test of Significant Toxicity] as a formal rule.”

*(Southern California Alliance of Publicly Owned Treatment Works v. U.S. Environmental Protection Agency, supra, 8 F.4th at pp. 834–835.)*

The guidance consists of a technical document and an implementation document. Focusing on the technical document, at the outset the document explains in a notice and disclaimer that it “provides the technical basis for the Test of Significant Toxicity ...

approach ... for permitting authorities ... interested in analyzing valid whole effluent toxicity ... test data using the traditional hypothesis testing approach.” The “document describes what the [Agency] believes is another statistical option to analyze valid [whole effluent toxicity] test data” but does not “substitute for the [Clean Water Act], an NPDES permit, or [Agency] or state regulations applicable to permits or [whole effluent toxicity] testing; nor is [the] document a permit or a regulation itself.” Accordingly, the document claims the “[Test of Significant Toxicity] approach does not result in changes to [the Agency]’s [whole effluent toxicity] test methods promulgated at Title 40 of the *Code of Federal Regulations* Part 136.”

The technical document then outlines the existing approaches to whole effluent toxicity testing, the reasons for developing the Test of Significant Toxicity, the relevant regulatory management decisions implemented in the test, an analysis of the Test of Significant Toxicity in relation to the existing methods, and various aspects of using the Test of Significant Toxicity. We provide a summary of some of the relevant statements made in those sections.

Relevant to this case, the technical document explains that the “statistical endpoints that are used in chronic [whole effluent toxicity] testing ... are the no observed effect concentration (NOEC), and the 25 percent inhibition concentration (IC25).” The NOEC is a “traditional hypothesis testing approach” while the IC25 is a point-estimation approach. In contrast, the “document focuses on another statistical option with respect to the traditional hypothesis testing approach.” The Test of Significant Toxicity “uses a hypothesis testing approach but in a different way,” based on a type of testing “referred to as *bioequivalence testing*.”

The Test of Significant Toxicity incorporates two significant changes to traditional hypothesis testing. First, in standard testing, toxicity is found when the true mean biological measure in the effluent sample is greater or equal than the true mean for the biological measure in the control water. In the Test of Significant Toxicity, “[f]irst, a

specific value for the ratio ..., designated  $b$ , is included to delineate unacceptable and acceptable levels of toxicity, allowing a risk management decision about what level of toxicity should be allowed.” “Second, the inequalities are reversed so that it is assumed that the effluent sample has an unacceptable level of toxicity until demonstrated otherwise.”

The technical document claims the regulatory management decision for  $b$  “should reflect what is considered acceptable if the true biological response means for the effluent and control were actually known” and notes that for “all chronic [whole effluent toxicity] test methods, the [regulatory management decision] is to set  $b$  to 0.75,” a value “consistent with [the Agency]’s use of the IC25 in point estimation methods.” Despite this, the document notes that “emphasis was placed on comparing results of the [Test of Significant Toxicity] to traditional hypothesis testing approaches and not to point estimate techniques such as linear interpolation (i.e., IC25).”

The technical document then describes how it evaluated the Test of Significant Toxicity based on existing whole effluent toxicity testing data. The document claims, “One of the intended benefits of the [Test of Significant Toxicity] approach is that increasing the precision and power of the test increases the chances of ... declaring a sample non-toxic,” thereby increasing “the ability of the permittee to *prove the negative* that a sample is acceptable.” Compared to traditional testing, at “a mean effect of 10–15 percent at the IWC” the Test of Significant Toxicity “declared a lower percentage of tests toxic than the traditional ... approach.... However, when the mean effect was greater than 25 percent ..., [the Test of Significant Toxicity] declared 100 percent of the tests toxic while the traditional hypothesis testing approach did not.” Ultimately, the technical document claims that, given the values chosen, the Test of Significant Toxicity provides “as much protection under most circumstances as the current approved [whole effluent toxicity] test analysis methods when the mean effect at the IWC exceeds the toxicity threshold of the [Test of Significant Toxicity] approach.” Finally, the document

explains that “[whole effluent toxicity] NPDES permit limits would be expressed as *no significant toxicity of the effluent at the IWC using the [Test of Significant Toxicity] analysis approach*” and be declared according to a pass/fail criteria.

The implementation document provides some additional information regarding the reasons for developing the Test of Significant Toxicity. It notes that since 1991, “permitting authorities have requested alternative approaches for analyzing [whole effluent toxicity] test data that would provide increased confidence in the data assessment and simplify the NPDES permit decision-making process with respect to [whole effluent toxicity].” The implementation document ultimately notes several benefits to using the Test of Significant Toxicity, including that it is “similar to statistical concepts used in other [Agency] programs,” that the regulatory management decisions “are transparent because they are incorporated into the [whole effluent toxicity] data analysis process,” that “error rates are directly incorporated into the [Test of Significant Toxicity] statistical approach,” that it provides “a positive incentive for the permittee to generate valid, high quality [whole effluent toxicity] data,” and that it “is much simpler.” The document encourages permitting authorities to consider adopting the Test of Significant Toxicity and notes, “[T]he [Test of Significant Toxicity] approach should be used in place of, *and not in addition to*, the traditional hypothesis testing (NOEC) approach for [whole effluent toxicity] analysis” if adopted.

#### *Applicable Law and Additional Standards of Review*

The State Board has adopted the Toxicity Provisions in part to incorporate them into its existing NPDES permitting system under the Clean Water Act. Statements by the Toxicity Provisions that permitting authorities “shall include aquatic toxicity monitoring requirements in an NPDES permit” and that such monitoring “shall be analyzed using the [Test of Significant Toxicity]” raises the question whether such testing is consistent with the federal statutory and regulatory scheme. (See Wat. Code, §§ 13374 [waste discharge

requirements are equivalent to permits under federal law], 13377 [requiring waste discharge requirements comply with applicable provisions of the Clean Water Act].)

The Toxicity Provisions cannot require a wastewater testing method that conflicts with federal law.<sup>8</sup> (See *City of Burbank, supra*, 35 Cal.4th at pp. 626–627 [federal supremacy applies to water quality standards].) In determining whether such conflicts exist, “ ‘state courts can interpret federal law, and thus can review and enjoin state authorities from issuing permits that violate the requirements of the Clean Water Act.’ [Citation.] Indeed, California courts have often interpreted the Act.” (*Southern California Alliance of Publicly Owned Treatment Works v. U.S. Environmental Protection Agency, supra*, 8 F.4th at p. 839.) We examine interpretations “of legal matters utilizing a de novo standard of review.” (*County of Los Angeles v. State Water Resources Control Bd.* (2006) 143 Cal.App.4th 985, 997.) While deference may be given to an agency interpretation, the court has ultimate responsibility for construction of the controlling law. (*American Coatings Assn. v. South Coast Air Quality Management Dist.* (2012) 54 Cal.4th 446, 461.)

The Toxicity Provisions, as a state policy being applied to federal NPDES permit requirements, are also similar in function to state regulations. When evaluating the validity of a regulation, there are two questions that can drive the court’s analysis. The first asks “whether the regulation is ‘ ‘consistent and not in conflict with’ ’ the provision that authorizes it,” and the second asks “whether the regulation is reasonably necessary to effectuate the purpose of the authorizing law.” (*In re Gadlin* (2020) 10 Cal.5th 915, 926.) The first question predominates the issues raised in this claim. “[W]hen an implementing regulation is challenged on the ground that it is ‘in conflict with the statute’ [citation] or does not ‘lay within the lawmaking authority delegated by the Legislature’ [citation], the

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<sup>8</sup> A testing method that is more protective than federal law is permissible. (*Bell v. Cheswick Generating Station, supra*, 734 F.3d at pp. 197–198.) However, the State Board does not attempt to justify using the Toxicity Provisions on this basis.



material changes to the regulatory testing methods if this understanding is accepted. We do not agree with the State Board's framing.

As noted above, title 33 United States Code section 1314(a)(8) provides the authority for the Agency's regulation of whole effluent toxicity, and these regulations are found at 40 Code of Federal Regulations part 136.3(a). This part identifies "[p]arameters or pollutants, for which methods are approved" in a table format. (40 C.F.R. § 136.3(a).) Table IA, line 10, identifies the "[p]arameter and units" as "Toxicity, chronic, fresh water organisms, NOEC or IC25, percent effluent" and the relevant methods as methods 1000.0, 1001.0, 1002.0, and 1003.0 from the 2002 Methods Manual. The whole effluent toxicity testing methods are the only approved methods that include such statistical endpoints. As discussed above, the regulations and manuals repeatedly frame the relevant procedures in terms of utilizing either the NOEC or the IC25 endpoints.

This framing is consistent with the explanations provided when these regulations were first adopted. When adopted in 1995, the short-term test methods approved were described as having specific "Toxicity Test Endpoints," which were "summarized as: (1) The NOEC, which is the highest percent effluent concentration at which no adverse effect on survival, growth, or reproduction is observed, and (2) the IC25 (Inhibition Concentration, 25%), which is the effluent concentration at which growth or reproduction are reduced 25% from that of controls." (60 Fed.Reg., *supra*, at p. 53533.) Noted as part of the specific methods approved, these endpoints were included separate from a later discussion of comments related to statistical methods for determining them, which noted an objection to the models chosen but stated that "[Agency] statisticians evaluated and considered many other analyses" but chose the methods approved for specific disclosed reasons. (*Id.* at p. 53538.) Other comment responses indicate that the Agency selected the identified statistical models so that implementors could choose between them, not among any available options. (See *id.* at p. 53539.)

