

State of California  
AIR RESOURCES BOARD

**Staff Report: Initial Statement of Reasons**  
**Proposed Amendments to the California**  
**Regulation for Reducing Emissions from Consumer Products**  
**Pertaining to**  
**Automotive Windshield Washer Fluid Products**



**Date of Release: August 29, 2012**

California Environmental Protection Agency  
 **Air Resources Board**



State of California  
**AIR RESOURCES BOARD**

**Initial Statement of Reasons**

**Proposed Amendments to the  
California Regulation for Reducing Emissions from Consumer Products  
Pertaining to Automotive Windshield Washer Fluid**

**To be Considered by the Air Resources Board at a Public Hearing on  
October 18, 2012**

**Byron Sher Auditorium  
Air Resources Board, Cal/EPA Headquarters  
1001 I Street  
Sacramento, CA 95812**

Release date: August 29, 2012

This report has been reviewed by the staff of the California Air Resources Board and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the Air Resources Board, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.



## **Initial Statement of Reasons**

Public Hearing to Consider  
Proposed Amendments to the California Regulation for  
Reducing Emissions from Consumer Products Pertaining to  
Automotive Windshield Washer Fluid

### **Air Resources Board Meeting**

**October 18, 2012, at 9:00 a.m.**

**Air Resources Board  
Cal/EPA Headquarters  
Byron Sher Auditorium  
1001 I Street  
Sacramento, CA 95814**

For those unable to attend the meeting in person, a live video webcast will be available beginning at 9:00 a.m. on October 18, 2012, at <http://www.calepa.ca.gov/broadcast>

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## Executive Summary

In this rulemaking, California Air Resources Board (ARB or Board) staff is proposing amendments to the provisions for Automotive Windshield Washer Fluid (AWWF) products as set forth in the Regulation for Reducing Emissions from Consumer Products (Consumer Products Regulation). Requirements for AWWF products are based upon the region in which they are sold. Type “A” areas are regions of the State which routinely experience freezing temperatures and require an AWWF with a higher volatile organic compound (VOC) content to prevent the fluid from freezing. However, the current description of Type “A” does not include some areas of California that routinely experience freezing temperatures.

To address this issue, the proposed amendments are designed to redefine and expand areas of the State where freezing temperatures occur during the winter months. The net effect of this proposal would be to allow, but not require, the sale of higher VOC AWWF products in a ready-to-use (premixed) form in additional areas of the State. The amendments would also allow clarifying language to be included on products that are diluted prior to use. As proposed, the language would advise the consumer to dilute the product to Type “A” specifications if traveling to areas where freezing temperatures are expected. The proposal would also clarify and improve existing regulatory provisions. For example, where appropriate, we are proposing to use ZIP codes to identify some Type “A” areas. The regulation is codified in title 17, California Code of Regulations, sections 94507-94517.

This Executive Summary, together with the Technical Support Document is the Initial Statement of Reasons for Proposed Rulemaking as required by the California Administrative Procedure Act. Appendix A contains the amendments to the Consumer Products Regulation in underline and ~~strikeout~~ format.

**Background:** AWWF products are defined as liquids designed or labeled for use in motor vehicle windshield washer fluid systems to provide anti-freeze protection or to clean the windshield. AWWFs were first regulated in 1990. At that time it was acknowledged that AWWF products with a higher VOC content were necessary in areas that routinely experience freezing temperatures to prevent the fluid from freezing. To maximize VOC reductions, the State was divided into areas designated as Type “A” areas and “All other areas.” The term Type “A” area was used to describe regions of the State which experience freezing temperatures. Specifically, Type “A” areas were described as Del Norte, Shasta and Trinity Counties; the Great Basin Valley, Lake Tahoe, Mountain Counties, and Northeast Plateau Air Basins. The rest of the State was designated as “All other areas.” For ready-to-use (premixed) products the current VOC limit for Type “A” areas is 25 percent by weight VOC. A 1 percent by weight VOC limit is in effect for “All other areas.” Dilutable (concentrated) products can be sold throughout the State year-round as long as dilution instructions are specified for Type “A” and “All other areas.”

Regulation of AWWF products has resulted in a VOC reduction of over 25 tons per day. Most of these reductions have come from products sold in “All other areas.”

**Development of Proposed Amendments:** To determine whether, and to what extent, areas should be added to Type “A,” staff mapped average monthly minimum temperature data using the Geographic Information System (ArcGIS, 2012). This analysis identified additional mountainous regions of several counties that routinely experience freezing temperatures during the winter months of December through March. Because adding areas to Type “A” would result in increased VOC emissions, staff evaluated methods to minimize the emission increases while allowing higher VOC product to be available in the identified areas. Staff determined that ZIP (Zone Improvement Plan) codes most closely aligned with the areas with freezing temperatures. This system of five-digit postal codes has been used by the United States Postal Service, since 1963. Each address is tied to a specific ZIP code and these codes are readily understood. Figure ES-1 below shows the areas proposed for addition to Type “A” in blue. The pink lines indicate ZIP codes to be used to define these areas. Existing Type “A” areas are shown in gray.

**Figure ES-1.**  
**ZIP Codes Used to Describe Proposed**  
**New Type “A” Areas**



As shown in Figure ES-1, the additional areas are mountainous portions of the following counties: Butte, Fresno, Glenn, Humboldt, Kern, Madera, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, Tehama, Tulare, and Ventura.

**Summary of Proposed Amendments:** Staff is proposing amendments to the provisions for AWWF products only. Amendments are proposed to section 94508, “Definitions,” and section 94509, “Standards for Consumer Products.”

Staff is proposing to expand Type “A” areas to include those regions identified in Figure ES-1. As proposed, areas identified by 43 ZIP codes would be added into Type “A” areas. The AWWF definition would also be reorganized to include all terms necessary to understand regulatory provisions.

Stakeholders have indicated that describing existing Type “A” areas by air basin is not easily understood. Therefore we are also proposing to include in the AWWF definition the counties that comprise the air basins. In the case of Placer County, only portions of the county are included in Type “A.” To clarify the areas that are in Type “A,” staff is proposing to list the ZIP codes of Placer County included in Type “A” areas.

Section 94509(b)(3) allows concentrated AWWF products to include dilution instructions for both Type “A” and Nontype “A” areas. Within this section, staff is proposing that the dilution instructions may advise the consumer to follow the dilution instructions for Type “A” areas if traveling during times when freezing temperatures are expected.

We also note that areas proposed for addition to Type “A” are those areas with the most severe winter temperatures that are not currently in Type “A.” Clearly, there are additional areas of the State that occasionally experience freezing temperatures during the winter months. For residents in these areas, when freezing temperatures do occur, dilutable products are available for use. Our proposal would further clarify that diluting these products for freezing conditions is allowed.

The proposed amendments allow, but do not require, manufacturers, distributors, and/or retailers to sell, supply, or offer for sale, higher VOC content AWWF products into the expanded Type “A” areas. Likewise manufacturers are not required to modify dilutable product labels. However, staff believes most manufacturers, distributors, and retailers will accommodate the amendments as a service to their customers. All other regulatory provisions for AWWF products would be unchanged.

**Economic Impacts:** The proposed amendments should have no discernible cost impact on California businesses. This is because businesses may choose whether to sell, supply, or offer for sale higher VOC AWWF in the areas proposed for inclusion into Type “A.” We also note that manufacturers incurred reformulation costs in the 2008 timeframe to comply with the 25 percent by weight VOC limit for Type “A” areas. This same formulation would be compliant in the areas proposed for addition to Type “A.” Should they choose to expand distribution of these products into new Type “A” areas, there would be minor costs associated with redesigning distribution systems. However,

transportation costs are expected to remain stable because the weight, size, and amounts of AWWF to be offered for sale would be comparable to the existing situation. We estimate the cost for labeling modifications, should the manufacturer choose to include the clarifying language, to be about \$165 per manufacturer.

Likewise, we do not expect retailers in the expanded Type “A” areas to experience costs associated with the proposed amendments. The AWWF products these businesses currently offer for sale would continue to be compliant. Retailers in the expanded Type “A” areas could choose to offer for sale higher VOC premixed AWWF products instead of, or in addition to, current products. However, we expect most retailers to sell the higher VOC products as a service to their customers.

Because manufacturers, distributors, and/or retailers may choose, but are not required, to sell higher VOC content AWWF in the expanded Type “A” area and/or modify product labels, we also do not expect the proposed amendments to impact California jobs; business expansion, elimination or creation; or the ability of California businesses to compete with businesses in other states. We also expect consumers to experience little or no difference in the price of the available AWWF products. Premixed AWWF products, regardless of VOC content appear to be comparably priced.

We have also determined that the proposed amendments will not create costs or savings to any State agency or in federal funding to the State, costs or mandate to any local agency or school district whether or not reimbursable by the State, or other nondiscretionary savings to local agencies.

**Environmental Impacts:** Based on ARB staff’s review, implementation of the proposed amendments will neither benefit nor result in significant adverse impacts on the environment.

However, these proposed amendments, taken alone, are expected to result in a small VOC emissions increase. We estimate that emissions could increase by as much as 0.12 tons per day statewide. To offset this increase, new or lower VOC limits for various categories of consumer products are scheduled to become effective concurrent with these amendments. In a 2010 rulemaking, the Board approved, and subsequently adopted, limits resulting in a 6.7 ton per day statewide VOC emissions decrease beginning on December 31, 2012. Further reductions from this 2010 rulemaking will occur at the end of 2013. Taken together then, we do not expect a significant adverse impact on air quality because overall consumer product VOC emissions will be declining.

**Environmental Justice:** We do not expect any communities, especially those with low-income and minority populations, regardless of location, to be disproportionately impacted by adoption of the proposed amendments. The goal of the proposed amendments is to alleviate potential hazardous driving conditions in areas that routinely experience freezing temperatures by allowing higher VOC content AWWF to be sold in additional areas of the State. All residents in the proposed expanded Type “A” areas

will have access to the higher VOC AWWF, and these products are comparably priced to the lower VOC content AWWF. The slight increase in VOC emissions resulting from the proposal would not be concentrated in any particular area, but rather would be widely distributed across the entire area.

