

Appendix B:

Detailed Description of Proposed Regulatory Changes

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A. Proposed Changes to the Regulation by Section

This section details changes that staff has proposed for each section of the voluntary accelerated vehicle retirement (VAVR) regulation. To better understand the proposed modifications, staff recommends that the reader follow the narrative along with the proposed underlined and strike-out regulation located in Appendix A to this report.

1. Section 2601 – Definitions

Staff is proposing to delete six outdated or unused definitions and add six new definitions to improve clarity. Staff is also proposing to arrange the definitions by alphabetical order for greater ease of use.

Air Resources Board (ARB) staff is proposing to delete the following definitions: gross polluter, high emitter, inspection and maintenance program, measure M1, pilot program, and SIP. The pilot program operated successfully in the South Coast Basin during 1998 and 1999, and a program report was published in 2002. As the program has been completed, the definition is no longer required and is proposed for deletion. Measure M1 was proposed in the 1994 state implementation plan (SIP) in an effort to scrap over 75,000 vehicles but was unfunded and subsequently removed from the SIP. Therefore, ARB staff is proposing to delete this definition. As the proposed regulation does not contain any reference to the SIP, this definition is also proposed for deletion. The terms gross emitter and high emitter were not used in the 2002 VAVR regulation and are not proposed for use in the 2006 revised version. A new term, high emitting vehicle, is proposed to more accurately represent the type of vehicles of interest to VAVR programs. Additionally, the proposed term has been defined with respect to published emission standards pursuant to Bureau of Automotive Repair's (BAR) Accelerated Simulation Mode (ASM) Emission Standards and Gross Polluter Standards located in Title 16, Division 33, Article 5.5, Section 3340.42 of the California Code of Regulations. ARB staff is proposing to use the term Smog Check in place of the term inspection and maintenance program. The term Smog Check is more universally recognized.

Staff is proposing to add six definitions including: day, dismantle, high emitting vehicle, remote sensing device, useful life, and VAVR enterprise. The term day was added to clarify that a day is any weekday including weekend days to distinguish it from a working day. Dismantle replaces the term crush. The new term was used to confirm that other means may be used to destroy a vehicle in addition to crushing and to clarify that a vehicle or part must no longer function as originally intended after dismantling. The term high emitting vehicle is used in place of the terms gross polluter and high emitter. The term high emitter was only vaguely defined in the Health and Safety Code and did not reference emission standards. The term gross polluter defined vehicles whose emissions exceeded the Gross Polluter Standards cited above. The term high emitting vehicle is more inclusive and is defined as a vehicle whose emissions exceed

the ASM Emission Standards. This change expands the range of vehicles potentially eligible for retirement. Therefore, the new term is defined with reference to a wider range of published emission standards and is more representative of the type of vehicle that the VAVR program may target. The term remote sensing devices or RSD was added to define one of the proposed technologies that may be used to identify potential high emitting vehicles. The term useful life was added because the term is used in the legislation that authorizes the VAVR regulation to describe the condition of vehicles that are potentially eligible for retirement under VAVR. VAVR enterprise was added to define an undefined term used in the 2002 regulation to improve clarity.

The terms car and automotive were deleted, and ARB staff is proposing to use the term vehicle to clarify that both light-duty automobiles and light-duty trucks are light-duty vehicles and are eligible for inclusion in VAVR programs.

The term enterprise operator was condensed for greater ease of reading.

The definition of VAVR was revised to more accurately represent the current meaning of these types of programs. The definition was expanded to specify that for vehicles to be eligible for VAVR programs they must be operational and still have a useful life. In this way, emission reductions would be surplus and would not be considered anyways reductions. Anyways reductions are not surplus and refer to reductions from retiring a vehicle that would have been retired anyway because the vehicle reached the end of its useful life in less than the three year life time of the emission reduction credit.

2. Section 2602 – District Responsibility

Staff is proposing to make changes to this section to consolidate District responsibilities and requirements in a single section. To this end, subsections from other sections in the regulation were moved here when they were more closely related to district responsibilities and requirements. Some subsections were reorganized to improve clarity. Subsections that were not directly related to this section were moved to sections where the subject matters were more closely aligned.