None of the edits identified in the 2002 modifications to the regulations changed this position on the appropriate endpoints for the testing. (See 67 Fed.Reg., *supra*, at p. 69954.) Further, in discussing the review of concentration-response relationships, the Agency affirmed that “[whole effluent toxicity] methods and the [whole effluent toxicity] testing program rely on the measurement of specific test endpoints (NOECs, LC50s, IC25s) for determining toxicity.” (*Id.* at p. 69962.) Likewise, in discussing comments about method flexibility, the Agency noted that method manuals included “direction on” such issues as “statistical methods” and stated that it “believes that these method modifications clarify the requirements for acceptable [whole effluent toxicity] test results submitted under NPDES permits.” (*Id.* at p. 69963.) Finally, in response to comments that the Agency “approve and use alternative statistical methods,” the Agency responded that it “believes that the statistical methods currently recommended in the [whole effluent toxicity] methods are appropriate,” while acknowledging “that these recommended statistical methods are not the only appropriate techniques,” before referring to language similar to that used in the 1995 approval regarding the reasons why the present methods were chosen. (*Id.* at p. 69964; see 60 Fed.Reg., *supra*, at p. 53538.)

Accordingly, under the statutory and regulatory framework, there is no ambiguity regarding the fact that both biological monitoring and assessment criteria for chronic freshwater toxicity have been developed. These criteria include four monitoring tests and two assessment standards, the NOEC and the IC25. The two assessment standards are recognized by the Agency as specific test endpoints relied upon to determine toxicity and as requirements for acceptable testing results. While the Agency acknowledges other statistical models exist and can be appropriate, in all instances the Agency explains that it chose the two assessment methods for certain reasons despite the existence of other options.

The question then, is whether the statistical method challenged in this case falls within the approved monitoring and assessment criteria. This further distills to whether

the Test of Significant Toxicity is a mere statistical method for determining the NOEC for an effluent concentration, as the IC25 is a point estimation endpoint that cannot be met by a hypothesis testing assessment. The answer is no.

#### The Test of Significant Toxicity Is Not a Mere Analytical Statistical Method

The Board argues that the Test of Significant Toxicity is merely an analytical statistical method which can fairly be substituted for any of the other analytical methods identified. In support, the Board points to statements by the Agency in the 2002 Methods Manual that “[t]he statistical methods *recommended* ... are not the only possible methods of statistical analysis” and “there are other reasonable and defensible methods of statistical analysis ... for ... toxicity data.” But this argument oversimplifies the change that has actually been implemented when adopting the Test of Significant Toxicity to measure whole effluent toxicity.

Whole effluent toxicity is a method-defined analyte. In whole effluent toxicity testing, toxicity is not a defined value outside of the method used to measure the toxicity of the samples. The Agency noted this in its discussion of changes to the regulations made in 2002. There it wrote: “Toxicity is only defined by its effects on organisms, and it is these effects that are directly measured in the toxicity test. Because toxicity is inherently defined by the measurement system (a ‘method-defined analyte’), and toxicity cannot be independently measured apart from a toxicity test, accuracy as a performance characteristic is not completely applicable.” (67 Fed.Reg., *supra*, at p. 69965.)

The 2002 Methods Manual explains in its discussion of chronic toxicity test endpoints and data analysis, that the “objective of chronic aquatic toxicity tests with effluents and pure compounds is to estimate the highest ‘safe’ or ‘no-effect concentration’ of these substances.” In this context, the safe concentration “is a biological concept, whereas the ‘no-observed-effect concentration’ ... is a statistically defined concentration.” The effect that changing the statistical method has on the definition of toxicity is further acknowledged by the Agency in the implementation document for the

Test of Significant Toxicity. In justifying the decision to set the value for the regulatory management decision defining toxicity—the *b* value—at 0.75, the Agency wrote: “Lower *b* values (i.e., for chronic test methods using a 0.70 instead of 0.75 *b* is unacceptable) are not recommended because it would mean that a lower fraction of test control response (i.e., greater effect at the IWC) is considered acceptable.” In other words, changing a part of the statistical method redefined when water was deemed toxic.

As a core part of the testing method used to measure toxicity, the definition of toxicity is a fundamental component of the approved biological methods. The definition of toxicity is therefore necessarily a type of “assessment method[]” under which the Clean Water Act requires guidance from the Agency. (33 U.S.C. § 1314(a)(8).) In turn, and consistent with this understanding, the definition of toxicity is one of the “parameters” inherently disclosed in the approved methods listed in the regulations. Notably, this is in contrast to the approved methods for analytes that are not method defined, such as *E. coli*, fecal streptococci, or salmonella, which have their relevant parameters defined as “number per 100 mL” and “number per gram dry weight” with no indication of relevant toxicity levels. (40 C.F.R. § 136.3(a), table IA.)

For all chronic toxicity standards, the definition of toxicity is identified by the express approval of two statistical endpoints in the regulations—the NOEC and the IC25.<sup>10</sup> To the extent that the statute, regulations, and manuals are ambivalent about the statistical methods used to determine toxicity, they are ambivalent as to which statistical model is used to calculate the identified endpoints for the approved methods; fundamentally differences in degree.

Changing the statistical endpoint, and thereby the definition of toxicity, is a difference in kind. It fundamentally changes what qualifies as toxic water. In hypothesis testing, the NOEC defines toxicity as the concentration of toxicant “that causes no

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<sup>10</sup> For acute toxicity, the statistical endpoint disclosed is the LC50 percent effluent.

observable adverse effects on the test organisms.” In contrast, the Test of Significant Toxicity defines toxicity as “*no significant toxicity of the effluent at the IWC using the [Test of Significant Toxicity] analysis approach.*” In this approach, “significant toxicity” is defined by a regulatory management decision as a change of greater than 25 percent in the biological response endpoint of the chosen testing method. It is axiomatic that the concentration which causes no observable effect is different from that which causes a 25 percent reduction in the end measurement.<sup>11</sup>

The State Board is correct in claiming the Agency has adopted a 25 percent reduction in the end measurement as a definition of toxicity and that the general methodology underlying the Test of Significant Toxicity is used in various other contexts. Where point estimate analysis is used—a system by which a specific reduction in the end measurement is identified and calculated with a 95 percent confidence level—the regulations adopt the 25 percent reduction criteria as a definition of toxicity. Indeed, this is the recommended methodology in the guidance documents. Similarly, the concept of bioequivalence testing—the type of hypothesis testing underlying the Test of Significant Toxicity—is recognized as an adopted methodology in other contexts and other agencies.

These claims provide no support for using the Test of Significant Toxicity, however. There is a clear and recognized difference between point estimate techniques and hypothesis testing, and because of this, the Agency only considers the Test of Significant Toxicity as an alternative to the approved hypothesis testing method. In doing so, the Agency acknowledges that the NOEC “is determined using a traditional hypothesis testing approach” before presenting the Test of Significant Toxicity as a newly

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<sup>11</sup> The significance of redefining toxicity is particularly clear when one acknowledges that the Test of Significant Toxicity’s 25 percent reduction in end measurement is set by a mere regulatory management decision. Under the State Board’s argument, there is no reason why that figure must be set at 25 percent. Indeed, if the Test of Significant Toxicity is merely a statistical model, it would be equally proper to set the regulatory management decision for toxicity as a 99 percent reduction and only find water toxic if nearly all growth is halted. After all, nothing in the model has changed other than that regulatory management decision.

developed “statistical option with respect to the traditional hypothesis testing approach.” In other words, a new method that differs from the approved “traditional” method.

The inherent differences that changing the meaning of toxicity creates is perhaps best modeled by Table 3-4 from the Agency’s technical document, shown below. In this example, the traditional hypothesis testing, which defines toxicity as an effluent concentration which exceeds the NOEC, shows that 98 percent of tests conducted on effluent concentrations showing a mean effect of between 10 and 15 percent as compared to the control were deemed toxic. However, 0 percent of these same effluent concentrations were deemed toxic under the Test of Significant Toxicity because of the regulatory decision to redefine toxicity as a concentration that generates a greater than 25 percent mean effect compared to the control.

**Table 3-4.** Comparison of the percentage of chronic effluent fathead minnow tests declared toxic using TST versus the traditional hypothesis testing approach

<b>% Mean effect</b>	<b>N</b>	<b>% tests toxic using TST</b>	<b>% tests toxic using traditional hypothesis testing approach</b>
10–15	58	0	98
> 25	136	100	100

Ultimately, the Test of Significant Toxicity is a statistical model that does not reach either of the approved statistical endpoints which define toxicity in the regulations—either IC25 (a 25 percent inhibition of the measured effect within a defined confidence level) or NOEC (no observed effect at the concentration of the toxicant). It is therefore not an approved method. Rather, the Test of Significant Toxicity’s bioequivalence-based determination that there is no significant toxicity because there was no change of greater than 25 percent in the biological response redefines toxicity. Using this new and unapproved definition creates a new statistical endpoint for toxicity, expanding the statutory and regulatory scheme. In the context of NPDES permitting, a

system governed by federal law and regulatory restrictions, this is improper. (See *In re Gadlin, supra*, 10 Cal.5th at p. 926 [administrative regulations enlarging or impairing the scope of authorizing statutes are void].)

