PROPOSED RULE # _____

Administrative Procedures – Proposed Coversheet

Instructions:

In accordance with Title 3 Chapter 25 of the Vermont Statutes Annotated and the "Rule on Rulemaking" adopted by the Office of the Secretary of State, this proposed filing will be considered complete upon the submission and acceptance of the following components:

- Proposed Rule Coversheet
- Adopting Page
- Economic Impact Statement
- Public Input Statement
- Scientific Information Statement (if applicable)
- Incorporated by Reference Statement (if applicable)
- Clean text of the rule (Amended text without annotation)
- Annotated text (Clearly marking changes from previous rule)

All forms requiring a signature shall be original signatures of the appropriate adopting authority or authorized person, and all filings are to be submitted at the Office of the Secretary of State, no later than 3:30 pm on the last scheduled day of the work week.

The data provided in text areas of the proposed coversheet form will be used to generate a notice of rulemaking in the newspapers of record. Publication of notices will be charged back to the promulgating agency based on the word count of the notices.

Certification Statement: As the adopting Authority of this rule (see 3 V.S.A. § 801 (b) (11) for a definition), I approve the contents of this filing entitled:

Rule Title: **Amendments to Subchapter XI, Low Emission Vehicle Program, Vermont Air Pollution Control Regulations**

_____, on _____.
(signature) (date)

Printed Name and Title:
Deb Markowitz, Secretary, Agency of Natural Resources

RECEIVED BY: _____

- ☐ Proposed Rule Coversheet
- ☐ Adopting Page
- ☐ Economic Impact Statement
- ☐ Public Input Statement
- ☐ Scientific Information Statement (if applicable)
- ☐ Incorporated by Reference Statement (if applicable)
- ☐ Clean text of the rule (Amended text without annotation)
- ☐ Annotated text (Clearly marking changes from previous rule)
- ☐ ICAR Approval received by E-mail.

1. TITLE OF RULE FILING:

   Amendments to Subchapter XI, Low Emission Vehicle Program, Vermont Air Pollution Control Regulations

2. ADOPTING AGENCY:

   Agency of Natural Resources

3. PRIMARY CONTACT PERSON:
   (A PERSON WHO IS ABLE TO ANSWER QUESTIONS ABOUT THE CONTENT OF THE RULE).

   Name: Tom Moye

   Agency: Agency of Natural Resources

   Mailing Address: Vermont Dept. of Environmental Conservation, Air Pollution Control Division, Davis Building - 2nd Floor, One National Life Drive

   Montpelier, VT 05620-3802

   Telephone: 802 279 - 5327 Extension: Fax: 802 828 - 1250

   E-Mail: tom.moye@state.vt.us

   Web URL*(WHERE THE RULE WILL BE POSTED)*:
   http://www.anr.state.vt.us/air/htm/proposedamendments.htm

4. SECONDARY CONTACT PERSON:
   (A SPECIFIC PERSON FROM WHOM COPIES OF FILINGS MAY BE REQUESTED OR WHO MAY ANSWER QUESTIONS ABOUT FORMS SUBMITTED FOR FILING IF DIFFERENT FROM THE PRIMARY CONTACT PERSON).

   Name: Elaine O'Grady

   Agency: Agency of Natural Resources

   Mailing Address: Vermont Dept. of Environmental Conservation, Air Pollution Control Division, Davis Building - 2nd Floor, One National Life Drive

   Montpelier, VT 05620-3802

   Telephone: 802 343 - 7221 Extension: Fax: 802 828 - 1250

   E-Mail: elaine.ogrady@state.vt.us

5. LEGAL AUTHORITY / ENABLING LEGISLATION:
   (THE SPECIFIC STATUTORY OR LEGAL CITATION FROM SESSION LAW INDICATING WHO THE ADOPTING ENTITY IS AND THUS WHO THE SIGNATORY SHOULD BE. THIS SHOULD BE A SPECIFIC CITATION NOT A CHAPTER CITATION).
   10 V.S.A. §§ 554, 558, and 567

6. CONCISE SUMMARY **(150 WORDS OR LESS)**:

The Agency is proposing amendments to its low emission vehicle (LEV) rules, which incorporate by reference California's motor vehicle emission standard regulations. Vermont first adopted California's vehicle emission standards in 1996, and the Agency periodically amends its LEV rules to remain consistent with California's emission standards. The proposed amendments to Vermont's LEV rules would adopt the next generation of Zero Emission Vehicle (ZEV) requirements for model years 2018-2025 and minor revisions to clarify existing requirements.

7. EXPLANATION OF WHY THE RULE IS NECESSARY:

Motor vehicles are the largest source of smog-forming pollutants and greenhouse gas (GHG)emissions in Vermont. Under the federal Clean Air Act (CAA), California is the only state authorized to establish automobile emissions standards, but the CAA allows other states to adopt emission standards that are identical to California's. Vermont first adopted California's standards in 1996 and periodically adopts amendments to maintain consistency with the California standards and the CAA's identicality requirement. Adopting California's motor vehicle emission standards ensures that the cleanest cars are available in Vermont and is also part of a coordinated effort to reduce pollution from motor vehicles in other states (e.g., CT, ME, MA, NJ, NY, and RI) across the region. In addition, the proposed rule will play a significant role in meeting Vermont's GHG climate change and renewable energy goals.

8. LIST OF PEOPLE, ENTERPRISES AND GOVERNMENT ENTITIES AFFECTED BY THIS RULE:

Automobile consumers; automobile industry; other businesses; and state agencies.