**Recommendation:** Staff recommends that the Board adopt the proposed amendments to the California Consumer Products Regulation that would modify and clarify provisions related to Automotive Windshield Washer Fluid products. Adoption of the amendments would expand Type “A” areas and clarify other regulatory provisions pertaining to these products. The net effect of expanding Type “A” areas would be to allow, but not require, the sale of premixed AWWF products with a VOC content of up to 25 percent by weight. Amendments are proposed to sections 94508 and 94509 of title 17, California Code of Regulations.



State of California  
**AIR RESOURCES BOARD**

**Initial Statement of Reasons**

**Proposed Amendments to the  
California Regulation for Reducing Emissions from Consumer  
Products Pertaining to Automotive Windshield Washer Fluid**

**Technical Support Document**



## I. Introduction and Background

In this rulemaking, California Air Resources Board (ARB or Board) staff is proposing amendments to the provisions for Automotive Windshield Washer Fluid (AWWF) products contained in the Regulation for Reducing Emissions from Consumer Products (Consumer Products Regulation). AWWF products are regulated based on the region in which they are sold. "Type A" areas are regions of the State which routinely experience freezing temperatures and require AWWF products with a higher volatile organic compound (VOC) content to prevent freezing of the fluid. However, the current description of Type "A" does not include some areas that routinely experience freezing temperatures.

The amendments are primarily designed to better characterize the areas of the State where freezing temperatures occur during the winter months. As proposed, businesses in these areas would be allowed to offer for sale higher VOC AWWF products in a ready-to-use (premixed) form. The amendments would also clarify and improve existing regulatory provisions, and allow additional clarifying language to be included on labels for products that are diluted prior to use. The regulation is codified in title 17, California Code of Regulations, sections 94507-94517. The proposed amendments are specific to AWWF products; all other provisions of the Consumer Products Regulation would be unchanged.

This Technical Support Document is ARB staff's technical justification and analysis of the proposed amendments. It is part of the Initial Statement of Reasons (ISOR) for the Proposed Amendments to the California Consumer Products Regulation pertaining to Automotive Windshield Washer Fluid Products. The proposed amendments to the Consumer Products Regulation are found in Appendix A of this document.

Included in this Technical Support Document is the following information:

- background information on the consumer products program;
- regulatory history related to AWWF products;
- a description of the public problem, the proposed solution, and the rationale supporting the solution;
- a description, in plain language, of the proposed amendments to the Consumer Products Regulation;
- an analysis of the expected environmental impacts;
- the economic impacts associated with complying with the proposed amendments; and
- the rationale for the proposal.

## **A. Authority to Regulate Consumer Products**

The Health and Safety Code sets forth ARB's authority to regulate consumer products to control VOC emissions and greenhouse gas (GHG) emissions. Section 41712 specifies requirements to reduce VOC emissions as a ground-level ozone control strategy. Section 38500 *et seq.*, establishes authority to reduce emissions of GHGs from consumer products as part of ARB's climate change mitigation strategy.

Consumer products are defined as chemically formulated products used by household and institutional consumers. Examples include detergents, cleaning products, floor finishes, personal care products, lawn and garden products, air fresheners, disinfectants, automotive specialty products (e.g. automotive windshield washer fluid), paint thinners, insecticides, and aerosol paints.

## **B. Background**

### **1. Existing Consumer Products Regulations**

For more than twenty years, the Board has taken actions to fulfill the legislative mandates pertaining to the regulation of consumer products. Three regulations have set VOC limits for 129 consumer product categories. Two voluntary regulations, the Alternative Control Plan and the Hairspray Credit Program, have been adopted to provide compliance flexibility to companies. These five consumer product regulations are codified in title 17, California Code of Regulations, sections 94500 to 94575.

The three regulations that set VOC limits for consumer products, when fully effective, will result in reducing VOC emissions by about 50 percent compared to 1990 levels. By 2020, limits on the use of ingredients with higher global warming potential (GWP) values will provide reductions of approximately 0.23 million metric tons of carbon dioxide equivalents per year.

### **2. Consumer Products and State Implementation Plan (SIP)**

Federal clean air laws require areas with unhealthy levels of ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide and inhalable particulate matter to develop State Implementation Plans (SIP) describing how they will attain national ambient air quality standards (NAAQS).

A SIP is a compilation of new and previously submitted plans, programs (such as monitoring, modeling, permitting, etc.), local air district rules, and State and federal regulations. The Code of Federal Regulations (CFR) Title 40, Chapter I, Part 52, Subpart F, Section 52.220 sets forth all of the items which are included in the California SIP.

Because they are ozone precursors, reducing VOC emissions has been necessary to work toward attainment of the ambient air quality standards for ozone. In 1988, with the

passing of the California Clean Air Act, the importance of controlling emissions from consumer products was set forth. In 1994, emission reductions from consumer products became part of the SIP to meet the federal standard for ozone.

The 2007 SIP, the State Strategy for California's 2007 State Implementation Plan, is California's plan to attain the NAAQS for ozone of 0.08 parts per million (ppm) averaged over eight hours. In the 2007 SIP, ARB set a target to achieve an additional statewide VOC reduction of 30 to 40 tons per day from consumer products by January 1, 2014. As of this writing, limits reducing VOC emissions by 26 tons per day have been adopted to progress toward this target.

With respect to the ozone standard, the United States Environmental Protection Agency (U.S. EPA) set a standard of 0.075 ppm in 2008. This standard was under reconsideration, but ultimately, in September 2011, the U.S. EPA announced its decision to proceed with implementation of the ozone standard of 0.075 ppm. On April 30, 2012, the U.S. EPA issued a final rule that directs key aspects of the implementation of the ozone standard of 0.075 ppm. The U.S. EPA will issue a second rule that will guide implementation of the 2008 ozone standard and will address SIP deadlines and other implementation issues. We expect to submit new SIPs for the 0.075 ppm ozone standard in 2015.

Up-to-date information on SIP activities can be found on ARB's website at: <http://www.arb.ca.gov/planning/sip/sip.htm>.

### **3. National Consumer Products Regulation**

On September 11, 1998, U.S. EPA promulgated a national consumer product regulation, the "National Volatile Organic Compound Emission Standards for Consumer Products" (40 CFR Part 59, Subpart C, Sections 59.201 *et seq.*). This action set national VOC emission standards for various categories of consumer products. The regulation became effective on September 11, 1998, and the VOC limits became effective on December 10, 1998, (U.S. EPA, 1998). There are similarities and differences between the California and national consumer products regulations; however, the national regulation does not preclude states from adopting more stringent regulations.

The U.S. EPA has also promulgated a national regulation for aerosol coatings (spray paints) based on ARB's Aerosol Coatings Regulation. This is a reactivity-based regulation. The national aerosol coatings regulation was promulgated on March 24, 2008. The compliance date was July 1, 2009 (U.S. EPA, 2008).

The national consumer products regulation is less effective than the California Consumer Products Regulation in reducing VOC emissions from consumer products. The national regulation does not regulate a number of product categories that are currently regulated under the ARB regulation. For the categories that are regulated under both regulations, many of ARB's limits are more stringent than the national limits.

Such is the case for the AWWF category; the national rule contains a 35 percent by weight VOC standard for all areas whether freezing temperatures exist or not. Therefore, ARB's consumer products regulations have achieved significant additional reductions over those that would be achieved by the national rule.

Because California has unique air quality problems, reducing VOC emissions from all categories, including consumer products, to the maximum extent feasible, is necessary to attain the federal and State ambient air quality standards for ozone.

The national regulations for consumer products and aerosol coatings do not prohibit the use of certain toxic air contaminants (TACs). To date, the California Consumer Products Regulation includes prohibitions on the use of certain TACs in 80 categories, resulting in a reduction of toxic compound emissions of over 13 tons per day.

As of the date of this staff report, there are no national consumer products regulations related to reducing GHG emissions.

### ***C. Public Process for Development of Amendments***

In order to involve the public, the consumer products staff held a public workshop on July 10, 2012, to discuss the proposed amendments for AWWF products. The information discussed at the workshop was posted on our consumer products program webpage, and stakeholders were notified *via* a list serve announcement. At the workshop, staff discussed the methodology used to identify additional Type "A" areas, the resulting areas proposed for addition to Type "A" areas, the potential environmental and economic impacts, and the rulemaking schedule. The workshop was also webcast.

In addition to the workshop, staff held discussions with individual stakeholders and associations representing manufacturers, distributors, and retailers of AWWF products. No suggested alternatives to the amendments were raised at the workshop or during discussions.

The workshop notice was distributed *via* the consumer products electronic list serve, which has over 2,800 subscribers. The list serve is used to provide subscribers pertinent information about the consumer products program.

### ***D. Automotive Windshield Washer Fluid Regulatory History***

This section provides a summary of existing regulatory provisions pertaining to AWWF products sold in California. These requirements are set forth in the Consumer Products Regulation, title 17, California Code of Regulations, sections 94507-94517.

#### **1. Product Description**

AWWF products are liquids designed or labeled for use in motor vehicle windshield washer fluid systems to provide anti-freeze protection or to clean, wash, remove bugs,

or wet the windshield. Some products also claim to add a coating to the windshield that repels water, bugs, dirt and grime. Any fluid which is placed in the windshield washer reservoir of new motor vehicles at the time the vehicle is manufactured is not subject to the requirements for AWWF products. AWWF products do not include Windshield Water Repellant products; these products are regulated separately.

AWWF products are sold as both ready-to-use (premixed) products and concentrated (dilutable) products. The premixed products make up the vast majority of the market. Premixed products are intended to be poured directly into the vehicle fluid reservoir without any additional dilution or mixing. On the other hand, concentrated products are to be diluted with water prior to use. AWWF products are sold in auto parts stores, car dealerships, hardware stores, grocery supermarkets, convenience stores and in mass-merchandisers.

AWWF products are typically formulated with water, short chain alcohols (such as methyl, ethyl, or propyl), smaller amounts of glycol ethers, and surfactants. The alcohols are typically used to provide the anti-freeze protection while not leaving a greasy film on the windshield. The glycol ethers and surfactants provide the cleaning function. This same suite of VOCs is used to formulate dilutable and premixed AWWF.