The Agency’s and State Board’s Statements Are Not Entitled to Deference

The State Board argues that this court should defer to both the Agency and the State Board’s determinations that the Test of Significant Toxicity satisfies the obligations of the Clean Water Act. Although Agency deference is on less stable footing than it has been historically, it remains appropriate provided “the regulation is genuinely ambiguous.” (*Kisor v. Wilkie* (2019) 588 U.S. 558, 574; see *Yamaha Corp. of America v. State Bd. of Equalization* (1998) 19 Cal.4th 1, 8 [“ ‘The standard for judicial review of agency interpretation of law is the *independent judgment* of the court, giving *deference* to the determination of the agency *appropriate* to the circumstances of the agency action.’ ”]; but see *Loper Bright Enterprises v. Raimondo* (2024) 603 U.S. 369, 412 [overruling existing *Chevron*<sup>12</sup> deference doctrine for federal review].) Our prior discussion shows that the relevant regulation is not ambiguous in its disclosure of two statistical endpoints which define toxicity as analyzed by the approved methods. Thus, ambiguity could only exist with respect to whether the Test of Significant Toxicity is equivalent to one of those regulatorily defined endpoints.

In this case, the State Board points to no findings in the record showing toxicity under the Test of Significant Toxicity is equivalent to a finding of no observed effect. Rather, in the comparative analysis contained in the technical document, the Agency itself notes that in some instances, toxicity will be found under the NOEC endpoint but not under the Test of Significant Toxicity endpoint. The technical document explains in one analysis that at a “mean effect of 10 percent, use of the [Test of Significant Toxicity] approach results in fewer declared toxic tests relative to the traditional hypothesis

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<sup>12</sup> *Chevron U.S.A. v. Natural Res. Def. Council* (1984) 467 U.S. 837.

approach at all alpha error rates examined.” In another, it cabins its findings by noting that the Test of Significant Toxicity “is as protective as the current hypothesis testing approach for those tests when the [Test of Significant Toxicity] [regulatory management decision] threshold for toxicity is exceeded.” Further, the Agency limits its degree of protectiveness determination to considering whether the Test of Significant Toxicity is equivalent to or better than the NOEC only under conditions where the specific effluent concentration reaches the 25 percent mean effect point deemed toxic under the Test of Significant Toxicity, explaining that in “this report, *as protective as* is defined as an equal ability to declare a sample toxic at or above the regulatory management level.”

The State Board also points to no evidence in the record showing that the regulatory management decision setting “*b*” at 0.75 is entitled to deference on the question whether it sets a regulatory definition of toxicity equal to or more stringent than the approved NOEC for hypothesis testing. At most, the Agency discloses that it considers the test “consistent with” the IC25. However, in the same technical document, the Agency makes clear that “[b]ecause [the Test of Significant Toxicity] is a form of hypothesis testing, analyses in this document focus on comparing results of [the Test of Significant Toxicity] to the traditional hypothesis testing approach and not to point estimate techniques such as linear interpolation (i.e., IC25).”<sup>13</sup>

Even the Agency’s strongest implications that the Test of Significant Toxicity is functionally equivalent to approved methods are countered by the Agency’s own statements and hedges. As the State Board notes, the technical document does allege that “[u]sing the [Test of Significant Toxicity] approach does not result in any changes to [the

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<sup>13</sup> The State Board’s own discussion of the regulatory management decisions specifically relies on the Agency’s technical document and “peer reviewed literature,” but only to conclude the decisions are “consistent with the [Agency’s] use of IC25 as an acceptable effect threshold for determining chronic toxicity” and “as a toxic threshold above which ecological effects are likely.” We have not been pointed to any portion of the State Board’s analysis containing relevant findings of equivalence.

Agency]’s [whole effluent toxicity] test methods.” In the same paragraph, the technical document explains that the “[Test of Significant Toxicity] approach is an alternative statistical approach for analyzing and interpreting valid [whole effluent toxicity] data; it is not an alternative approach to developing NPDES permit [whole effluent toxicity] limitations.” Despite these claims, in other sections, the technical document affirms that “[u]sing the [Test of Significant Toxicity] approach, [whole effluent toxicity] NPDES permit limits would be expressed as *no significant toxicity of the effluent at the IWC using the [Test of Significant Toxicity] analysis approach,*” thereby undercutting its claim not to be an alternative approach to developing whole effluent toxicity limits.

Similarly, the technical document regularly compares the Test of Significant Toxicity to “the current approved [whole effluent toxicity] test analysis methods,” implying a recognition that the Test of Significant Toxicity has not been approved under the current regulatory scheme.<sup>14</sup> Nor is this surprising given that the Test of Significant Toxicity was not fully developed and disclosed until June 2010, well after the approved methods were adopted. Indeed, even in introducing the Test of Significant Toxicity, the Agency affirms that the “statistical endpoints that are used in chronic [whole effluent toxicity] testing in the NPDES [Whole Effluent Toxicity] Program are the no observed effect concentration (NOEC), and the 25 percent inhibition concentration (IC25).”

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<sup>14</sup> This is consistent with how the federal Environmental Appeals Board described the approved method before the Test of Significant Toxicity was developed. (See *In re San Jacinto River Authority* (July 16, 2010) SS005 ALI-ABA 423, 456 [“Standardized procedures for [whole effluent toxicity] testing provide that test results of the fathead minnow [whole effluent toxicity] testing requirement are expressed as either the ‘no observed effect concentration’ (‘NOEC’) or IC25. [Fn. omitted.] 40 C.F.R. § 136.3(a) tbl. [I]A (‘parameter and units’ column). The Region also explained in the Fact Sheet that ‘[t]he [whole effluent toxicity] Methods Manual describes two equally acceptable methods [to measure, analyze and express [whole effluent toxicity] test results]: hypothesis testing, using the No Observable Effect Concentration approach; and point estimation, for example using the Inhibition Concentration.’ ” (fifth & seventh bracketed insertions in original)].)

Finally, it is notable that the Agency itself specifically prohibits analysts from modifying approved analytical methods for method-defined analytes. (40 C.F.R. § 136.6(b)(3).) As the analytical method chosen for whole effluent toxicity testing intrinsically defines toxicity, the Agency expects and understands that changes to the approved analytical methods do not result in equivalent tests.<sup>15</sup> It would be inconsistent, then, to defer to unadopted guidance from the Agency on using additional analytical methods when the Agency prohibits any changes from those approved methods precisely because those changes redefine the analyte.

Given the lack of evidence demonstrating the Agency considers the Test of Significant Toxicity to be an equivalent to the approved NOEC utilized in existing hypothesis testing methods and the clear conflict between such an assertion and the effect of a statistical change on a method-defined analyte, this court finds no basis to defer to any claim that the Agency or the State Board has interpreted the statutory and regulatory scheme to authorize using the Test of Significant Toxicity. Rather, as noted throughout the documents available, the most reasonable interpretation of the record is that the Agency has developed a new and more powerful, but fundamentally different, statistical model which it believes is both more effective at properly identifying toxicity and fairer to those subject to potential false positives. While this is likely true, the development of this method relies on acknowledged regulatory decisions to redefine toxicity to something other than what is currently used by the approved methods.

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<sup>15</sup> The State Board is similarly aware that choosing a different statistical model changes the definition of toxicity. The State Board explains in its staff report: “Toxicity is not an absolute quantity, but rather an effect that is determined relative to a control, when using a toxicity test. A hypothesis testing approach, such as the [Test of Significant Toxicity], incorporates what is considered acceptable or unacceptable toxicity as specific explicit levels of effect referred to as Regulatory Management Decisions .... The [Test of Significant Toxicity] statistical approach implements what the [regulatory management decision] has defined as biologically important, by incorporating what effect level in the effluent or sample water is considered unacceptable toxicity.”

### *Appellants' Remaining Contentions*

As noted at the outset of this discussion, appellants also directly challenge two other aspects of the Toxicity Provisions as inconsistent with federal requirements. First, appellants challenge the adoption of a maximum daily effluent limitation and a monthly median effluent limitation for publicly owned treatment works. Second, appellants challenge the decision to require, without conducting a reasonable potential analysis, toxicity effluent limitations for all publicly owned treatment works that discharge at a rate greater than 5 million gallons per day and are already required to have a pretreatment program.

Both of these issues derive from the chronic aquatic toxicity effluent limitations set out in section III.C.5 of the Toxicity Provisions. These requirements are specifically applicable to non-storm water NPDES dischargers. Unlike other provisions applicable to non-storm water NPDES dischargers, however, the chronic toxicity effluent limitations absolutely require the use of the Test of Significant Toxicity to implement. As explained in the Toxicity Provisions, to the “extent any monitoring requires the use of receiving water, different species, different effluent concentrations than the IWC, or different test methods, that monitoring cannot be used to determine compliance with the chronic aquatic toxicity effluent limitations specified in this section.”

We have found that using the Test of Significant Toxicity is inconsistent with the Clean Water Act's requirements. Accordingly, neither of the remaining issues can be implemented in NPDES permits without using a testing method inconsistent with that permitting system. We therefore do not need to consider whether these requirements were properly adopted or independently conflict with the Clean Water Act. We take no position on those claims. Similarly, having found the Test of Significant Toxicity is inconsistent with the Clean Water Act, we do not reach related claims raised generally in appellants' briefing, such as whether a pass/fail result or a greater than 50 percent effect endpoint also conflicts with the Clean Water Act.