To reduce excess verbiage, the phrase “within its jurisdiction” was deleted from this section and included in the definition of District.

Subsection (b) “All operators of VAVR enterprises . . .” was moved to Section 2604, as the subsection did not relate to district responsibilities but was directly related to VAVR enterprise operator requirements.

Subsections (c) and (d) were combined into a single new subsection (b) to consolidate district responsibilities and to provide the responsibilities in list form for greater clarity. Staff is proposing to reword new subsection (b) to clarify that districts “shall” administer and audit VAVR enterprises and not just have the responsibility to do so.

Proposed new subsection (d) "District approval to generate . . ." was moved from Section 2609, as the subsection was directly related to district responsibilities and consolidated district responsibilities in one location.

3. Section 2603 – Vehicle Eligibility

To improve internal consistency within the regulation, acronyms were changed to be consistent with the rest of the regulation.

Staff is proposing to replace the 120-day Department of Motor Vehicles (DMV) registration residency requirement in the district for vehicle eligibility to 24 months in subsection (a)(2). Staff proposed this change so that the regulation conforms to the requirements of the authorizing legislation. The regulation was modified in 2002 to incorporate the shorter 120 day residency requirement to harmonize with the BAR Consumer Assistance Program (CAP) program. However, this created an inconsistency with Health & Safety Code (H&SC) section 44094. Staff proposes reinstating the 24-month residency requirement for consistency with the legislation.

As staff is proposing to re-instate the 24 month vehicle residency requirement, subsection (a)(2)(A) is proposed for deletion, as It is no longer needed.

New subsections (a)(2)(B) and (C) were added to be consistent with the wording of the original 1996 VAVR regulation. These clarifications are designed to add some flexibility to the 24-month residency registration requirement to allow some degree of non-use of a vehicle prior to retirement but still within the 24 month window.

Staff is proposing to update subsection (a)(3) to define the gross vehicular weight rating for vehicles considered light-duty vehicles. The gross vehicular weight rating for light-duty vehicles is proposed to be defined as 8,500 pounds. This value is consistent with the definition of light-duty vehicle found in the low emission vehicle or LEVII program (The California Low-Emission Vehicle Regulations for Passenger Cars, Light-Duty Trucks and-Medium-Duty Vehicles, as of January 1, 2006). This proposed modification expands the fleet of vehicles that are potentially eligible for vehicle retirement.

Subsection (a)(4) is proposed for deletion, as it is redundant to subsection (b)(1). Additionally, the requirement for a vehicle to be driven to the purchase site under its own power was more closely related to the functional and equipment eligibility requirements listed in subsection (b).

ARB staff is proposing that Smog Checks must be completed by BAR licensed technicians in new subsection (a)(6). This clarification is proposed as a safeguard to ensure that Smog Checks are performed in compliance with BAR standards. BAR recommended that this language during their review of the proposed regulation.

The authorizing legislation for VAVR programs emphasizes that tampered vehicles are not eligible for VAVR programs until all of the tampering is corrected. New subsection

(a)(7) is proposed for addition to conform the regulation to the letter and intent of the authorizing legislation and to highlight the importance of not including vehicles in VAVR programs whose owners have not conformed to the requirements of the law.

Staff is proposing to reword subsection (b) to more clearly distinguish between the requirements for the equipment and the functional eligibility inspections. Excess verbiage is proposed for removal to improve readability.

Subsection (b)(6) is proposed to be modified to clarify that tampered vehicles could be eligible for retirement once all of the deficiencies are corrected outside of and without cost to the VAVR program. Once the tampering is corrected, the vehicle would no longer be considered tampered.

Subsection (c) is proposed to be rephrased to simplify the requirement that districts are limited to changes to the functional and eligibility inspection requirements so that the district changes do not omit or weaken any requirements.