## **2. Regulatory History**

AWWF products were first regulated as part of "Phase I" of the Consumer Products Regulation in 1990. At that time, it was acknowledged that products with higher VOC content were necessary in some areas of the State because these areas routinely experience freezing temperatures, *i.e.* less than 32 degrees Fahrenheit. Thus, to achieve the maximum feasible VOC reduction, the State was divided into areas designated as Type "A" areas and "All other areas." The term Type "A" area was used to describe regions of the State which experience freezing temperatures. Specifically, Type "A" areas were described as Del Norte, Shasta and Trinity Counties; the Great Basin Valley, Lake Tahoe, Mountain Counties, and Northeast Plateau Air Basins, as defined in title 17, California Code of Regulations, sections 60105, 60108, 60111, and 60113. Figure I-1, shows the existing Type "A" areas in gray. The rest of the State was designated as "All other areas."

In the Phase I rulemaking, a VOC limit of 35 percent by weight was set for Type "A" areas, while a 10 percent by weight VOC limit was set for "All other areas." These limits became effective on January 1, 1993.

In a 1999 rulemaking, the VOC limit for AWWF products for areas outside of Type "A," *i.e.*, "All other areas" was lowered to 1 percent by weight VOC effective December 31, 2002. In 2006, the Board approved and subsequently adopted a 25 percent by weight VOC limit for Type "A" areas effective December 31, 2008. Table I-1 shows a chronology of the VOC limits for AWWF.

**Figure I-1. Existing Type “A” Areas**



**Table I-1  
VOC Limits for Automotive Windshield Washer Fluid**

<b>Area</b>	<b>Effective Date</b>	<b>VOC Standard (percent by weight)</b>
Type "A" areas	1/1/1993	35
	12/31/2008	25
All other areas	1/1/1993	10
	12/31/2002	1

Overall, VOC emissions have been reduced by 25 tons per day from this category. The majority of reductions have come from VOC limits for "All other areas."

Other amendments have established package size requirements for AWWF products. Dilutable products are defined as those packaged in quart containers, or smaller, or in sizes of 10 gallons or more. Premixed fluids are defined as those packaged in sizes larger than one quart but less than 10 gallons. In 2004, amendments modified the regulation to allow manufacturers of dilutable AWWF products to specify dilution instructions for both Type "A" and "All other areas" on the product label.

For further information on these rulemakings, the reader is referred to the following rulemaking documents:

- "Proposed Regulation to Reduce Volatile Organic Compound Emissions from Consumer Products - Technical Support Document." August, 1990. (ARB, 1990)
- "Initial Statement of Reasons for Proposed Amendments to the California Consumer Products Regulation: Midterm Measures II." September 10, 1999. (ARB, 1999)
- "Initial Statement of Reasons for the Proposed Amendments to the California Aerosol Coating Products, Antiperspirants and Deodorants, and Consumer Products Regulations, Test Method 310, and Airborne Toxic Control Measure for para-Dichlorobenzene Solid Air Fresheners and Toilet/Urinal Care Products." May 7, 2004. (ARB, 2004b)
- "Initial Statement of Reasons for Proposed Amendments to the California Consumer Products Regulation and the Aerosol Coatings Regulation." September 29, 2006. (ARB, 2006)
- "Initial Statement of Reasons for Proposed Amendments to the California Consumer Products Regulation." August 7, 2009. (ARB, 2009)



## **II. Description of Public Problem, Proposed Solution to the Public Problem, and Rationale Supporting the Proposed Solution**

In this chapter we describe issues that have come to light with the regulation of Automotive Windshield Washer Fluid (AWWF) products, the analysis to determine how best to resolve the issues, and the resulting proposed solutions. We also describe, in plain language, the amendments proposed to implement the solutions, along with a rationale for each amendment proposed.

### ***A. Description of Public Problem***

As described in Chapter I, the intent of our regulations has always been to allow ready-to-use premixed AWWF products with a higher volatile organic compound (VOC) content to be sold in areas that routinely experience freezing temperatures. In these areas, termed Type "A" areas, ready-to-use AWWF products may be sold with a VOC content of up to 25 percent by weight to prevent the fluid from freezing.

Areas outside of Type "A" are termed "All other areas." In these areas of the State premixed ready-to-use AWWF must contain no more than 1 percent by weight VOC, because freeze protection is not needed. However, the current definition of Type "A" area does not include some areas that routinely experience freezing temperatures in the winter. In these areas ready-to-use products with 1 percent by weight VOC do not provide the necessary anti-freeze protection and consumers could encounter hazardous driving conditions either because the AWWF freezes in the reservoir or freezes as the product is sprayed onto the windshield.

Another issue identified relates to dilutable AWWF products. These are products that must be diluted prior to use and can be sold throughout the State year-round. In practice these products should be diluted by consumers to concentrations appropriate for driving conditions. For example, when traveling to an area with sub-freezing temperatures, from areas where premixed AWWF is sold with a VOC content of 1 percent by weight, the consumer should purchase a dilutable product and dilute the product to Type "A" specifications to achieve the proper anti-freeze protection. The statewide availability of these products is designed to alleviate situations where the use of lower VOC AWWF would freeze during winter. However, we have learned from stakeholders that the dilution instructions are unclear as to whether the end user may dilute the product to a concentration appropriate for driving conditions, whether they reside in Type "A" areas or not. Consumers have also indicated that these products are not readily available in some areas.

A further issue is that much of existing Type “A” area is described using air basin names. Stakeholders have indicated that air basin names are not easily understood, making it difficult to discern where higher VOC premixed AWWF products can be sold.

## ***B. Proposed Solutions***

To address the problem of areas routinely experiencing freezing winter temperatures, but being outside of areas designated Type “A,” staff is proposing to identify, and if appropriate, propose that these areas be included in Type “A.” The net effect of this solution would be to allow higher VOC content AWWF products to be sold in additional areas of the State.

Related to a solution for clarifying dilution instructions on concentrated products, allowing language on dilutable products to explicitly advise the consumer to dilute to a concentration appropriate for the driving conditions should resolve the problem.

To help stakeholders understand the existing Type “A” areas, a combination of listing counties within the air basins, and in the case of Placer County, listing United States Postal ZIP codes should clarify areas of the State included in Type “A.”

As a first step to implement the proposed solutions, staff undertook an evaluation to determine whether, and to what extent, additional areas of the State should be added to Type “A” areas. A detailed description of the data sources and the methodology used in our analysis is included in Appendix B. A summary of staff’s analysis follows.

### **1. Determine Areas of the State that Experience Freezing Temperatures During the Winter Months**

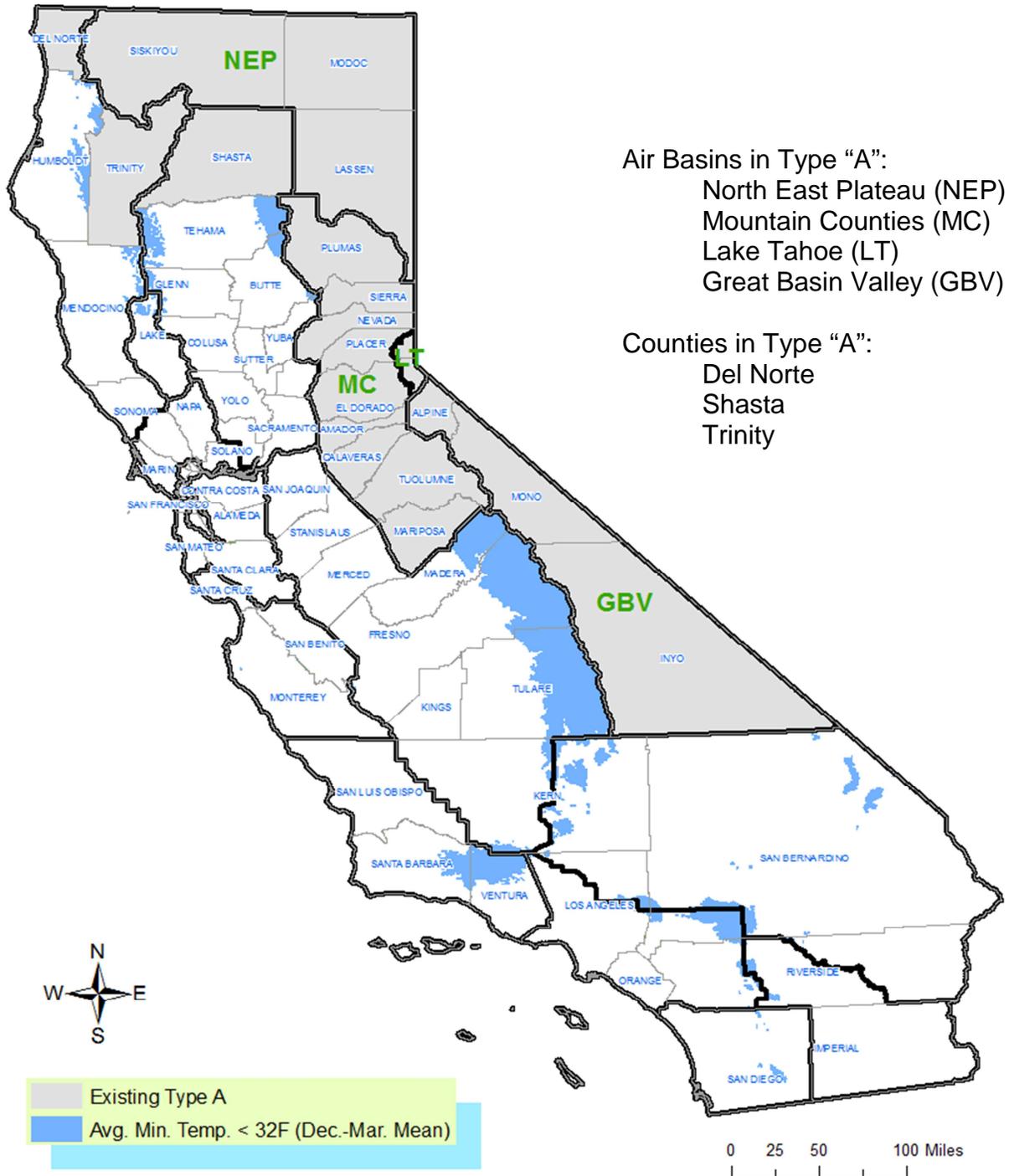
To identify areas of the State that should be included in Type “A,” staff used temperature data for the months of December to March for the period of 1970 to 2000. Using this data set staff was able to identify regions of the State where the overall average of the minimum temperature between the months of December through March was below 32 degrees Fahrenheit (PRISM, 2012). The areas that met this criterion were mapped using the Geographic Information System (GIS) (ArcGIS, 2012). The identified “freezing zones” not currently included in the Type “A” area are shown in blue in Figure II-1. Existing Type “A” areas are shown in gray.