### *Conclusion*

The Test of Significant Toxicity as incorporated into the Toxicity Provisions is inconsistent with the Clean Water Act's requirements. As a method-defined analyte, toxicity in whole effluent toxicity testing is defined by the method used to analyze the data collected. The federal regulations governing whole effluent toxicity testing have approved two statistical endpoints for defining toxicity. The Test of Significant Toxicity satisfies neither. To the extent the Toxicity Provisions determine compliance with NPDES permits based upon toxicity as defined by the Test of Significant Toxicity, they conflict with federal law and must be set aside.<sup>16</sup>

### **The State Board Properly Adopted the Toxicity Provisions Under State Law**

Although the Test of Significant Toxicity is not a proper method for determining whole effluent toxicity under the Clean Water Act, this does not resolve the full scope of appellants' claims. The State Board also adopted the Toxicity Provisions as a statewide water policy, and several aspects of this policy make clear they are not required for compliance with an NPDES permit. For example, although the chronic aquatic toxicity limitations of section III.C.5. rely exclusively on the Test of Significant Toxicity, the general aquatic toxicity monitoring requirements of section III.C.4 do not. While the Toxicity Provisions require that permitting authorities "include aquatic toxicity monitoring requirements in an NPDES permit" and such monitoring "shall be analyzed using the [Test of Significant Toxicity]," the Toxicity Provisions expressly state the permitting authorities "may also require dischargers to conduct additional toxicity testing." This additional testing "can include ... testing with additional dilutions" and

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<sup>16</sup> This court notes that a different conclusion was reached by our sister court in a nonpublished opinion. (*Camarillo Sanitary Dist. v. California Regional Water Quality Control Bd., Los Angeles Region* (Dec. 19, 2024, B333420).) This court previously denied the State Board's motion asserting this opinion supported dismissing portions of this appeal on issue preclusion grounds. We take no position on any effect that prior opinion may still have under the law of the case. However, our analysis demonstrates why the prior analysis is not persuasive.

can be required “in an NPDES permit.” And the Toxicity Provisions include instructions for situations where non-storm water NPDES dischargers “are not required to comply with the chronic toxicity effluent limitations indicated in Section III.C.5.”

Similarly, with both storm water dischargers regulated pursuant to NPDES permits and nonpoint source and other non-NPDES dischargers, the Toxicity Provisions note that “[m]ulti-concentration testing is not required except to the extent required by federal law or specified by the PERMITTING AUTHORITY.” While both of these dischargers will be required to utilize the Test of Significant Toxicity and report to the state accordingly, there is nothing in the Toxicity Provisions that makes use of the test mandatory for complying with federal regulations. Indeed, the provision above makes clear that additional testing is permitted to comply with federal requirements.

For this reason, neither party argues that, if properly adopted as a state water policy, the fact that the Toxicity Provisions fail to satisfy the Clean Water Act’s requirements means California must wholly discard their use. Therefore, we next consider whether, in light of appellants’ arguments, the Toxicity Provisions were properly adopted under state law as a state water policy. We conclude they were.

*Applicable Law and Additional Standards of Review*

Initially adopted before the Clean Water Act, the Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.) now covers both how California regulates its own waters and how it complies with federal mandates under the Clean Water Act. (*City of Burbank, supra*, 35 Cal.4th at p. 619.) “Its goal is ‘to attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible.’ ([Wat. Code, ]§ 13000.) The task of accomplishing this belongs to the [the State Board] and the nine Regional Water Quality Control Boards; together the State Board and the regional boards comprise ‘the principal state agencies with primary

responsibility for the coordination and control of water quality.’ ([Wat. Code, ]§ 13001.)” (*Ibid.*)

Under Water Code section 13140, the State Board “shall formulate and adopt state policy for water quality control.” These policies “shall consist of all or any of the following: [¶] (a) Water quality principles and guidelines for long-range resource planning .... [¶] (b) Water quality objectives at key locations .... [¶] (c) Other principles and guidelines deemed essential by the [S]tate [B]oard for water quality control.” (Wat. Code, § 13142, subds. (a)–(c).) In addition, the State Board “may require any state or local agency to investigate and report on any technical factors involved in water quality control; provided that the burden, including costs, of such reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained therefrom.” (Wat. Code, § 13165.)

A state policy for water quality control effectively directs future regional water board actions. Thus, when a regional board adopts a water quality control plan, the plan “shall conform to the policies set forth in [the Porter-Cologne Water Quality Control Act] and any state policy for water quality control.” (Wat. Code, § 13240.) Despite this, the State Board may also unilaterally “adopt water quality control plans ... for waters for which water quality standards are required by the” Clean Water Act. (Wat. Code, § 13170.) These plans, “when adopted, supersede any regional water quality control plans for the same waters to the extent of any conflict.” (*Ibid.*)

Similar to the analysis of the Toxicity Provisions as a regulation related to NPDES permitting, the State Board’s adoption of the Toxicity Provisions as a state policy parallels adopting a regulation. As noted above, there are two questions that can drive the court’s analysis. The first asks “whether the regulation is ‘consistent and not in conflict with’ the provision that authorizes it,” and the second asks “whether the regulation is reasonably necessary to effectuate the purpose of the authorizing law.” (*In re Gadlin*,<sub>2</sub> *supra*, 10 Cal.5th at p. 926.)

In this instance, the second question dominates. When the regulation constitutes a quasi-legislative rule, derived from lawmaking authority delegated to the Agency, the scope of our review is narrow. (*Western States Petroleum Assn. v. Board of Equalization, supra*, 57 Cal.4th at p. 415.) “When a regulation is challenged on the ground that it is not ‘reasonably necessary to effectuate the purpose of the statute,’ our inquiry is confined to whether the rule is arbitrary, capricious, or without rational basis [citation] and whether substantial evidence supports the agency’s determination that the rule is reasonably necessary [citation].” (*Ibid.*) “We presume the validity of a regulation promulgated by a state agency. [Citation.] The burden lies with the party challenging the regulation to show its invalidity.” (*In re Gadlin, supra*, 10 Cal.5th at p. 926.)

*The Toxicity Provisions Were Properly Adopted as a State Policy*

Appellants claim the Toxicity Provisions are not properly adopted as a state policy for water quality control under Water Code sections 13140 and 13142 because the State Board did not adequately demonstrate the Toxicity Provisions are essential policies and because the overall decision to adopt the Toxicity Provisions as a policy and not a water quality control plan demonstrates an improper blending of authority. Appellants’ briefing, however, contains little argument and virtually no citation to case law or the record which demonstrate the Toxicity Provisions were not adopted under the State Board’s broad authority to develop essential state water policy. Indeed, appellants’ opening brief makes only the bald assertion that the “State Board inadequately justified these regulations were required when only ‘principles and guidelines’ are prescribed ... or when these regulations are ‘essential,’ ” before concluding that Water Code section 13142 “cannot serve as the basis for the adoption of Policy ... related to toxicity.” And appellants’ reply brief only notes a claimed failure to “differentiate in any way between what part represents the plan and what is a policy, or as to which waters the plan or policy apply” before, in both instances, focusing on whether the State Board has

intended to or actually met the statutory requirements for adopting a water quality control plan.

In response, the State Board alleges it implemented the Toxicity Provisions under multiple authorities, including through determinations they were “ ‘essential’ for protecting ‘aquatic life beneficial uses’ for the state’s waters, ‘regardless of [the water’s] status as waters of the United States,’ ” and that they were “necessary to address the ‘inconsistency between the Regions’ [citation], as well as the elevated levels of toxicity in the state’s waters.” The State Board further notes appellants did not challenge the “essential” finding below and contends there is no basis in the law to prevent the State Board from properly adopting water policy as statutorily authorized.

We conclude the Toxicity Provisions were properly adopted as a state water policy for water quality control under Water Code sections 13140 and 13142. The State Board is granted broad policy authority over all of California’s waters, including those also covered by the Clean Water Act. Water Code section 13140 provides a mandate to the State Board to adopt water quality control policies, which by statutory definition include “the regulation of any activity or factor which may affect the quality of the waters of the state.” (Wat. Code, § 13050, subd. (i).) Water Code section 13142 then confirms the broad scope of this authority by permitting such policies to cover “principles and guidelines deemed essential by the [S]tate [B]oard for water quality control.” Thus, to the extent the State Board has set forth testing principles or guidelines that it deems essential, and those principles and guidelines affect any activity or factor which might affect water quality in California, it has acted within the scope of its authority.

The Toxicity Provisions consist of principles and guidelines disclosing and implementing a methodology for monitoring and analyzing the risk that water is toxic due to a combination of pollutants not otherwise adequately regulated by existing effluent limitations. Given that whole effluent toxicity testing is a method-defined analyte, the statistical method chosen to analyze whole effluent toxicity data also defines when the

water is toxic. Thus, as a statistical model and guidelines for whole effluent toxicity testing in California, the Toxicity Provisions both affect an activity—testing—and a factor—toxicity—which may affect water quality in the state. Further, in developing and adopting the Toxicity Provisions, the State Board considered several reasons why the provisions were essential for water quality control. These included a desire to supersede conflicting provisions in regional water quality control plans and “to establish a uniform regulatory approach for all waters of the state and to strengthen regulatory effectiveness and improve consistency across all Water Boards.” They also included “the protection of aquatic life beneficial uses of all inland surface waters, enclosed bays, estuaries, and coastal lagoons of the state, regardless of their status as waters of the United States.”