4. Section 2604 – VAVR Enterprise Operator Requirements

Staff is proposing to consolidate the responsibilities and requirements of enterprise operators in one location. To this end, subsections from other sections in the regulation were moved here when they more closely related to enterprise operators. Additionally, staff is proposing to reorganize some existing subsections to improve clarity. Finally, minor changes are proposed to acronyms for consistency with other sections of the regulation and some wording changes are proposed to clarify responsibilities.

Subsection (a) “All owners and operators . . .” is proposed to be moved from Section 2602 as it more directly applies to enterprise operators than it does to districts.

Subsection (c)(1) is proposed to be renumbered as subsection (b)(1) and reworded to provide greater flexibility for the way that the enterprise operator’s notification to the district is submitted. The original wording required that a form specified by the district be submitted. The proposed wording increases the flexibility in the way that the notification can be submitted to the district.

New subsection (c)(3) is proposed to be renumbered from subsection (b)(3) and reorganized to list the enterprise operator compliance requirements for easier reading.

Subsections (j) “Violation of any provision of these regulations . . .” and (k) “Violations of any provision of Section 2603 . . .” are proposed to be moved from Section 2609 to this section. Staff’s proposal is to consolidate enterprise operator responsibilities in this section. Therefore, the consequences of violating any provisions of this regulation by an enterprise operator more directly apply to this section.

5. Section 2605 – Offering Vehicles to the Public

Staff is not proposing any changes to car collector provisions and proposes to retain consistency with the intent of the authorizing legislation. Staff is proposing minor changes by adding acronyms where needed and deleting unnecessary references.

6. Section 2606 – Parts Recycling and Resale

Staff is proposing minor changes to the references. Additionally, staff is proposing to replace the term crush by a more generic term dismantle throughout the section. The term crush refers to a single method by which a vehicle can be retired. As there are many additional retiring methods such as shredding, hammer milling, and cutting, the term dismantle is proposed to signal that other means are permitted to retire vehicles.

Subsections (b)(2)(A) and (B) and part of (b)(2) originally included instructions for the Quality Control Checklist. Staff is proposing to delete them and move them to Appendix C, Quality Control Checklist. Additionally, staff is proposing to reword the instructions to simplify them yet retain clear language so that the form will be completed correctly.

Subsection (c)(3)(B) now requires battery recyclers to be licensed by the State of California. The original language did not specify what entity provided the license.

Staff is proposing to reword subsection (e) to improve clarity by listing compliance requirements rather than including them sequentially in a single sentence.

7. Section 2607 – Advertising

Staff is proposing minor changes in punctuation and deletions for clarity.

8. Section 2608 – Emission Reduction Credits

ARB staff is proposing to substantially revise this section. Some subsections are proposed to be rearranged to improve clarity. A new subsection is proposed for authorizing the generation of extra emission reduction credits, and subsections are included from other sections because they are more aligned with this section.

Staff is proposing to insert subsection (a) that is contained in the 2002 version of the definition of enterprise operator. This change is intended to emphasize that emission reduction credits are marketable.

Subsections (b), (c), (d), and (e) are proposed to be moved from Section 2609, as they are more directly related to the approval of emission reduction credits and this move will consolidate district and enterprise operator responsibilities regarding emission reduction credits. The text of subsections (b) and (c) was retained. The text of subsections (d) and (e) was modified to improve readability.

Staff is proposing to reposition subsection (g)(3) to subsection (f) to emphasize that emission reduction credits have a default credit life of three years. Some subsections of subsection (g) were repositioned to highlight credit value, usage, and life.

Staff is proposing to reword subsection (g) to simplify the language but retain the meaning and intent of the text. This change will improve clarity and specify that the methodology for generating emission reduction credits will be located in Appendix D.

Prior to the proposed revisions, Appendix B contained tables of default emission reductions by vehicle model year. Two years of values were provided, and updating required a regulation revision and re-adoption. ARB staff is proposing to delete the tables and provide the methodology for developing them in Appendix D. ARB staff is proposing to publish the tables annually on the VAVR program website using the methodology described in Appendix D. The tables can easily be updated without the need to reopen and re-adopt the regulation. This flexible approach provides updated tables in a timelier manner and preserves the methodology for developing the tables.