### **2. Define Additional Type “A” Areas**

As shown in Figure II-1, existing Type “A” areas are either described by entire air basins or by entire counties. In evaluating the additional regions with freezing temperatures, it is clear that many of them are located in areas that are nonattainment for ozone, *e.g.* the San Joaquin Valley and the South Coast. Thus, including the entire county or air basin where the identified areas exist would substantially erode the emission reduction benefits achieved from regulating the VOC content of AWWF products. Therefore, staff

evaluated approaches that would clearly define the additional freezing regions, while minimizing emission impacts.

**Figure II-1. Areas Outside of Existing Type “A” where the Average Minimum Temperature for December to March is Less than 32 Degrees Fahrenheit**



To define the additional areas staff evaluated using census tracts and ZIP codes. Using GIS staff mapped census tracts and ZIP codes over the identified freezing regions. Both approaches matched the freezing temperature regions closely.

While use of census tracts to identify the freezing regions would lessen the emissions impact slightly, staff believes this information is not easily understood. ZIP codes, on the other hand, are commonly used and understood. Each address is identified by a single ZIP code and their use would provide a practical way for manufacturers, distributors, and retailers to manage the distribution and sale of AWWF products into the new Type “A” areas. Thus staff believes use of ZIP codes is the better approach to define the identified freezing regions.

Figure II-2 shows the ZIP codes (as a pink line) that are consistent with the identified freezing regions. Forty-three ZIP codes identify these freezing regions that are not currently identified as Type “A” areas.

### 3. Better Define Existing Type “A” Areas

As discussed in Chapter I, beginning in 1993 VOC limits for AWWF were established based on where the products are sold. This was done to maximize VOC reductions while recognizing the need for higher VOC products to provide anti-freeze protection in areas where the temperature is routinely less than 32 degrees Fahrenheit. Much of the existing Type “A” area was identified by air basin names. Stakeholders have asked for an approach to make it easier to understand existing Type “A” areas.

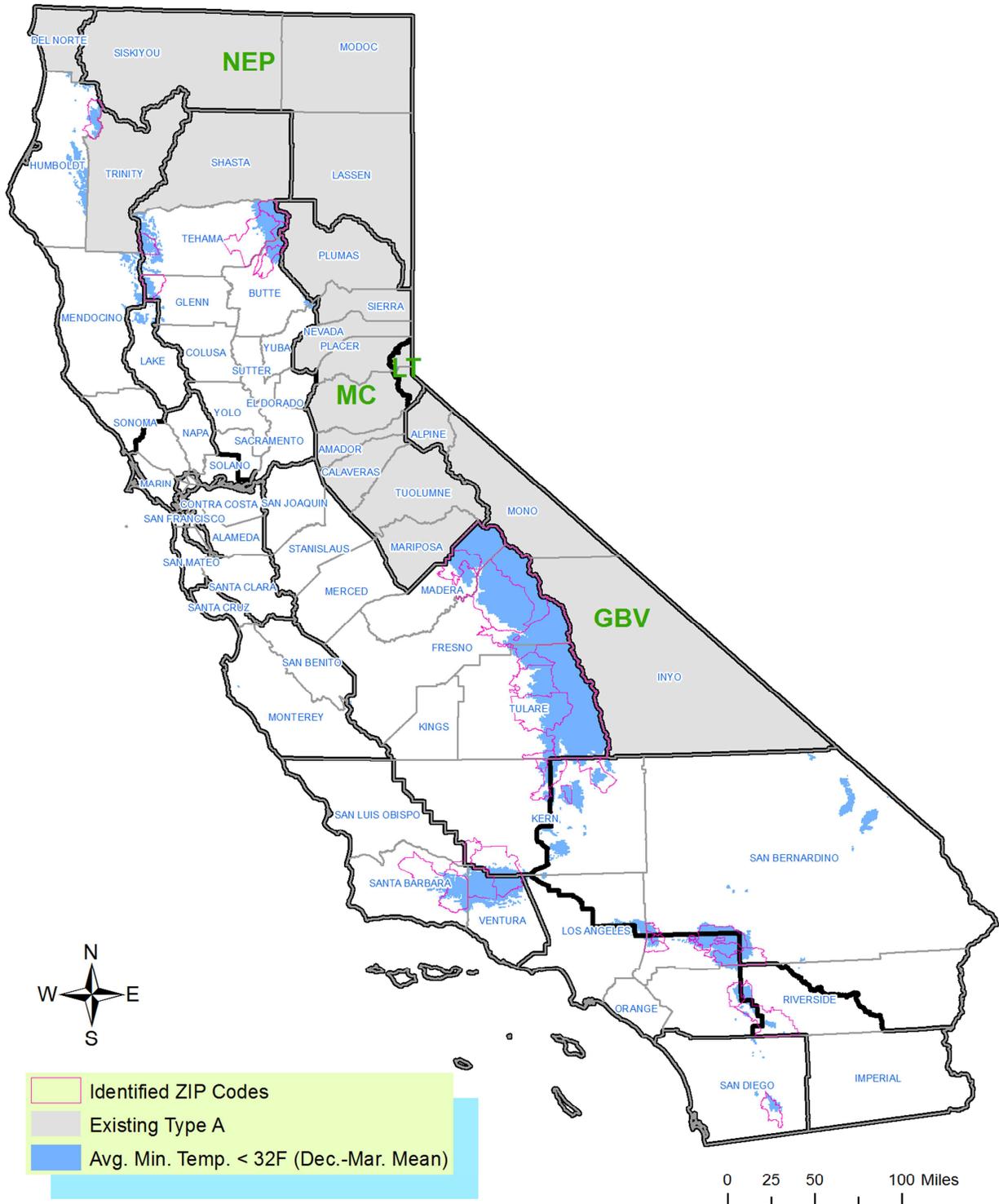
Two solutions are proposed to clarify areas currently included in Type “A:” 1) list counties that fall within the air basins; and 2) use ZIP codes to identify areas that cannot be described by county name. Table II-1 lists the counties that are currently considered Type “A.” Listing county names provides a clear distinction for all Type “A” areas except for Placer County. Not all of Placer County is currently defined as Type “A.” Therefore, a further discussion related to Type “A” areas of Placer County is warranted.

**Table II-1  
Counties that Comprise the Existing Type “A”**

<b>Air Basin</b>	<b>Counties</b>
Great Basin Valleys	Alpine, Inyo, Mono
Lake Tahoe	El Dorado, Placer* (portions)
Mountain Counties	Amador, Calaveras, El Dorado, Mariposa, Nevada, Placer* (portions), Plumas, Sierra, Tuolumne
Northeast Plateau	Lassen, Modoc, Siskiyou
North Coast	Del Norte, Trinity
Sacramento Valley	Shasta

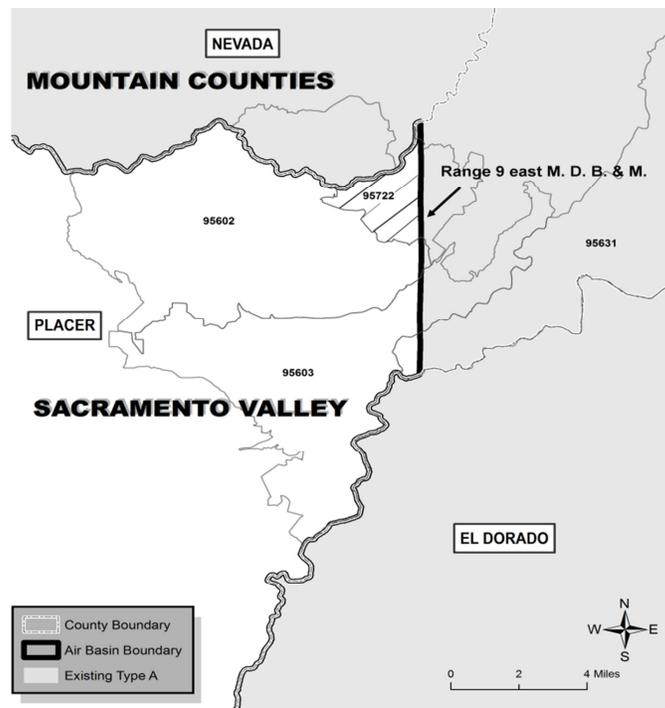
\* Only part of Placer County is included in Type “A” in this air basin

**Figure II-2. ZIP Codes Used to Describe Proposed Newly Identified Type “A” Areas**



Placer County is divided among three air basins: Sacramento Valley, the Mountain Counties, and Lake Tahoe. All portions of Placer County in the Lake Tahoe Air Basin are in Type “A.” No parts of Placer County that are in the Sacramento Valley Air Basin are Type “A.” The portion of Placer County that is in the Mountain Counties Air Basin is Type “A.” The Sacramento Valley and Mountain Counties Air Basin share a common border. The border is termed “Range 9 east, Mount Diablo Baseline and Meridian” (M.D.B. & M). Range 9 east M.D.B. & M is not clearly defined by conventional maps. Figure II-3 shows the line that forms the border between the Sacramento Valley and Mountain Counties Air Basins.

**Figure II-3. Range 9 East Mount Diablo Baseline and Meridian in Placer County: the Boundary for Existing Type “A” Areas**



To help clarify areas considered Type “A” in Placer County, ZIP codes could be used. However, four ZIP codes span Range 9 east M.D.B. & M: 95602, 95603, 95631 and 95722. ZIP codes 95602 and 95603 define areas including the city of Auburn. ZIP code 95631 describes Foresthill. ZIP code 95722 identifies the community of Meadow Vista. Staff further evaluated whether the entirety of these four ZIP codes should be added to Type “A.”

As was done to identify additional areas to consider adding to Type “A,” staff reviewed average monthly minimum temperature data for the months December through March. This review indicates that areas west of Range 9 east M.D.B. & M are beyond the identified winter freezing regions and are densely populated areas including the city of

Auburn. The entirety of the city of Auburn is beyond Type “A” and is not bisected by Range 9 east M.D.B. & M.