Appellants raise concerns that the State Board has blurred the acts of adopting policy and enacting a water quality control plan under Water Code section 13170. These concerns are no barrier to adopting the Toxicity Provisions as a policy in this case. Appellants point to no statutory basis limiting the State Board’s authority to develop policy or enact a water quality control plan depending on the waters covered. Rather, given the facts and arguments in this case, under the statutory scheme, the only effective difference between the authority to adopt policy and the authority to approve a state-wide water quality control plan is the time frame for implementing the decision. A policy must be adhered to in future regional water board decisions, while a water quality control plan immediately supersedes conflicting provisions. (Wat. Code, §§ 13146 [requiring compliance with state water policy], 13170 [State Board water quality control plans supersede regional water quality control plans to the extent of any conflict].)

In developing the Toxicity Provisions, the State Board recognized the significant overlap between its authority under Water Code sections 13140 and 13142 and its authority under Water Code section 13170 and regularly considered its actions to be proper under both types of authority to the extent appropriate. In practical effect, the State Board’s adopted policy will be implemented over time when new actions require

considering the policies adopted for the state's independent analysis of its waters. We need not consider appellants' challenges to the Toxicity Provisions under the authority to create a water quality control plan given they cannot supplant testing procedures for federally regulated waters and are independently appropriate as a state water policy.

We also reject appellants' claim that the Toxicity Provisions failed to comply with Water Code section 13165, which states, "The [S]tate [B]oard may require any state or local agency to investigate and report on any technical factors involved in water quality control," provided that the burden bears "a reasonable relationship to the need for the reports and the benefits to be obtained therefrom." Appellants argue that this statute applies because the Toxicity Provisions may result in nonpoint source discharges by local agencies being subjected to toxicity testing requirements. But the record does not support this claim. The implementation plan for nonpoint source discharges states that the Test of Significant Toxicity will be utilized for those discharges "with existing chronic or acute aquatic toxicity monitoring requirements" and shall be incorporated when the relevant permitting authority "issues new or renewed chronic or acute toxicity monitoring requirements." In other words, the Toxicity Provisions themselves provide no new requirements for monitoring that would trigger Water Code section 13165, even if it were deemed applicable. Rather, the Toxicity Provisions only define how to execute already existing authority to require testing and thus are not subject to Water Code section 13165.

#### **The State Board Complied with the APA**

Appellants next contend that the State Board failed to comply with certain APA requirements when adopting the Toxicity Provisions. Under Government Code section 11353, any policy adopted by the State Board must be reviewed "to determine compliance with the standards of necessity, authority, clarity, consistency, reference, and nonduplication set forth in subdivision (a) of [Government Code s]ection 11349.1." (Gov. Code, § 11353, subd. (b)(4).) Appellants contend the State Board failed to meet these standards. As set forth below, we do not agree.

*Applicable Law and Additional Standards of Review*

“Born from a perception that ‘ “there existed too many regulations imposing greater than necessary burdens on the state and particularly upon small businesses,” ’ the APA provides a procedural vehicle to review proposed regulations or modifications thereto in order to ‘ “advance ‘meaningful public participation in the adoption of administrative regulations by state agencies’ and create ‘an administrative record assuring effective judicial review.’ ” ’ [Citation.] In other words, the APA establishes basic minimal procedural requirements for rulemaking in California.” (*John R. Lawson Rock & Oil, Inc. v. State Air Resources Bd.* (2018) 20 Cal.App.5th 77, 111.)

The State Board is partially exempt from the requirements of the APA when adopting state policy for water quality control or adopting water quality control plans subject to specific identified requirements set forth by Government Code section 11353, subdivision (b). (Gov. Code, § 11353, subd. (a); *California Assn. of Sanitation Agencies v. State Water Resources Control Bd.* (2012) 208 Cal.App.4th 1438, 1448.) When conducting such activities, the State Board must submit a “clear and concise summary of any regulatory provisions adopted,” the “administrative record,” a “summary of the necessity for the regulatory provision,” and a “certification ... that the action was taken in compliance with all applicable procedural requirements” of the Water Code. (Gov. Code, § 11353, subd. (b)(2)(A)–(D).)

Once submitted, the regulatory provisions shall be reviewed by the Office of Administrative Law (the office) “to determine compliance with the standards of necessity, authority, clarity, consistency, reference, and nonduplication set forth in subdivision (a) of [Government Code] section 11349.1” and “compliance with the public participation requirements of the [Clean Water] Act.” (Gov. Code, § 11353, subd. (b)(4).) The office must then approve or disapprove the regulations within 30 working days pursuant to Government Code section 11349.3. (See Gov. Code, § 11353, subd. (b)(4) [noting Government Code sections applicable to review].) If disapproved, the State

Board has 120 days to resubmit the regulations and can petition the Governor for review in the interim. (Gov. Code, §§ 11349.4, 11349.5.) Any disapproved regulation may also be challenged by bringing an action for declaratory relief. (Gov. Code, § 11350.3.)

As noted above, under Government Code section 11349.1, subdivision (a), “The office shall review all regulations ... submitted to it for publication in the California Code of Regulations Supplement and for transmittal to the Secretary of State and make determinations using all of the following standards: [¶] (1) Necessity. [¶] (2) Authority. [¶] (3) Clarity. [¶] (4) Consistency. [¶] (5) Reference. [¶] (6) Nonduplication.”

Government Code section 11349 defines these terms as follows:

“(a) ‘Necessity’ means the record of the rulemaking proceeding demonstrates by substantial evidence the need for a regulation to effectuate the purpose of the statute, court decision, or other provision of law that the regulation implements, interprets, or makes specific, taking into account the totality of the record. For purposes of this standard, evidence includes, but is not limited to, facts, studies, and expert opinion.

“(b) ‘Authority’ means the provision of law which permits or obligates the agency to adopt, amend, or repeal a regulation.

“(c) ‘Clarity’ means written or displayed so that the meaning of regulations will be easily understood by those persons directly affected by them.

“(d) ‘Consistency’ means being in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or other provisions of law.

“(e) ‘Reference’ means the statute, court decision, or other provision of law which the agency implements, interprets, or makes specific by adopting, amending, or repealing a regulation.

“(f) ‘Nonduplication’ means that a regulation does not serve the same purpose as a state or federal statute or another regulation. This standard requires that an agency proposing to amend or adopt a regulation must identify any state or federal statute or regulation which is overlapped or duplicated by the proposed regulation and justify any

overlap or duplication.... This standard is intended to prevent the indiscriminate incorporation of statutory language in a regulation.”

Several of these terms are also discussed in regulations adopted by the office. (Cal. Code Regs., tit. 1, §§ 10–12, 14, 16.) To “meet the ‘necessity’ standard,” one must include a “statement of the specific purpose of each adoption, amendment, or repeal” and “information explaining why each provision ... is required to carry out the described purpose of the provision,” including but not limited to “facts, studies, or expert opinions.” (Cal. Code Regs., tit. 1, § 10, subd. (b)(1), (2).)

“A regulation shall ‘serve the same purpose,’ as that term is used in Government Code Section 11349[, subdivision ](f), where it either repeats or rephrases in whole or in part a state or federal statute or regulation.” (Cal. Code Regs., tit. 1, § 12, subd. (a).) Further, a “regulation which duplicates a state or federal statute or regulation shall, nonetheless, meet the ‘nonduplication’ standard ... if any one of the following conditions is met: [¶] (1) ... the duplication or overlap is necessary to satisfy the ‘clarity’ standard ...; [¶] (2) [t]he agency meets the requirement of Government Code Section 11346.9[, subdivision ](c) when adopting or amending federally mandated regulations; or [¶] (3) [t]he duplication is mandated or authorized by a specified statute or other provision of law.” (Cal. Code Regs., tit. 1, § 12, subd. (b)(1)–(3).)

“ ‘Authority’ shall be presumed to exist only if an agency cites in its ‘authority’ note proposed for printing ...: [¶] (1) a California constitutional or statutory provision which expressly permits or obligates the agency to adopt ... the regulation; or [¶] (2) a California constitutional or statutory provision that grants a power to the agency which impliedly permits or obligates the agency to adopt ... the regulation in order to achieve the purpose for which the power was granted.” (Cal. Code Regs., tit. 1, § 14, subd. (a).)

Finally, “[a] regulation shall be presumed not to comply with the ‘clarity’ standard if any of the following conditions exists: [¶] (1) the regulation can, on its face, be reasonably and logically interpreted to have more than one meaning; or [¶] (2) the

language of the regulation conflicts with the agency’s description of the effect of the regulation; or [¶] (3) the regulation uses terms which do not have meanings generally familiar to those ‘directly affected’ by the regulation, and those terms are defined neither in the regulation nor in the governing statute; or [¶] (4) the regulation uses language incorrectly. This includes, but is not limited to, incorrect spelling, grammar or punctuation; or [¶] (5) the regulation presents information in a format that is not readily understandable by persons ‘directly affected’; or [¶] (6) the regulation does not use citation styles which clearly identify published material cited in the regulation.” (Cal. Code Regs., tit. 1, § 16, subd. (a)(1)–(6).)