Subsection (h) is proposed for addition to authorize the issuance of extra emission reduction credits for retiring high emitting vehicles. The subsection also proposes that anyone who operates a VAVR program that involves retiring high emitting vehicles must provide the details of how extra emission reduction credits will be calculated in a plan to the ARB. The ARB must approve the methodology in a VAVR program plan. Finally, the subsection states that the methodology must be consistent with the methodology that is recommended by the ARB in the Carl Moyer Program Guidelines.

The proposed changes require that a complete, detailed technical justification must be submitted to the ARB and approved before implementing. The ARB staff believes that the proposed ARB methodology will be applicable in most cases but understands that local conditions may require a more unique approach. This approach provides flexibility but, because the methodologies must be approved by the ARB prior to implementation, only methodologies that are technically justifiable and result in emission reductions that are real, surplus, quantifiable, and enforceable will be considered.

Proposed subsection (h) also lists the general criteria that the ARB will use to evaluate alternative methodologies. ARB staff must be provided a clear, logical, and complete description of how the alternative methodology will quantify driving cycle emissions from the raw data or initial measurements of the technology that is proposed to be used to identify potential high emitting vehicles.

9. Section 2609 – Records and Auditing

Staff is proposing to extensively revise this section. To consolidate the responsibilities and requirements of districts and enterprise operators, subsections (a)(4), (5), (6), and (7)(B) are proposed to be deleted from this section and inserted in other sections in the regulation where the content is more closely aligned. Enforcement-related subsections are proposed to be moved to the sections where the enforcement issues directly apply.

Subsection (b) is proposed to be renumbered as subsection (a)(1) and is proposed to be reworded to specify that enterprise operators shall maintain and store records instead of just being responsible for doing so.

Staff is proposing the following:

- Move subsection (a)(4) to Section 2608(d) and (c)
- Move subsection (a)(5) to Section 2608(e)
- Move subsection (a)(6) to Section 2608(b) and
- Move subsection (a)(7)(B) to Sections 2604(j) and (k) and 2602(d)

As noted above, these proposed changes are designed to consolidate district and VAVR enterprise operator requirements and responsibilities in their respective sections and to consolidate emission reduction credit responsibilities on a single location.

10. Section 2610 – Pilot Program

This section is proposed for deletion to be replaced by new Section 2610. The pilot program was initiated by the ARB in response to H&SC section 44104.5 and Measure M1 in the 1994 California State Implementation Plan for Ozone. The pilot program was conducted from November 1998 to November 1999 in Southern California. Sierra Research published a draft report in September 2000 [Sierra Research, 2000]. While the program results were encouraging, the program was not expanded due to funding limitations and emission reductions called for in the 1994 SIP were not obtained.

11. Section 2610 – Identification of High Emitting Vehicles

Staff is proposing an entirely new section that authorizes the use of remote sensing devices (RSD) and other ARB-approved technologies to identify potential high emitting vehicles that emit pollutants in excess of the ASM test pass/fail limits established by BAR. The following is a brief description of the specific additions that are proposed. The explanations for the proposed additions are described throughout the staff report

Subsection (a) authorizes the use of RSD and other ARB-approved technologies to identify high emitting vehicles. The subsection also lists the requirements that an alternative technology must meet to be considered by the ARB. Staffs intent is to limit the technologies to those that are proven in practice and are well established. As emission reductions must be real, ARB staff must be confident that the technologies will identify potential high emitting vehicles with minimal false positives.

Subsection (b) specifies that the use of these technologies is optional. Those wishing to administer or operate conventional programs are not required to use any technology to identify vehicles for voluntary participation in a VAVR program.

Subsection (c) requires that high emitting VAVR programs comply with all other requirements of the VAVR regulation. High emitter VAVR programs are a subset of

VAVR programs and are subject to the authorizing legislation and all of the applicable responsibilities and requirements of this regulation.