The same cannot be said for the community of Meadow Vista, ZIP code 95722. Range 9 east M.D.B. & M. splits the community of Meadow Vista. This means that some businesses in this community are able to sell higher VOC content AWWF while other areas of this same community are not. To provide consistency and clarity staff is proposing to add all of ZIP code 95722 into Type “A.” The area of ZIP code 95722 that would be added to Type “A” is shown with diagonal lines in Figure II-3.

The areas of ZIP Codes 95602, 95603, and 95631 which lie east of Range 9 east M.D.B. & M appear to be rural areas or public land. No cities or communities of these three ZIP codes appear to span Range 9 east M.D.B. & M. Therefore adding the entire area of these three ZIP codes is not warranted or supported by our freezing temperature data. Because no cities are impacted by this boundary there should be no confusion as to which AWWF products could be offered for sale in the areas to the west of Range 9 east M.D.B. & M—premixed products with 1 percent by weight VOC content. We also note that adding all areas of these ZIP codes would substantially erode air quality benefits from the regulation of AWWF.

To clarify those areas of Placer County included in Type “A,” staff proposes to list appropriate ZIP codes within the definition of AWWF (see Table II-4) and add all of the community of Meadow Vista described by ZIP code 95722. As a further aid, staff maintains a website that also describes Type “A” vs. Nontype “A” areas along Range 9 east M.D.B. & M. The website can be accessed at: <http://www.arb.ca.gov/consprod/regact/awwf/awwf.htm>

#### **4. Determining Emission Impacts**

Another part of our analysis for the proposal was to evaluate the emissions impact that could occur if additional areas of the State were to be added to Type “A.” As stated earlier, the net effect of adding regions into Type “A” would be to allow the sale of premixed AWWF products with VOC content of up to 25 percent by weight VOC—in addition to or in place of—the currently available 1 percent VOC by weight premixed product.

To evaluate the potential emission increases staff used existing survey data (grown to current year by population) to determine a per capita AWWF usage per day (ARB, 2006). Staff then calculated the emission increase by multiplying this daily usage of AWWF by the population in the proposed new Type “A” areas to get the total amount of product used. This result was then used to determine emissions if all product sold was either 1 or 25 percent by weight VOC. The difference is the potential VOC emissions increase.

Staff estimates that the statewide VOC emissions increase would be about 0.12 tons per day (tpd). This analysis assumes that all product used was premixed AWWF. In

reality, in these areas there is some use of dilutable AWWF at a higher VOC content than 1 percent by weight, as allowed by regulation, thus the emissions increase is likely overstated. Table II-2 displays the estimated emissions impact by air basin. In the context of having reduced VOC emissions by over 25 tpd from this category, staff believes the increase to be quite small. A more detailed description of this analysis is included as Appendix B to this report.

**Table II-2  
Estimated Emissions Increases in Affected Air Basins**

<b>Air Basin</b>	<b>VOC Emission Increase (tpd)*</b>
Mojave Desert	0.02
San Joaquin Valley	0.03
South Coast	0.04
Northern Air Basins**	0.02
San Diego	< 0.01
Total	0.12

\* Values are rounded

\*\* Includes Sacramento Valley, North Coast, and Lake County Air Basin

## **5. Summary of the Proposed Solutions**

To resolve issues associated with regulatory provisions for AWWF products staff is proposing to add areas of the State that routinely experience freezing temperatures into Type “A.” This would allow ready-to-use products with higher VOC content to be sold which, in turn, should alleviate potential hazardous driving conditions that could result from use of a lower VOC content AWWF. Staff is also proposing to better define existing Type “A” areas. A third proposal would allow clear instructions to be included on dilutable product labels to indicate that these products can be diluted to Type “A” specifications when warranted by weather conditions.

Areas proposed for addition to Type “A” are those areas with the most severe winter temperatures that are not currently in Type “A.” Clearly, there are additional areas of the State that occasionally experience freezing temperatures during the winter months. For residents in these areas, when freezing temperatures do occur, dilutable products are available for use. Our proposal would further clarify that diluting these products for freezing conditions is allowed.

### ***C. Proposed Amendments and the Rationale Supporting the Proposals***

This section describes the proposed amendments that would implement the solutions to address the issues with current regulatory provisions for AWWF products. The rationale supporting the amendments is also explained.

This section is intended to satisfy the requirements of Government Code Section 11343.2, which requires that a noncontrolling “plain English” summary of the regulation be made available to the public. The proposed amendments to the Consumer Products Regulation are set forth in Appendix A to this report.

## **1. Proposed Amendments**

Amendments are being proposed to section 94508, “Definitions,” and section 94509, “Standards for Consumer Products,” of the Regulation for Reducing Emissions from Consumer Products. The regulation is codified in title 17, California Code of Regulations, Division 3, Chapter 1, Subchapter 8.5, Article 2, Consumer Products, sections 94507-94517 (Consumer Products Regulation).

Where applicable, key terms or concepts involved in each proposed amendment are described. In the sections below, we describe the proposed amendments and the rationale for them.

### **a. Definitions (Section 94508)**

At present, contained in section 94508 are definitions for Automotive Windshield Washer Fluid (dilutable) and Automotive Windshield Washer Fluid (premixed). In addition, rather than providing a definition in section 94508, the current regulation includes a description of Type “A” areas in the Table of Standards, section 94509(a). Specifically, Type “A” areas are described as Del Norte, Shasta and Trinity Counties; the Great Basin Valley, Lake Tahoe, Mountain Counties, and Northeast Plateau Air Basins, as defined in title 17, California Code of Regulations, sections 60105, 60108, 60111, and 60113. Staff is proposing to consolidate all definitions pertaining to Automotive Windshield Washer Fluid (AWWF) products into a modified AWWF definition. This should make the regulation easier to understand, and allow stakeholders to review all definitions pertaining to AWWF in one place.

We are proposing to delete the description for Type “A” in the Table of Standards and instead define Type “A” within the reorganized AWWF definition. In addition, within the proposed AWWF definition, we would include the definitions for “premixed,” “dilutable,” and “Nontype “A” area.” The term “Nontype “A” area” is proposed to replace the term “All other areas.” The term Nontype “A” area would be simply defined as all areas that are not Type “A.”

The proposed definitional changes would also clarify the areas of the State that are currently included in Type “A.” Specifically, we are proposing to include the names of the counties that comprise the air basins in existing Type “A” areas. Staff believes that county boundaries are more readily understood than are air basin boundaries. Thus defining existing Type “A” areas by county should clarify and simplify areas termed Type “A.” Table II-3 displays these counties.

**Table II-3  
Counties that Comprise Existing Type “A” Areas**

<b>Air Basin</b>	<b>Counties</b>
Great Basin Valleys	Alpine, Inyo, Mono
Lake Tahoe	El Dorado, Placer (portions)
Mountain Counties	Amador, Calaveras, El Dorado, Mariposa, Nevada, Placer (portions), Plumas, Sierra, Tuolumne
Northeast Plateau	Lassen, Modoc, Siskiyou
North Coast	Del Norte, Trinity
Sacramento Valley	Shasta

As shown in Table II-3, only portions of Placer County are included in the Mountain Counties Air Basin Type “A” area. To help provide regulatory clarity staff is proposing to include in the AWWF definition the ZIP codes of Placer County included in Type “A.”

As described in section B.3 of this chapter, several ZIP codes span the boundary for Type “A” areas in Placer County. Because the boundary line bisects the Meadow Vista community, to alleviate potential confusion, staff is proposing to add all of the ZIP code for Meadow Vista, 95722, into the Type “A” area. The ZIP codes that define Type “A” areas in Placer County are shown in Table II-4.

**Table II-4  
ZIP Codes of Placer County that are Type “A” Areas or Proposed Type “A” Areas**

<b>Post Office Name</b>	<b>ZIP Code</b>	<b>Post Office Name</b>	<b>ZIP Code</b>
Auburn	95602*	Norden	95724
Auburn	95603*	Carnelian Bay	96140
Foresthill	95631*	Homewood	96141
Alta	95701	Tahoma	96142
Applegate	95703	Kings Beach	96143
Colfax	95713	Tahoe City	96145
Dutch Flat	95714	Olympic Valley	96146
Emigrant Gap	95715	Tahoe Vista	96148
Gold Run	95717	Truckee	96161
Meadow Vista	95722	Truckee	96162

\* Only the portion of ZIP codes 95602, 95603, and 95631 that lie to the east of Range 9 east, Mount Diablo Baseline and Meridian.

We are also proposing to add additional areas to the Type “A” definition. As described earlier in this chapter, we have identified additional areas that routinely experience freezing temperatures during the winter. As proposed, the areas to be added would be

listed by ZIP codes and the county where the ZIP codes are located. County names are provided as a point of reference only. All portions of the identified ZIP codes (regardless of the county listed) would be added to Type “A” areas. The ZIP codes representing the areas proposed for addition are shown Table II-5.

**Table II-5  
Areas Proposed for Addition to Type “A” Areas Identified by ZIP Code and County\***

<b>County*</b>	<b>ZIP Code</b>	<b>County*</b>	<b>ZIP Code</b>	<b>County*</b>	<b>ZIP Code</b>
Butte	95954	Madera	00020	San Bernardino	92382
Butte/Tehama	95942	Madera	93643	San Bernardino	92385
Fresno	00017	Madera	93644	San Bernardino	92397
Fresno	93621	Riverside	92549	San Diego	91962
Fresno	93628	Riverside	92561	Santa Barbara	00032
Fresno	93664	San Bernardino	91759	Tehama	00037
Fresno/Tulare	93633	San Bernardino	92256	Tehama	00038
Glenn	00047	San Bernardino	92305	Tehama	96063
Humboldt	00050	San Bernardino	92314	Tulare	00026
Kern	00016	San Bernardino	92315	Tulare	93260
Kern	93255	San Bernardino	92317	Tulare	93262
Kern	93285	San Bernardino	92321	Tulare	93265
Kern/Ventura	93225	San Bernardino	92339	Tulare	93271
Kern	93226	San Bernardino	92352		
Kern/Ventura/Santa Barbara/San Luis Obispo	93252	San Bernardino	92358		

\* County names are provided for reference only. All identified ZIP codes (regardless of the county listed) are proposed for addition to Type “A” areas.