When a challenge is properly raised under these requirements, our standard of review depends upon the argument made. Questions such as the necessity of a regulation are reviewed deferentially, asking only “whether the regulation is arbitrary, capricious, without rational basis, or not supported by substantial evidence.” (*Associated General Contractors of California, Inc. v. Department of Industrial Relations* (2025) 108 Cal.App.5th 243, 308.) “In contrast, when a regulation is challenged on the grounds that it conflicts with a governing statute or exceeds the rulemaking authority delegated by the Legislature, the issue of statutory construction is a question of law on which the court exercises its independent judgment.” (*Id.* at p. 309.) “Because a regulation adopted by a state agency is presumed valid [citation], the burden is on the party challenging the regulation to establish its invalidity.” (*Id.* at p. 310.)

*Government Code Section 11349.1 Factors Are Met*

At the outset, this court questions whether it has authority to review the office’s decision to approve the Toxicity Provisions under Government Code section 11353 and its implementation of Government Code section 11349.1. The court’s authority to consider such issues is generally authorized by Government Code section 11350. (See *California Assn. of Medical Products Suppliers v. Maxwell-Jolly, supra*, 199 Cal.App.4th at p. 303 [“The regulation ‘may’ be declared to be invalid by a court because of a

‘ “substantial failure” to comply with’ the APA.”].) However, Government Code section 11353 expressly excludes the adoption of state water policy from the requirements of the APA, save for certain identified requirements. (Gov. Code, § 11353, subds. (a), (b)(4).)

Government Code section 11350 is not one of those statutes specifically included in the process for reviewing actions taken under Government Code section 11353. Rather, Government Code section 11353 incorporates Government Code section 11350.3, which grants judicial review only of regulations “which the office has disapproved pursuant to [Government Code ]section 11349.3, or 11349.6, or of a regulation that has been ordered repealed pursuant to [Government Code s]ection 11349.7.” (Gov. Code, § 11350.3.) In other words, the statutory scheme excludes all statutory review procedures for approved water policy under the APA while expressly granting limited review for rejected policy.<sup>17</sup> This would imply that judicial review was intended to be limited. (Contra, *Sims v. Department of Corrections & Rehabilitation* (2013) 216 Cal.App.4th 1059, 1076–1078 [concluding judicial review of clarity and necessity requirements is unambiguously indicated as appropriate under the full structure of the APA].)

We need not resolve the scope of our authority in this instance, however, as neither party has specifically raised this issue and the court finds no error in the approval. We therefore turn to the relevant factors considered by the office.

#### Necessity, Authority, and Reference

The requirement for “necessity” is generally met through statements identifying the specific purpose of each regulation and information explaining why each provision of the adopted regulation is required to carry out the described purpose of the authorizing

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<sup>17</sup> Further supporting the limited nature of review, Government Code section 11353, subdivision (c) notes that the exclusion from general APA review does not apply to policies challenged prior to June 1, 1992. This affirms the exclusion applies to all policies challenged after that date.

statute. (Cal. Code Regs., tit. 1, § 10, subd. (b); see *California Forestry Assn. v. California Fish & Game Commission* (2007) 156 Cal.App.4th 1535, 1554 [noting that necessity will nearly always be satisfied when a statute is not self-implementing].)

Similarly, the requirements for “authority” and “reference” are presumed to exist where any agency cites a statutory provision which expressly permits or grants power which allows the action and where the agency is empowered to implement that statute. (Cal. Code Regs., tit. 1, § 14.) As this court has noted and found proper, the State Board clearly and repeatedly referred to its authority and obligation to implement state water policy under Water Code sections 13140 and 13142 when adopting the Toxicity Provisions. This court has also noted evidence in the record showing that the policy enacted was needed to create consistency in practice and standards for whole effluent toxicity testing across the various regional boards. As related to a statewide water policy, these statements are substantial evidence demonstrating the requirements of necessity, authority, and reference when adopting a consistent approach to whole effluent toxicity testing across all of California’s waters.

Contrary to the arguments raised in this case, we find no reason to discount these statements due to the fact that the approved policy does not satisfy federal requirements for NPDES permitting. California may adopt its own water quality testing standards across all of its waters even if those standards do not satisfy additional federal requirements, and its adoption of the Toxicity Provisions does not prevent it from also complying with any controlling federal requirements. The Toxicity Provisions themselves note that NPDES permits can include “testing with additional dilutions or higher concentrations of effluent than the IWC” if the rationale is properly recorded and, in another context, that “multi-concentration testing is not required except to the extent required by federal law or specified by the permitting authority.” (Capitalization omitted.) The mere fact that the regulations do not fully satisfy federal requirements,

even if initially meant to do so, does not demonstrate they could not be authorized under the relevant laws in the first instance.

#### Consistency and Nonduplication

Similarly, although not satisfying certain federal requirements, the Toxicity Provisions are not inconsistent with those requirements and do not duplicate any other identified regulation or policy. The Toxicity Provisions also cover waters not otherwise affected by the federal requirements and for which no duplicative or inconsistent laws or policies have been identified by appellants. As noted above, they even allow for additional testing methods as required by federal law. (See *Wendz v. State Dept. of Education* (2023) 93 Cal.App.5th 607, 634 [regulations do not conflict where they preserve authority to act in conformity with compared statute].) And the Toxicity Provisions neither “repeat[] or rephrase[] in whole or in part a state or federal statute or regulation.” (Cal. Code Regs., tit. 1, § 12, subd. (a).) Further, as a policy providing for a consistent approach to aquatic toxicity testing, the Toxicity Provisions need not be rejected merely because they cannot wholly displace similar but different federal requirements. (See *California Forestry Assn. v. California Fish & Game Commission*, *supra*, 156 Cal.App.4th at pp. 1554–1555 [difference in reach of regulations and additional protection of California’s interests justified alleged overlap].) Although there may be identifiable overlap in substance between the Toxicity Provisions and the related federal whole effluent toxicity testing requirements, the State Board has identified a justifiable basis for adopting this policy—consistency in approved testing methods across all state waters.

#### Clarity

Finally, we find no basis to overturn the Toxicity Provisions for a lack of clarity. The Toxicity Provisions need only be written so their meaning “will be easily understood by those persons directly affected by them.” (Gov. Code, § 11349, subd. (c).) Appellants challenge the Toxicity Provisions as lacking such clarity but only offer undefined

assertions that they “are vague, ambiguous, or unintelligible and are not easily understood by the general public or those persons directly affected by” them, and that the administrative record “is rife with instances where the regulated community expressed frustration with the construction and obscurity of the” Toxicity Provisions. Appellants identify none of the bases by which a lack of clarity may be presumed by the office, such as being reasonably interpreted to have multiple meanings, language that conflicts with stated descriptions of the effect, unfamiliar terms, incorrect language use, poor formatting, or unclear citation styles. (See Cal. Code Regs., tit. 1, § 16; *Sims v. Department of Corrections and Rehabilitation*, *supra*, 216 Cal.App.4th at p. 1080 [noting provisions of challenged regulations that conflict with existing regulatory timelines and which may have more than one meaning].) In our own analysis of the issues raised in this case, we have also identified no portions of the Toxicity Provisions that obviously fail a basic test for clarity.

### **The State Board Did Not Violate CEQA**

Appellants’ final claim alleges that the State Board failed to comply with CEQA when adopting the Toxicity Provisions. Although several arguments are interspersed, appellants’ contentions generally fall into two points: (1) The State Board was not authorized to use a substitute environmental document to complete its environmental review; and (2) The State Board failed to adequately consider potentially significant impacts. We conclude the State Board did not violate CEQA or its internal regulations.

#### *Applicable Law and Additional Standards of Review*

“With narrow exceptions, CEQA requires an [environmental impact report] whenever a public agency proposes to approve or to carry out a project that may have a significant effect on the environment.” (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 390.) “The Legislature has made clear that an [environmental impact report] is ‘an informational document’ and that ‘[t]he purpose of an environmental impact report is to provide public agencies and the public in

general with detailed information about the effect which a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project.’ ” (*Id.* at p. 391, first bracketed added.) “The [environmental impact report] is also intended ‘to demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action.’ ” (*Id.* at p. 392.)

Subject to certain restrictions, “when the regulatory program of a state agency requires a plan or other written documentation containing environmental information ... the plan or other written documentation may be submitted in lieu of the environmental impact report required by this division if the Secretary of the [Natural] Resources Agency has certified the regulatory program pursuant to this section.” (Pub. Resources Code, § 21080.5, subd. (a).) The basin planning process of the State Board and regional boards is a certified regulatory program (Cal. Code Regs., tit. 14, § 15251, subd. (g)), and the regulations implementing the program appear in the California Code of Regulations, title 23, sections 3775 to 3782. (*City of Arcadia v. State Water Resources Control Bd.* (2006) 135 Cal.App.4th 1392, 1422–1423.)