Subsection (d) specifies that equipment and software associated with the use of any technology must be operated according to established and approved protocols and procedures. Staff's intent is to ensure that equipment and software associated with any technology is correctly applied and used. If deviations from established protocols or operating procedures are needed, the VAVR plan must detail and justify these them.

Subsection (e) states that the generation of extra emission reduction credits for retiring eligible vehicles must comply with the requirements of section 2608.

Section (f) requires anyone wanting to operate a high emitting vehicle VAVR program to submit a detailed plan for ARB approval and that the plan must be approved by the ARB prior to implementing the plan. ARB staff's intent is to ensure that high emitting vehicle VAVR programs are well thought out prior to implementation and that the resulting emission reductions are real, surplus, quantifiable, and enforceable.

Subsection (g) lists the minimum elements for a high emitting vehicle plan to be considered by the ARB. Staff's goal is that the plan must clearly explain for the average technical reader exactly how the technology works and how it will used to identify a potential high emitting vehicle. The plan must inform ARB staff that the administrators and operators of the program have a clear understanding of the application, operations, and use of the technology. The plan should also verify that the personnel operating the technology are qualified to do so and will follow established protocols.

Section (h) lists the criteria that the ARB will use to assess a high emitting vehicle VAVR plan. Plans that are incomplete or unclear will be returned within sixty days of receipt. No high emitter VAVR program may be initiated without an approved plan.

12. Section 2611 – Procurement of Credits for SIP Measure M1

Measure M1 of the 1994 California State Implementation Plan for Ozone was drafted to encourage the retirement of older, more polluting vehicles. The measure anticipated that the program would operate between 1996 and 2010 and that 11 tons per day of NOx and 14 tons per day of ROG would be reduced in 2010. It was envisioned that implementing M1 would remove up to 75,000 vehicles per year from the South coast Air Basin. Because this measure went largely unfunded, M1 was not included in later version of the SIP. This section is proposed for deletion, as SIP Measure M1 was unfunded and is no longer in the latest version of the SIP.

B. Proposed Changes to the Appendices of the VAVR Regulation

1. Appendix A – Vehicle Functional and Equipment Eligibility Inspection Form

In 2002, the original 1998 VAVR regulation was amended to be consistent with BAR's CAP program. During this harmonization process, the requirements of Section 2603, Vehicle Eligibility, were changed to model those contained in the CAP. However, the Vehicle Functional and Equipment Eligibility Inspection Form was not changed to be consistent with the new requirements. ARB staff is proposing to modify the form to reflect the requirements that are listed in various sections of the proposed regulation. Additionally, the title of the appendix is proposed to be shortened for clarity. The form will also be reduced in size from three pages to a single page for ease of use. A reference is provided for each major line item or section that specifies the location in the proposed regulation that directly relates to the information requested.

2. Appendix B – Emission/Drive Train-Related Parts List

Appendix C was relabeled as Appendix B to reflect the order in which it was cited in the regulation. There was no change in content. The listing of emissions and drive train-related parts is not all inclusive, and the inspector at the location of the enterprise operation must use best professional judgment to ensure that all emission and drive train-related parts on vehicles to be retired are intact and not just those in the list.

3. Appendix C – Quality Control Checklist

Appendix C is proposed to be relabeled from Appendix D. The directions for completing this form are located in the body of the regulation in Section 2606(b)(2) and are proposed to be relocated here and revised to simplify for ease of use.

4. Appendix D – Calculation of Default Emission Reductions

Staff is proposing to renumber Appendix B and Appendix D and re-title the appendix from the original title "Voluntary Accelerated Light-Duty Vehicle Retirement Program Emissions." The appendix will be completely revised, and the default emission reduction tables will be deleted. As previously discussed, the tables contained in the regulation are limited to two specific calendar years. ARB staff is proposing to provide a more responsive update of the tables by including the methodology that is used to develop the tables. ARB staff will then generate the tables based on the reference methodology and will publish these tables on an annual basis on the VAVR website.