The proposal is designed to minimize the emission increases resulting from the sale of higher VOC AWWF products in more areas of the State, while acknowledging that there are additional areas that require a higher VOC content AWWF product to prevent the AWWF from freezing. The net effect of adding areas to Type “A” would be to allow, but not require, the sale of ready-to-use (premixed) AWWF products with a VOC content of 25 percent by weight in the identified areas.

**b. Proposed Amendments to Standards for Consumer Products (section 94509)**

Several modifications to section 94509 are proposed as described below.

***i. Section 94509(a), Table of Standards***

As previously mentioned, we are proposing to delete the description of Type “A” area in the Table of Standards and instead refer to the proposed reorganized definition for AWWF in section 94508(a). The proposed amendments would replace the term “All other areas” in the Table of Standards with the term Nontype “A” areas. These changes are proposed to provide clarity. It would also be impractical to include the modified description of Type “A” area in the Table of Standards.

***ii. Section 94509(b), Products that are Diluted Prior to Use***

Subsection 94509(b)(3)(B) currently specifies labeling requirements for dilutable (concentrated) products. The labeling requirements allow a single concentrated product to be sold in all areas of the State provided that dilution instructions clearly specify how the product is to be diluted for Type “A” areas and “All other areas.” This section would be modified to replace the term “All other areas” with the newly defined term Nontype “A” area. However, use of the term “All other areas” for products that provide dilution instructions for these areas would continue to be in compliance as long as the dilution instructions result in a final concentration of no more than 1 percent by weight VOC.

Section 94509(b) would be further modified to add new subpart (C). Subpart (C) would clarify that language on dilutable products may include instructions for the consumer to dilute the product as specified for Type “A” areas, if the consumer intends to travel to an area when freezing temperatures are expected. This language would allow the consumer to prepare for winter driving conditions prior to experiencing freezing temperatures.

We also note that areas proposed for addition to Type “A” are those areas with the most severe winter temperatures that are not currently in Type “A.” Clearly, there are additional areas of the State that occasionally experience freezing temperatures during the winter months. For residents in these areas, when freezing temperatures do occur, dilutable products are available for use. Our proposal would further clarify that diluting these products for freezing conditions is allowed.

***iii. Effective Date***

Staff is proposing that the amendments would become effective when filed with the Secretary of State, *i.e.*, the effective date of the amendments. This proposal is designed to allow sale of higher VOC AWWF into additional areas of the State as soon as possible to alleviate potential hazardous driving conditions.

## **2. Compliance with the Proposed Amendments**

While the proposed amendments would expand Type “A” areas, reformulation of AWWF products for these areas is not required. This is because ready-to-use (premixed) AWWF products that comply with the December 31, 2008, 25 percent by weight VOC limit are already sold in existing Type “A” areas. The proposed amendments would allow, but not require, these products to be sold, supplied, or offered for sale into additional areas. In addition, premixed AWWF currently sold in these areas would continue to be in compliance because their VOC content is no more than 1 percent by weight. We expect manufacturers of AWWF products, as well as distributors and retailers, to make a business decision as to whether to offer for sale the higher VOC ready-to-use (premixed) AWWF products into the expanded area.

Likewise, the proposed labeling language would not require the dilution language on dilutable product labels to be changed. It would also be a business decision as to whether to make label modifications to advise the consumer to dilute concentrated products as specified for Type “A” areas if traveling to areas experiencing freezing temperatures.

While not mandated, we believe most manufacturers, distributors, and retailers will make the changes allowed by the proposed amendments as a service to their customers.



### **III. Summary of Recommended Action and Alternatives to the Proposed Regulation**

This chapter contains staff's recommendation to adopt the proposed amendments. It also sets forth two alternatives to the proposal that were considered, but rejected by staff, in favor of the recommended proposal.

#### ***A. Recommended Action***

Staff recommends that the Board adopt the proposed amendments to the California Consumer Products Regulation that would modify and clarify provisions related to Automotive Windshield Washer Fluid (AWWF) products. Adoption of the amendments would expand Type "A" areas and clarify other regulatory provisions pertaining to AWWF products. The net effect of expanding Type "A" areas would be to allow, but not require, the sale of premixed AWWF products with a VOC content of up to 25 percent by weight. Amendments are proposed to sections 94508 and 94509 of title 17, California Code of Regulations. A description of the proposed amendments and rationale for them is contained in Chapters II and VII. The regulatory text for the proposed amendments is set forth in Appendix A.

#### ***B. Evaluation of Regulatory Alternatives***

Government Code section 11346.2 requires ARB to consider and evaluate reasonable alternatives to the proposed amendments and provide reasons for rejecting those alternatives. Staff has evaluated potential alternatives to the proposal including "taking no action," and using a different approach to describe areas proposed for addition to Type "A."

A rationale for rejecting the alternatives is also provided. Staff has determined that no alternative considered by the agency would be more effective in carrying out the purpose for which the regulation is proposed, or would be as effective or less burdensome to affected private parties than the proposed regulation.

##### **1. Taking No Action**

A "taking no action" alternative would leave Type "A" areas unchanged. However, as described in Chapter II, the current description of Type "A" areas does not include several areas of California that routinely experience freezing temperatures during the winter months. Consumers in these areas currently only have access to ready-to-use AWWF products with a 1 percent by weight VOC content. This VOC level is not sufficient to keep the AWWF products from freezing at low temperatures and creates a potential hazard in these areas should the AWWF product freeze in the reservoir or

freeze when applied to the windshield. While concentrated products are available statewide that should alleviate this situation, dilution instructions direct the end user in Nontype “A” areas to dilute the product to a concentration of 1 percent by weight. Hence, having concentrated products available does not alleviate the situation.

Staff rejected this alternative because the “taking no action” alternative leaves residents in areas with routine freezing temperatures, but not currently considered Type “A,” without suitable AWWF products to provide the necessary anti-freeze protection.

## **2. Define New Type “A” Areas by County Boundaries**

Current Type “A” areas are identified by either county or air basin boundaries. Therefore, a straight-forward approach to add areas to Type “A” would be to include the entire county if a portion of that county has an identified freezing region. Our analysis indicates that including the entire county would expand the Type “A” areas well beyond areas where freezing temperatures are common in the winter months, and result in much greater emission increases than would the staff’s proposal. For example, if all of Tulare County were to be considered a Type “A” area, potential emission increases would be about 0.5 tons per day. Using ZIP codes to identify freezing regions within Tulare County to be included in the Type “A” area, which is the staff’s proposal, results in a VOC emission increase of about 0.01 tons per day.

Staff has tried to balance the need to have easily understood Type “A” area boundaries while minimizing emission increases. Staff believes using ZIP codes to describe as Type “A” only those areas of a county in the identified freezing regions is the better approach to minimize emission increases. This is important because many of the identified areas are in ozone nonattainment areas, such as the San Joaquin Valley Air Basin and the South Coast Air Basin. Therefore, staff rejected this approach in an effort to minimize the potential VOC emissions increase in these areas.

## **IV. Environmental Impacts Analysis**

This chapter provides an environmental analysis for the proposed amendments. Based on ARB staff's review, implementation of the proposed amendments to the Regulation for Reducing Emissions from Consumer Products would not result in any potentially significant adverse environmental impacts on the environment. This analysis provides the basis for reaching this conclusion.

### ***A. Environmental Review Process***

ARB is the lead agency for the proposed amendments and has prepared this environmental analysis pursuant to its regulatory program certified by the Secretary of the Natural Resources Agency (14 CCR 15251(d); 17 CCR 60005-60007). In accordance with Public Resources Code (PRC) section 21080.5 of the California Environmental Quality Act (CEQA), public agencies with certified regulatory programs are exempt from certain CEQA requirements including, but not limited to, preparing environmental impact reports, negative declarations, and initial studies. As required by ARB's certified regulatory program, and the policy and substantive requirements of CEQA, ARB staff has prepared an assessment of the potential for significant adverse and beneficial environmental impacts associated with the proposed regulation and a succinct analysis of those impacts. This environmental analysis is part of this Staff Report: Initial Statement of Reasons (ISOR) prepared for the rulemaking. The resource areas from the CEQA Guidelines Environmental Checklist were used as a framework for assessing the potential for significant impacts.

When ARB adopts a rule or regulation requiring the installation of pollution control equipment, or a performance standard or treatment requirement, CEQA requires ARB to conduct "an environmental analysis of the reasonably foreseeable methods of compliance by which that rule or regulation will be achieved" (PRC section 21159). This analysis describes the reasonably foreseeable methods of compliance with these amendments and the potential for adverse environmental impacts associated with those actions.

If comments received during the public review period raise significant environmental issues, staff will summarize and respond to the comments in writing. The written responses will be included in the Final Statement of Reasons (FSOR) for the regulation. Before taking final action on any proposed action for which significant environmental issues have been raised, the decision maker shall approve the written responses to these issues. If the regulation is adopted, a Notice of Decision will be posted on ARB's website and filed with the Secretary of the Natural Resources Agency for public inspection.

## ***B. Proposed Regulation***

### **1. Description**

In this rulemaking, ARB staff is proposing amendments to the provisions for Automotive Windshield Washer Fluid (AWWF) products. As described in Chapter I, AWWF products are regulated based on the area of the State where they are to be sold. The term Type “A” area is used to describe regions of the State which experience freezing temperatures. In Type “A” areas, premixed ready-to-use AWWF products may be sold with a volatile organic compound (VOC) content of up to 25 percent by weight to prevent the fluid from freezing.

The amendments are designed to redefine Type “A” areas because the current description does not include some areas of the State that routinely experience freezing temperatures in the winter. The areas proposed for addition are mountainous areas of the following counties: Butte, Fresno, Glenn, Humboldt, Kern, Madera, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, Tehama, Tulare, and Ventura. The proposed amendments would also define additional areas of Placer County as Type “A.”

In addition the proposed amendments would allow additional clarifying language to be included on labels for products that are diluted prior to use. As proposed, Responsible Parties may include, along with the currently required dilution instructions, language advising consumers to dilute the product for Type “A” areas if traveling to areas where freezing temperatures are expected.