“In reviewing an agency’s compliance with CEQA in the course of its legislative or quasi-legislative actions, the courts’ inquiry ‘shall extend only to whether there was a prejudicial abuse of discretion.’ (Pub. Resources Code, § 21168.5.) Such an abuse is established ‘if the agency has not proceeded in a manner required by law or if the determination or decision is not supported by substantial evidence.’ ” (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 426.) “An appellate court’s review of the administrative record for legal error and substantial evidence in a CEQA case, as in other mandamus cases, is the same as the trial court’s: The appellate court reviews the agency’s action, not the trial court’s decision; in that sense appellate judicial review under CEQA is *de novo*.” (*Id.* at p. 427.)

In this case, the relevant questions under CEQA relate to the State Board’s decision to utilize a substitute environmental document and, if proper, whether the State Board properly determined certain potentially significant environmental impacts were too speculative to fully analyze. “Whether the preparer ... applied the correct legal standard to determine the scope of analysis is a predominantly procedural question we review independently, but the correctness of factual findings predicate to the standard’s application (for example, delineation of the circumstances under which a future action is likely to occur) is a predominantly factual matter we review only for substantial evidence.” (*Ebbetts Pass Forest Watch v. California Dept. of Forestry & Fire Protection* (2008) 43 Cal.4th 936, 954 (*Ebbetts Pass*).) In other words, the determination of “proffered information as speculation not capable of leading to meaningful analysis or requiring further response in the [environmental impact report] is a factual conclusion entitled to deference.” (*Santa Rita Union School Dist. v. City of Salinas* (2023) 94 Cal.App.5th 298, 348.) And the determination that an agency properly utilized a supplemental environmental document in lieu of an environmental impact report is a question we review independently. (See *California Sportfishing Protection Alliance v. State Water Resources Control Bd.* (2008) 160 Cal.App.4th 1625, 1642–1645 [conducting independent review regarding whether agency has proceeded in the manner required by law].)

*The State Board Properly Utilized a Substitute Environmental Document*

Appellants contend the State Board incorrectly utilized a supplemental environmental document under its CEQA certified regulatory program when adopting the Toxicity Provisions. Appellants argue that adopting a statewide water policy falls outside of the scope of this regulatory program. The State Board asserts that all water quality policy decisions fall within the program and thus using a supplemental environmental document in this case was proper. We agree with the State Board.

### Additional Relevant Law

The exempt regulatory program cited by the parties in this case is defined by the Natural Resources Agency as the “Water Quality Control (Basin)/208 Planning Program of the State ... Board and the Regional Water Quality Control Boards.” (Cal. Code Regs., tit. 14, § 15251, subd. (g).)

According to the State Board’s own regulations, any “water quality control plan, state policy for water quality control, and any other components of California’s water quality management plan as defined in Code of Federal Regulations, title 40 [parts] 130.2(k) and 130.6, proposed for board approval or adoption must include or be accompanied by Substitute Environmental Documentation ... and supported by substantial evidence in the administrative record.” (Cal. Code Regs., tit. 23, § 3777, subd. (a).)

As noted previously, the State Board is authorized under Water Code section 13140 to “formulate and adopt state policy for water quality control,” and under Water Code section 13142, subdivision (c), that policy may consist of any “[o]ther principles and guidelines deemed essential by the [S]tate [B]oard for water quality control.” Additional policies are specifically identified within the statutory scheme for water quality as it relates to the coastal marine environment in Water Code section 13142.5. “During the process of formulating or revising state policy for water quality control the [S]tate [B]oard shall consult with and carefully evaluate the recommendations of concerned federal, state, and local agencies.” (Wat. Code, § 13144.)

### Additional Relevant Facts

The Natural Resources Agency certified the State Board’s regulatory program in 1979. The certification applies to “the portion of the regulatory program of the State ... Board involving the adoption or approval of standards, rules, regulation or plans to be used in the water basin/208 planning program for the protection maintenance and enhancement of water quality in California.” The certification goes on to note that this

planning process “involves the continuous updating of existing Regional Water Quality Control Plans” and that such changes “typically reflect new information ... or new priorities derived from ongoing water quality programs.” As examples of such changes, the certification specifically identifies “[r]evision beneficial uses and water quality objectives” and “[c]hanging agency goals or policies on water quality protection,” among others.

The certification also includes a statement of findings containing relevant points. First, as a general condition for approval, the findings broadly state that the “Basin Planning Program of the [State] Board is a regulatory program designed to control activities which would [a]ffect water quality in California.” Next, focusing on the interdisciplinary approach of the regulations, the findings cite as support that “Section 13144 requires that the State ... Board shall consult with and carefully evaluate the recommendations of concerned [f]ederal, [s]tate and local agencies.” Finally, in the ensuing discussion of enabling legislation, the findings discuss the State Board’s authority to adopt rules and regulations guided by standards and notes that “guidance is found” in Water Code sections “13000,” “13142, and 13142.5.”

In 1989, in response to a request related to actions taken with respect to a separate policy, the State Board requested and received confirmation from the Natural Resources Agency that it considered the adoption of water policy under Water Code section 13140 to fall within the scope of the regulatory program subject to Public Resources Code section 21080.5’s CEQA exemption.

### Analysis

The crux of appellants’ argument is that the “certified program (listed in the CEQA Guidelines) applies to the defined types of plans listed, not generally to every ‘water quality control’ activity within the State Board’s jurisdiction,” and “does *not* include statewide policies, which are distinct regulatory enactments.” Upon review, however, the record does not support this claim. Although the “Water Quality Control (Basin)/208

Planning Program” name for the regulatory process invokes the concept of a water quality control plan, commonly called a basin plan, and a specific federal program, the language is not so narrow as to only permit that conclusion. The name may also be understood to cover the entire planning process related to water quality control.

Given that state water policies are required to be followed in all later developed Regional Water Quality Control Plans (basin plans), it is clear that the development and adoption of state water policy is part of the planning process for water quality control and the adoption of basin plans. And, indeed, this is exactly the understanding referenced by the Natural Resources Agency when it certified the program. The Natural Resources Agency referred to aspects of the statutory scheme that covered both basin plans and general water policy. The regulatory plan was approved in part to allow for changing policies in water quality protection and was found to satisfy requirements for CEQA exemption because it contained consultation and interdisciplinary coordination requirements in statutes covering the adoption of state water policy. It was therefore well understood at the time of certification that the process for adopting state water policy would be exempt from CEQA.

We thus conclude that the State Board may utilize the exempt regulatory program identified as the “Water Quality Control (Basin)/208 Planning Program of the State ... Board and the Regional Water Quality Control Boards” when formulating and adopting state water quality control policies under Water Code section 13140.

*The State Board Properly Found No Potentially Significant Impacts*

Appellants next contend the State Board failed to consider or adopt required mitigation measures despite finding that the Toxicity Provisions would cause several potentially significant environmental impacts. The State Board counters that it properly found there were no potentially significant environmental impacts coming from the Toxicity Provisions, but that for transparency and disclosure purposes it went further than required and also identified potentially significant environmental impacts that could arise

should certain polluters seek to correct future toxicity issues. The State Board asserts it had no obligation to then mitigate those potential effects. Upon review, we find substantial evidence supports the State Board's position and conclude no error arose in the State Board's analysis.

Additional Relevant Law

Under the relevant regulations, a substitute environmental document "shall include, at a minimum, the following information:

"(1) A brief description of the proposed project;

"(2) An identification of any significant or potentially significant adverse environmental impacts of the proposed project;

"(3) An analysis of reasonable alternatives to the project and mitigation measures to avoid or reduce any significant or potentially significant adverse environmental impacts; and

"(4) An environmental analysis of the reasonably foreseeable methods of compliance. The environmental analysis shall include, at a minimum, all of the following:

"(A) An identification of the reasonably foreseeable methods of compliance with the project;

"(B) An analysis of any reasonably foreseeable significant adverse environmental impacts associated with those methods of compliance;

"(C) An analysis of reasonably foreseeable alternative methods of compliance that would have less significant adverse environmental impacts; and

"(D) An analysis of reasonably foreseeable mitigation measures that would minimize any unavoidable significant adverse environmental impacts of the reasonably foreseeable methods of compliance." (Cal. Code Regs., tit. 23, § 3777, subd. (b).)

Relevant to this case, the requirement to consider and analyze reasonably foreseeable methods of compliance is generally consistent with CEQA. CEQA requires

an “analysis of the environmental effects of future expansion or other action if: (1) it is a reasonably foreseeable consequence of the initial project; and (2) the future expansion or action will be significant in that it will likely change the scope or nature of the initial project or its environmental effects.” This prevents piecemealing projects in order to avoid environmental scrutiny. (*Laurel Heights Improvement Assn. v. Regents of University of California, supra*, 47 Cal.3d at p. 396.)