Table B-1, was calculated using the methodology outlined in proposed Appendix D of the regulation and lists the emission reductions for calendar years 2007 and 2008. To use the table, the model year of the vehicle is located in the first column and the default emissions are read off to the right according to the column headings.

Table B-1

**Voluntary Accelerated Light-Duty Vehicle Retirement Program
Emission Reductions for Calendar Year 2007
Total Pounds Per Vehicle Over 3 Year Credit Life**

Model Year	Emission Reductions (pounds) – 3 Year Credit Life					
	TotalROG*	NOx	CO	PM10	ROG exh	ROG evap
65 and earlier	506	158	2,999	0.74	279	227
66	472	152	2,771	0.81	239	233
67	479	154	2,823	0.77	243	236
68	487	159	2,889	0.83	249	239
69	498	163	2,967	0.99	255	243
70	431	167	3,056	1.04	261	170
71	436	169	3,053	1.13	270	166
72	442	172	3,059	1.06	279	163
73	448	173	3,070	0.97	284	165
74	386	152	2,821	1.20	264	122
75	320	137	2,656	1.03	207	113
76	215	110	2,246	0.75	104	111
77	173	93	2,203	0.63	90	83
78	177	92	2,191	0.88	91	86
79	161	82	1,455	0.86	77	84
80	124	74	1,211	0.69	59	65
81	105	56	934	1.16	45	59
82	102	59	920	1.04	44	58
83	92	62	795	0.91	34	58
84	99	62	752	0.93	32	67
85	92	57	490	0.86	24	68
86	89	57	446	0.89	23	66
87	80	55	407	0.80	22	58
88	72	55	371	0.77	22	50
89	51	44	424	0.71	24	27
90	49	34	450	0.68	25	24
91	44	35	438	0.63	25	19
92	42	36	434	0.60	25	17
93	32	34	253	0.55	18	14
94	19	22	40	0.49	7	12

* Includes exhaust and evaporative emissions

Source: Calculated using EMFAC Working Draft 2B (June 2006). Numbers are subject to change pending final version of emission inventory model. Assumes average 1965 through 2007 vehicle as replacement vehicle for vehicles retired in calendar year 2007.

Table B-1 (continued)

**Voluntary Accelerated Light-Duty Vehicle Retirement Program
Emission Reductions for Calendar Year 2008
Total Pounds Per Vehicle Over 3 Year Credit Life**

Model Year	Emission Reductions (pounds) – 3 Year Credit Life					
	TotalROG*	NOx	CO	PM10	ROG exh	ROG evap
65 and earlier	503	159	2,993	0.73	278	226
66	470	152	2,760	0.69	240	230
67	478	155	2,812	0.70	244	234
68	487	159	2,879	0.72	250	237
69	497	163	2,956	0.75	257	240
70	431	167	3,047	1.23	263	168
71	439	170	3,047	0.84	272	167
72	443	171	3,050	0.88	281	162
73	450	173	3,063	0.79	285	165
74	388	155	2,835	1.39	267	122
75	324	143	2,686	0.98	210	114
76	212	109	2,209	0.79	103	110
77	171	92	2,160	0.67	88	83
78	173	92	2,144	0.66	89	85
79	160	82	1,436	0.91	76	84
80	122	74	1,195	0.74	58	64
81	104	56	928	1.00	45	59
82	102	60	912	0.92	43	58
83	93	63	791	0.84	34	58
84	100	63	751	0.84	32	68
85	95	57	499	0.89	25	70
86	94	58	466	0.90	24	70
87	85	57	428	0.83	24	62
88	77	56	395	0.80	23	54
89	56	45	445	0.77	25	31
90	54	36	470	0.76	26	28
91	49	37	460	0.72	27	22
92	47	38	456	0.66	27	20
93	37	36	278	0.60	20	18
94	25	25	73	0.56	10	15

* Includes exhaust and evaporative emissions

Source: Calculated using EMFAC Working Draft 2B (June 2006). Numbers are subject to change pending final version of emission inventory model. Assumes average 1965 through 2008 vehicle as replacement vehicle for vehicles retired in calendar year 2008.