### **2. Objectives**

The proposal to expand Type “A” areas is designed to allow, but not require, premixed (ready-to-use) products with a VOC content of 25 percent by weight to be offered for sale in additional areas of the State that experience freezing temperatures during the winter months. Proposed labeling provisions for dilutable products are designed to clarify that the end user may dilute the product appropriately for winter driving conditions whether they reside in Type “A” areas or not. These proposals would make it less likely that consumers would encounter hazardous driving conditions because the AWWF product freezes in the reservoir or when sprayed onto the windshield.

### **3. Methods of Compliance**

While the proposed amendments would expand Type “A” areas, manufacturers and distributors are not required to sell or supply AWWF products with higher VOC content into these areas. There would not be a need for reformulation because ready-to-use (premixed) AWWF products that comply with the December 31, 2008, 25 percent by weight VOC limit are already sold in existing Type “A” areas. In addition, premixed AWWF currently sold in these areas would continue to be in compliance because their VOC content is no more than 1 percent by weight.

Moreover, manufacturers may choose, but are not required, to modify dilutable product labels to advise the consumer on how to dilute the product if traveling to areas where freezing temperatures are expected.

Businesses that offer for sale or use AWWF products may be impacted by the proposed amendments. However, because the proposed amendments only allow, but do not require, a specific action, it would ultimately be a business decision as to whether operations should be modified. Distributors, for example, may choose to modify their distribution systems to supply higher VOC content AWWF products into the expanded Type “A” areas which may potentially involve revising their computer databases. Additionally, businesses and retailers that had been required to sell only the lower VOC content premixed AWWF, may now choose to offer for sale the higher VOC AWWF in addition to (or instead of) the lower VOC AWWF product.

## **C. *Environmental Impacts***

### **1. Beneficial Impacts**

Staff did not identify any beneficial environmental impacts directly associated with this proposal. However, consumers should benefit from the proposed amendments by having access to a higher VOC content AWWF product in areas where freezing temperatures are common. Language on dilutable product labels would also benefit the consumer by clarifying that they can mix the concentrated products to the Type “A” dilution, regardless of their location when freezing temperatures are expected. These proposals are designed to alleviate potential hazardous driving conditions that may result from use of the 1 percent by weight VOC content AWWF.

### **2. Resource Areas with No Impacts**

Staff has evaluated the proposed amendments to determine whether implementation of the proposed amendments to the Consumer Products Regulation would have the potential to adversely impact the environment.

Based on staff’s review, it has been determined that the proposed amendments would not have a significant adverse impact on the environment. The rationale for making this determination is further explained below.

AWWF products are currently sold throughout California. The proposed amendments would allow, but not require, the sale or supply of higher VOC content AWWF into additional areas of the State that had previously sold only the lower VOC content AWWF. Other than a difference in VOC content, the AWWF products are identical in size, comparable in weight, and used in the same manner. After applying AWWF to clean the windshield—regardless of VOC content—the product is designed to evaporate.

Expanding the areas where AWWF products with higher VOC content can be sold will result in increased VOC emissions. We estimate that the emissions could increase by as much as 0.12 tons per day statewide. This estimate assumes that all AWWF used in the newly identified Type “A” areas is the 1 percent by weight premixed AWWF, and that all of this product will be replaced by premixed AWWF with 25 percent by weight VOC content. In reality, dilutable concentrated products are used to some extent in these areas at concentrations higher than 1 percent by weight VOC, as allowed by current regulation, so the assumed VOC increase is conservative and is likely smaller.

These proposed amendments, taken alone, are expected to result in a small VOC emissions increase. However, new or lower VOC limits for various categories of consumer products are scheduled to become effective concurrent with these amendments. In a 2010 rulemaking the Board approved, and subsequently adopted, VOC limits for consumer products resulting in a 6.7 ton per day statewide VOC emissions decrease beginning on December 31, 2012 (ARB, 2010). Even further VOC emissions reductions from this 2010 rulemaking are expected to occur at the end of 2013. Additionally, staff is currently working on another consumer products rulemaking that will result in even further reductions from consumer products. While there is a slight erosion of emission reduction benefit from these proposed amendments, the reductions from the 2010 rulemaking and the future rulemaking will more than offset this small emissions increase. Taken together then, we do not expect a significant adverse impact on air quality because overall consumer product VOC emissions will be less.

Climate change or global warming is the process whereby emissions of anthropogenic pollutants, together with other naturally occurring gases, absorb infrared radiation in the atmosphere, leading to increases in the overall average global temperature. Gases in the atmosphere can contribute to the greenhouse effect both directly and indirectly. Direct effects occur when the gas itself is a greenhouse gas (GHG). Indirect radiative forcing occurs when chemical transformations of the original gas produce other GHG. Such is the case for VOCs; they are considered GHGs primarily because of their role in forming ozone and prolonging the life of methane, both of which are GHGs. The small VOC emissions increase that would occur from these amendments is not expected to have an adverse impact on climate change because the compounds used in AWWF products are not potent ozone formers. Additionally, this rulemaking, together with the VOC reductions occurring from the previously mentioned 2010 rulemaking, will result in a net decrease in VOC emissions.

In general, there are hazards associated with many products containing VOCs if used, handled, or disposed of incorrectly. California currently has a strong regulatory system to manage hazardous materials and hazardous waste—from generation to final disposition—under which the AWWF products would be regulated. Hazardous materials, including products containing VOCs, are currently required to be labeled and accompanied by a Material Safety Data Sheet when sold (by State or federal regulations) in order to warn the end user of its potential hazards and safe handling. The AWWF products will not change as a result of these proposed amendments;

therefore, the potential hazards already identified on the label (flammable and toxic) will not change. Both higher and lower VOC AWWF products are formulated with water, short chain alcohols (such as methyl, ethyl, or propyl), smaller amounts of glycol ethers, and surfactants. The alcohols are typically used to provide the anti-freeze protection without leaving a greasy film on the windshield, while the glycol ethers and surfactants provide the cleaning function. This same suite of VOCs is used to formulate dilutable and premixed AWWF products. Individual exposure to the VOCs in AWWF products is minimal because it is essentially limited to when the AWWF is added to the reservoir. Users are otherwise inside of their vehicles at the time the product is applied to their windshields, thus limiting any exposure. Label instructions must be properly followed and warnings heeded in order to eliminate any adverse exposure to this product.

Staff does not expect any impacts on traffic and transportation systems because AWWF products are already distributed statewide. The weight, size, and amounts of AWWF products to be offered for sale and distribution will be similar to the existing situation, and there would be no changes to the current traffic routes and frequencies; therefore, there would not be any additional emissions associated with traffic or in the transportation of AWWF products.

Staff has concluded that the proposed amendments would not have a significant adverse impact on the following resource areas: aesthetics; agricultural and forestry resources; biological resources; cultural resources; geology and soils; hydrology and water quality; land use planning; mineral resources; noise; population and housing; public services; or recreation. These areas would not be impacted because compliance with the regulation does not require any action that could affect these resources, either directly or indirectly.

No discussion of alternatives or mitigation measures is necessary because no significant adverse environmental impacts were identified for these resource areas.



## V. Environmental Justice

The ARB has made the achievement of environmental justice an integral part of its activities. State law defines environmental justice as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.

The Board approved Environmental Justice Policies and Actions (Policies) on December 13, 2001. These Policies establish a framework for incorporating environmental justice into the ARB's programs consistent with the directives of State law. The Policies apply to all communities in California, but recognize that environmental justice issues have been raised more in the context of low-income and minority communities.

We believe the proposed amendments to the Consumer Products Regulation pertaining to AWWF are consistent with environmental justice policies. The goal of the proposed amendments is to alleviate potential hazardous driving conditions in areas that routinely experience freezing temperatures by allowing higher VOC content AWWF to be sold in additional areas of the State. These higher VOC products help prevent the AWWF from freezing either in the vehicle's reservoir or when applied to the windshield. All residents in the proposed expanded Type "A" areas will have access to the higher VOC AWWF, and these products are comparably priced to the lower VOC content AWWF. The proposed amendments would potentially result in a slight increase in VOC emissions in the expanded Type "A" areas. Because of how AWWF products are used, however, this increase would not be concentrated in any particular area, but rather would be widely distributed across the entire area. For these reasons, we do not expect any communities, especially those with low-income and minority populations, regardless of location, to be disproportionately impacted by adoption of the proposed amendments.



## **VI. Economic Impacts**

This chapter provides our analysis of the estimated economic and fiscal impacts associated with complying with the proposed amendments. This economic impacts analysis was conducted in accordance with the current legal requirements under the Administrative Procedure Act (APA).

The proposed amendments are designed to redefine Type “A” areas because the current description does not include some areas that routinely experience freezing temperatures in the winter. The effect of including these areas in Type “A” would be to allow, but not require, the sale of premixed Automotive Windshield Washer Fluid (AWWF) products with a volatile organic compound (VOC) content of up to 25 percent by weight rather than, or in addition to, the current 1 percent by weight products.

In addition the proposed amendments would allow Responsible Parties to include language on dilutable product labels to advise consumers how the product should be diluted when they expect to travel to areas that are experiencing freezing temperatures. Proposed amendments would also clarify existing Type “A” areas.

### ***A. Summary of Economic Impacts***

The proposed amendments allow, but do not require, higher VOC AWWF products to be sold into the additional Type “A” areas. Likewise proposed labeling language would not require the dilution language on dilutable product labels to be changed. Therefore, the economic impacts of the proposed amendments are neutral. We do not expect businesses to incur any costs to reformulate AWWF products. However, to sell, or offer for sale, higher VOC products into the added Type “A” areas, distribution systems may have to be modified. We believe this cost to be negligible. Should manufacturers opt to modify product labels, costs are estimated to be about \$165 per manufacturer. While the proposed amendments do not require a specific action, we expect most manufacturers, distributors, and retailers to accommodate the proposals if it would be profitable to do so or as a service to their customers.

### ***B. Impacts on California Businesses, Consumers, and State and Local Agencies***

Section 11346.3 of the Government Code requires State agencies to assess the potential for adverse economic impacts on California business enterprises and individuals when proposing to adopt or amend any administrative regulation. The assessment must include a consideration of the impact of the proposed regulation on California jobs; business expansion, elimination or creation; and the ability of California businesses to compete with businesses in other states.