Of course, this requirement necessarily leads to additional questions. When is an impact reasonably foreseeable? And when an impact is reasonably foreseeable, what discussion is required? *Ebbetts Pass*, a case considering whether a substitute environmental document needed to consider the potential use of herbicides multiple years into the future, provides guidance on these questions:

“Regarding speculativeness and its opposite, foreseeability .... ‘[w]hen a proposed act, such as the application of herbicides, is reasonably foreseeable in general terms, the [substitute environmental document] must include a general discussion of the act and its possible environmental effects, but need not include a detailed analysis of specific acts that cannot reasonably be foreseen at the time the [substitute environmental document] is prepared.’ ” (*Ebbetts Pass, supra*, 43 Cal.4th at p. 954.) “On the other hand, ‘[a] detailed environmental analysis of every precise use that may conceivably occur is not necessary at this stage.’ ” (*Id.* at p. 955.) “Where the exact parameters of generally foreseeable future actions cannot confidently be predicted, the full-disclosure goals of CEQA ... may nonetheless be met with an analysis that ‘acknowledges the degree of uncertainty involved, discusses the reasonably foreseeable alternatives ... and discloses the significant foreseeable environmental effects of each alternative, as well as mitigation measures to minimize each adverse impact.’ ” (*Ibid.*)

#### Additional Relevant Facts

When conducting its primary environmental analysis, the State Board determined that it would “not engage in speculation or conjecture.” Similarly, because the State

Board “does not specify the actual methods of compliance by which permittees choose to comply,” the State Board determined it would provide a level of specificity for its analysis at “a general, programmatic nature.” As the decisions made and analysis provided are important to the resolution of this issue, we provide a fuller outline of their contents.

The State Board explained that “[p]roject-level impacts will necessarily vary depending on the choice of the specific project and the size, location, and type of discharger and the environmental resources in and around the project site.” Since the State Board found it “speculative to estimate the type, size, and location of any particular possible toxicity control,” the State Board made “no attempt to quantify the impacts associated with implementation or maintenance of a particular toxicity control.” Ultimately, the State Board found the “major category of reasonably foreseeable methods of compliance for all non-stormwater NPDES dischargers” would be “an increase in monitoring, testing, and laboratory analysis.”

Despite finding the choice of future toxicity controls was speculative and not a reasonably foreseeable method of compliance, the State Board noted that its report “discusses possible toxicity controls” and “includes a discussion on the potential impacts from the possible toxicity controls,” which provides “a discussion of the environmental effects.” These effects included 13 resource areas that “may have potentially significant impacts,” including air quality, agricultural and forest resources, greenhouse gas emissions, hydrology and water quality, and transportation.

In a further five-page discussion, the State Board discussed what it had determined was the reasonably foreseeable method of compliance, additional monitoring, as well as the potential for additional toxicity control projects. On that later point, the State Board noted that such projects “would depend, in part, on whether the discharger already needs to comply with existing toxicant-specific or existing aquatic toxicity monitoring requirements, effluent limitations, or receiving water limitations,” “the nature, type, and

persistence of any toxicity detections, and whether the cause of the toxicity or the identity of the toxicant is determined.” The State Board further explained it does “not mandate the manner of compliance,” that the “discharger’s selection of one or more particular toxicity controls would depend on the type of facility, the type of toxicity controls already in place at the facility, and the quality of the existing effluent,” along with “whether the cause of the toxicity (e.g., malfunctioning equipment) or the toxicant (e.g., identification of high copper amount in the effluent) are identified,” and that it was likely dischargers would select projects “that are less expensive and have lower environmental impact.”

In light of these unknowns, the State Board reviewed five prior “discharger upgrade projects that broadly capture the size, types, and locations of upgrades that might be considered” in “order to aid the qualitative assessment of potential impacts.” In reviewing these five projects, the State Board found that “[n]early all of the potentially significant environmental impacts identified in the environmental documents were found to be less than significant with mitigation.” The State Board further identified those impacts that could not be corrected with mitigation and considered whether such impacts were related to treatment upgrades, ultimately finding any unavoidable effects were unrelated to concerns surrounding the speculative methods of compliance.

Even after this analysis, the State Board proceeded through a 100-plus-page environmental checklist discussion in a manner that generally split environmental considerations between those related to the reasonably foreseeable act of monitoring and those related the speculative toxicity controls. As just one example, and as appellants note in their reply brief, in one of several similar sections, the State Board concluded, “Compliance with the [Toxicity] Provisions is anticipated to have a potentially significant impact on agricultural or forestry resources.” This conclusion came after a five-page discussion in which the State Board first laid out the federal, state, and local programs and laws that comprise the regulatory background for agricultural and forest resources in the state. The State Board then looked at five questions regarding impacts. For three of

these questions, considering converting farmland to nonagricultural uses, creating conflicts with agricultural zoning or use, and creating conflicts with timberland zoning, the State Board found the project would have less than significant impacts. For two questions—loss or conversion of forest land and loss or conversion of farmland—the State Board concluded the project would have a potentially significant impact.

Following these conclusions, the State Board then specifically detailed the expected impacts and mitigation related to these findings. The first paragraph of this discussion explained that some “of the potential impacts discussed in this section relate to the construction and operation and maintenance of possible new or upgraded toxicity controls” and are “not considered to be reasonably foreseeable methods of compliance” but were discussed “for purposes of informing decision makers and the public of any possible effects that may result from the Provisions, however unlikely.”

The State Board then continued to consider three topics under unique subheadings. Under the first, “*Potential Impacts from Monitoring*,” the State Board found “no effect on agricultural and/or forest resources” and determined “[n]o mitigation is required.”

Under the second subheading, “*Potential Impacts from Structural Control Construction*,” the State Board noted that the prior projects reviewed had found impacts “to be less than significant or to have no impact” aside from one which had expanded their facility into new lands. The State Board explained that the probability of substantial impacts was “very low” because “construction of structural controls for non-storm water NPDES dischargers is expected to occur within existing facilities or in previously disturbed areas” and because the Toxicity Provisions were “not anticipated to require structural control construction measures for storm water dischargers, for nonpoint source dischargers, or for other non-NPDES dischargers.” The State Board noted that “[m]easures could be taken to avoid or reduce” some of these impacts, but nonetheless, “there could be potentially significant” impacts.

Under the third subheading, “*Potential Impacts from Operation and Maintenance Activities*,” the State Board found no impact. The State Board explained that such activities arising from the installation of toxicity controls “would take place within the footprint of the facilities and is not anticipated to impact surrounding” resources, while controls for nonpoint sources require “little or no” operation and maintenance efforts and thus have no impact. Following this subheading, and under the premise of a summary, the State Board made its statement that compliance was anticipated to have a potentially significant impact.

#### Analysis

The core question for this dispute is whether the State Board’s identification of potential future impacts required further analysis. On this point, we find this case to be generally similar to *Ebbetts Pass*. In *Ebbetts Pass*, the underlying substitute environmental document determined that the use of herbicides was too speculative in nature to be considered as part of the relevant project while expressly noting there was a reasonable probability that herbicides would be used at some point in the future. (*Ebbetts Pass, supra*, 43 Cal.4th at p. 952.) Despite these findings, the substitute environmental document provided a fairly deep discussion of herbicides, their use, and their impacts when used. (*Id.* at pp. 952–954.) These detailed discussions ultimately formed the basis for the court’s finding that substantial evidence supported approving “the plans’ finding that the precise parameters of future herbicide use could not be predicted, and hence failing to demand a more detailed, site-specific analysis of impacts and mitigation measures.” (*Id.* at p. 955.)

In this case, the State Board determined that reasonably foreseeable methods of compliance with the Toxicity Provisions did not include any future construction projects that were required to cure any future toxicity determinations because those projects were too speculative. Despite this, the State Board provided an analysis that discussed the degree of uncertainty involved, the reasonably foreseeable alternatives available to those

needing toxicity controls, the significant foreseeable environmental effects of each alternative as shown through prior projects, and the effects of mitigation efforts from those projects. Although only one example is provided in the facts above, this court has reviewed all of the discussions in the State Board’s final report and finds them to be substantially similar in relevant effect. As noted in *Ebbetts Pass*, a full disclosure of all impacts and mitigation efforts is not required when the exact parameters of generally foreseeable future actions cannot confidently be predicted. (*Ebbetts Pass, supra*, 43 Cal.4th at p. 955.)

The State Board’s efforts provided a wealth of relevant information covering those activities it deemed too speculative to be reasonably foreseeable means of compliance. Its overall discussion constitutes substantial evidence supporting its conclusion that toxicity control efforts are not reasonably foreseeable means of compliance with the Toxicity Provisions. Further, even if the court found this conclusion improper, the analysis contained in the environmental checklist readily meets the disclosure requirements for generally foreseeable impacts that cannot be accurately predicted. We thus find no error in the State Board’s analysis of potentially significant environmental impacts and related mitigation measures.

Finally, we note that appellants have identified a laundry list of alleged CEQA violations, such as “failing to revise and recirculate the scoping documents ...; failing to adequately discuss consistency with regional plans; relying on an inadequate project description; failing to adequately identify, analyze, and mitigate significant impacts to the environment; failing to adequately consider alternatives; and failing to adequately respond to comments,” but have not provided any independent analysis or discussion of those assertions. We consider such arguments waived. (See *Estrada v. Public Employees’ Retirement System* (2023) 95 Cal.App.5th 870, 889 [“As a general rule, ‘[w]hen an appellant raises an issue ‘but fails to support it with reasoned argument and citations to authority, we treat the point as waived.’ ” ’ ”].) Accordingly, we reject

appellants' assertion that the State Board's failure to independently refute each claim requires a finding in favor of appellants.

**DISPOSITION**

The judgment is reversed with respect to the determination that the Toxicity Provisions do not conflict with the Clean Water Act. On all other grounds, the judgment is affirmed. The matter is remanded for proceedings consistent with this opinion.

Costs are awarded to appellants.

HILL, P. J.

WE CONCUR:

PEÑA, J.

DE SANTOS, J.