## **1. Potential Impacts on California Businesses**

The proposed amendments should have no discernible cost impact on California businesses. Businesses may choose whether to sell, supply, or offer for sale higher VOC AWWF in the areas proposed for inclusion into Type “A.” Manufacturers incurred reformulation costs in the 2008 timeframe to comply with the 25 percent by weight VOC limit for Type “A” areas. This same formulation would be compliant in the areas proposed for addition to Type “A.” Should they choose to expand distribution of these products into new Type “A” areas, there would be minor costs associated with redesigning distribution systems. However, transportation costs are expected to remain stable because the weight, size, and amounts of AWWF to be offered for sale would be comparable to the existing situation. The proposed dilution language is also not required to be included on product labels. Thus, it can be presumed that manufacturers will choose to update their product label dilution instructions if it would be profitable to do so or as a service to their customers. Costs for revising product labels of concentrated AWWF are also expected to be negligible. However, if manufacturers choose to modify the labels, we estimate the cost to be about \$165 per manufacturer or a total one-time cost of about \$4,000 ( $\$165 \times 24 \text{ businesses} = \$3,960$ ).

Likewise, we do not expect retailers in the expanded Type “A” areas to experience costs associated with the proposed amendments. AWWF products are sold in a variety of businesses including home supply stores, automotive parts and tire stores, gasoline filling and service stations, and variety stores. Using the Dun and Bradstreet Market Insight database, we identified 41 such businesses in the affected areas; 37 of them are small businesses (D&B, 2012). The AWWF products these businesses currently offer for sale would continue to be compliant so we believe there would be no costs associated with product recall or sell-through provisions. We expect retailers to make business decisions as to whether to offer for sale higher VOC premixed AWWF products in the expanded Type “A” area instead of, or in addition to, the current products. However, we expect most retailers to offer for sale the higher VOC products.

## **2. Potential Impacts on Business Creation, Elimination, or Expansion**

The amendments would add areas of California into Type “A.” This could result in different AWWF products being offered for sale in these areas, but should not cause any noticeable increase or decrease in sales of AWWF products. Therefore, we do not believe there would be impacts on business creation, elimination, or expansion.

## **3. Potential Impacts on Business Competitiveness**

The proposed amendments would have no impact on the ability of California businesses to compete with businesses in other states. Because the proposed amendments would have no noticeable cost impact, the staff’s proposal should not present any economic disadvantages specific to California businesses.

#### **4. Potential Impacts on California Employment**

The proposed amendments are not expected to cause any change in California employment and payroll. The proposed amendments would only change the types of products that may be sold in small areas of the State. Overall, we expect total sales of AWWF products to remain unchanged.

#### **5. Potential Impacts on California Consumers**

Consumers in the expanded Type “A” areas would potentially benefit by having access to ready-to-use, freeze resistant AWWF products. These products are potentially more convenient to use than are dilutable products. We also expect consumers to experience little or no difference in the price of the available AWWF products. Premixed AWWF products, regardless of VOC content appear to be comparably priced.

Modified labeling requirements for dilutable products would help provide clarity for consumers regarding the use of these products in freezing conditions.

#### **6. Potential Impacts to California State or Local Agencies**

State agencies are required to estimate the cost or savings to any State or local agency and school district in accordance with instructions adopted by the Department of Finance. The estimate shall include any nondiscretionary cost or savings to local agencies and the cost or savings in federal funding to the State.

We have determined that the proposed amendments will not create costs or savings, as defined in Government Code section 11346.5(a)(6), to any State agency or in federal funding to the State, costs or mandate to any local agency or school district whether or not reimbursable by the State pursuant to Part 7 (commencing with section 17500), Division 4, title 2 of the Government Code, or other nondiscretionary savings to local agencies.

#### ***C. Mitigation of Potential Impacts***

If adopted by the Board, the proposed amendments would be incorporated into sections 95408 and 94509 of the Consumer Products Regulation (title 17, California Code of Regulations, sections 94507-94517). We do not expect there to be any noticeable economic impacts associated with complying with the proposed amendments. Therefore, no mitigation strategies are necessary. We believe manufacturers, distributors, and/or retailers will make business decisions as to how to respond to the proposed amendments, with the goal of maintaining or improving profitability.



## **VII. Summary and Rationale for the Proposed Amendments**

This chapter provides a summary of specific changes to the regulation and the reason, or rationale, for the change. Amendments are being proposed to section 94508, “Definitions,” and section 94509, “Standards for Consumer Products.” Any sections of the regulation without proposed changes are not included here.

### ***A. Summary of Section 94508, Definitions***

Section 94508 of the regulation defines all key terms used in the regulation that may not be in common use or which may potentially be ambiguous without a regulatory definition. Definitions have been edited and added to clarify the meaning and intent of the regulation.

#### **Summary of Section 94508(a) Proposed Amendments**

We are proposing to reorganize the definitions pertaining to AWWF products into a single definition. Within the modified definition we would define Type “A” areas and Nontype “A” areas. The term “Nontype “A” areas” is proposed to replace the current term “All other areas.” As proposed, Nontype “A” area would be any area that is not defined as a Type “A” area. Additional geographical areas would be added to the definition of Type “A” area, and these areas would be defined by ZIP code boundaries rather than by county or air basin boundaries. Existing Type “A” areas would also be clarified.

#### **Rationale for Section 94508(a) Proposed Amendments**

Type “A” areas were previously described in the Table of Standards. Inclusion of additional regions as well as redefining these areas would cause the Table of Standards to be unnecessarily lengthy. We believe that substituting the term Nontype “A” area for the previously undefined term “All other areas” will eliminate confusion. Providing definitions for Type “A” and Nontype “A” areas will better differentiate the two types of areas as well as provide definitions where they are normally found within a regulation. Additional regions that routinely experience freezing temperatures during the winter are proposed to be added to the definition of Type “A” area. We are proposing to define these areas by ZIP code boundaries to minimize emission increases. Along with ZIP codes we are providing the county names as a point of reference. However, all of the identified ZIP codes (regardless of the county listed) would be included in Type “A” areas.

## ***B. Summary of Section 94509, Standards for Consumer Products***

Section 94509 sets forth the VOC standard for each regulated category along with the effective date of the limit. Various other requirements for consumer products, such as specific prohibitions on use of toxic compounds, product labeling, and sell-through dates are also included.

### **Summary of Section 94509(a) Proposed Amendments**

We are proposing to delete the description of Type “A” areas in the Table of Standards and instead reference the definition in section 94508(a).

### **Rationale for Section 94509(a) Proposed Amendments**

We are providing a definition for Type “A” areas within the reorganized AWWF definition in section 94508(a). This change is necessary as it would be impractical to include the expanded definition of Type “A” area in the Table of Standards.

### **Summary of Section 94509(b)(3)(B) Proposed Amendments**

Subsection 94509(b)(3)(B) would be modified to replace the term “All other areas” with the term Nontype “A” area.

### **Rationale for Section 94509(b)(3)(B) Proposed Amendments**

Replacement of the term “All other areas” with the proposed term Nontype “A” area will allow for clarity and consistency of terminology within the regulation. However, dilutable product labels that continue to provide dilution instructions for Nontype “A” areas using the term “All other areas” would continue to be compliant as long as the dilution instructions result in a VOC content of no more than 1 percent by weight.

### **Summary of Section 94509(b)(3)(C) Proposed Amendments**

Section 94509(b)(3)(C) would clarify that language on dilutable products may include instructions for the consumer to dilute the product as specified for Type “A” areas if the consumer intends to travel to an area where freezing temperatures are expected.

### **Rationale for Section 94509(b)(3)(C) Proposed Amendments**

The proposed language for dilutable products is designed to advise the consumer in Nontype “A” areas that if they plan to travel to areas during times when they may encounter freezing temperatures they should dilute the product to Type “A” specifications. This will help consumers better prepare for winter driving conditions.

## VIII. References

1. Air Resources Board. Proposed Regulation to Reduce Volatile Organic Compound Emissions from Consumer Products - Technical Support Document. August, 1990. (ARB, 1990)
2. Air Resources Board. Initial Statement of Reasons for Proposed Amendments to the California Consumer Products Regulation: Midterm Measures II. September 10, 1999. (ARB, 1999)
3. Air Resources Board. Initial Statement of Reasons for the Proposed Amendments to the California Aerosol Coating Products, Antiperspirants and Deodorants, and Consumer Products Regulations, Test Method 310, and Airborne Toxic Control Measure for para-Dichlorobenzene Solid Air Fresheners and Toilet/Urinal Care Products. May 7, 2004. (ARB, 2004b)
4. Air Resources Board. Initial Statement of Reasons for Proposed Amendments to the California Consumer Products Regulation and the Aerosol Coatings Regulation. September 29, 2006. (ARB, 2006)
5. Air Resources Board. Initial Statement of Reasons for Proposed Amendments to the California Consumer Products Regulation. August 7, 2009. (ARB, 2009)
6. Air Resources Board. Initial Statement of Reasons for Proposed Amendments to the California Regulations for Reducing Emissions from Consumer Products and Test Method 310: Determination of Volatile Organic Compounds in Consumer Products and Reactive Organic Compounds in Aerosol Coating Products. September 29, 2010. (ARB, 2010)
7. ArcGIS Online, ESRI. Esri Maps and Data. <http://www.arcgis.com/home/index.html>. Accessed July 2012. (ArcGIS, 2012)
8. Dun & Bradstreet Market Insight Database. Sales & Marketing Solutions. July 12, 2012. (D&B, 2012)
9. PRISM Climate Group, Oregon State University. <http://prism.oregonstate.edu/>. Accessed July 2012. (PRISM, 2012)
10. United States Environmental Protection Agency. National Volatile Organic Compound Emission Standards for Consumer Products. (40 CFR Parts 9 and 59). Federal Register: September 11, 1998. Volume 63. Number 176: 48819-48847. (U.S. EPA, 1998)

11. United States Environmental Protection Agency. National Volatile Organic Compound Emission Standards for Aerosol Coatings; Direct Final Rule. (40 CFR Part 59). Federal Register: March 24, 2008. Volume 73, Number 57: 15470-15471. (U.S. EPA, 2008)