9. BRIEF SUMMARY OF ECONOMIC IMPACT**(150 WORDS OR LESS)**:

The anticipated costs of the proposed rule are higher purchase prices of advanced technology vehicles, such as battery electric and plug-in hybrid electric vehicles. However, reduced operating costs, largely from reduced fuel consumption, are expected to offset the increase in vehicle price over the life of the vehicle. Because consumers will

likely spend some of their savings on other consumer products and services, some Vermont businesses will benefit from the proposed rule. In addition, the proposed rule is likely to benefit companies specializing in electric vehicles and charging equipment. On the other hand, gas tax revenues and businesses in the gasoline distribution sector will likely be impacted. Finally, the proposed rule also provides some non-monetized societal benefits from reduced emissions of criteria pollutants and greehouse gases.

10. A HEARING IS SCHEDULED .

11. HEARING INFORMATION
(THE FIRST HEARING SHALL BE NO SOONER THAN 30 DAYS FOLLOWING THE POSTING OF NOTICES ONLINE).

IF THIS FORM IS INSUFFICIENT TO LIST THE INFORMATION FOR EACH HEARING PLEASE ATTACH A SEPARATE SHEET TO COMPLETE THE HEARING INFORMATION NEEDED FOR THE NOTICE OF RULEMAKING.

Date: 9/4/2013

Time: 06:00 PM

Location: Auditorium in the Pavilion Office Building,

109 State Street, Montpelier, Vermont

Date:

Time: PM

Location:

Date:

Time: PM

Location:

Date:

Time: PM

Location:

12. DEADLINE FOR COMMENT (NO EARLIER THAN 7 DAYS FOLLOWING LAST HEARING):

9/11/13

13. KEYWORDS (PLEASE PROVIDE AT LEAST 3 KEYWORDS OR PHRASES TO AID IN THE SEARCHABILITY OF THE RULE NOTICE ONLINE).

motor vehicle
low emission vehicle
zero emission vehicle
air pollution
greenhouse gas

Run Spell Check

Administrative Procedures – Adopting Page

Instructions:

This form must be completed for each filing made during the rulemaking process:

- Proposed Rule Filing
- Final Proposed Filing
- Adopted Rule Filing
- Emergency Rule Filing

Note: To satisfy the requirement for an annotated text, an agency must submit the entire rule in annotated form with proposed and final proposed filings. Filing an annotated paragraph or page of a larger rule is not sufficient. Annotation must clearly show the changes to the rule.

When possible the agency shall file the annotated text, using the appropriate page or pages from the Code of Vermont Rules as a basis for the annotated version. New rules need not be accompanied by an annotated text.

1. TITLE OF RULE FILING:
   Amendments to Subchapter XI, Low Emission Vehicle Program, Vermont Air Pollution Control Regulations
2. ADOPTING AGENCY:
   Agency of Natural Resources
3. AGENCY REFERENCE NUMBER, IF ANY:
   N/A
4. TYPE OF FILING (*PLEASE CHOOSE THE TYPE OF FILING FROM THE DROPDOWN MENU BASED ON THE DEFINITIONS PROVIDED BELOW*):

   - **AMENDMENT -** Any change to an already existing rule, even if it is a complete rewrite of the rule, it is considered an amendment as long as the rule is replaced with other text.
   - **NEW RULE -** A rule that did not previously exist even under a different name.
   - **REPEAL** - The removal of a rule in its entirety, without replacing it with other text.

   This filing is **AN AMENDMENT OF AN EXISTING RULE .**

5. LAST ADOPTED (*PLEASE PROVIDE THE TITLE AND LAST DATE OF ADOPTION FOR THE EXISTING RULE)*:

   Air Pollution Control Regulations, Subchapter XI, Low Emission Vehicles, December 13, 2012

Run Spell Check

Administrative Procedures – Economic Impact Statement

Instructions:

In completing the economic impact statement, an agency analyzes and evaluates the anticipated costs and benefits to be expected from adoption of the rule. This form must be completed for the following filings made during the rulemaking process:

- Proposed Rule Filing
- Final Proposed Filing
- Adopted Rule Filing
- Emergency Rule Filing

Rules affecting or regulating public education and public schools must include cost implications to local school districts and taxpayers in the impact statement (see 3 V.S.A. § 832b for details).

The economic impact statement also contains a section relating to the impact of the rule on greenhouse gases. Agencies are required to explain how the rule has been crafted to reduce the extent to which greenhouse gases are emitted (see 3 V.S.A. § 838(c)(4) for details).

All forms requiring a signature shall be original signatures of the appropriate adopting authority or authorized person.

Certification Statement: As the adopting Authority of this rule (see 3 V.S.A. § 801 (b) (11) for a definition), I conclude that this rule is the most appropriate method of achieving the regulatory purpose. In support of this conclusion I have attached all findings required by 3 V.S.A. §§ 832a, 832b, and 838(c) for the filing of the rule entitled:

Rule Title: **Amendments to Subchapter XI, Low Emission Vehicle Program, Vermont Air Pollution Control Regulations**

_____, on _____.
(signature) (date)

Printed Name and Title:
Deb Markowitz, Secretary, Agency Of Natural Resources

BE AS SPECIFIC AS POSSIBLE IN THE COMPLETION OF THIS FORM, GIVING FULL INFORMATION ON YOUR ASSUMPTIONS, DATABASES, AND ATTEMPTS TO GATHER OTHER INFORMATION ON THE NATURE OF THE COSTS AND BENEFITS INVOLVED. COSTS AND BENEFITS CAN INCLUDE ANY TANGILBE OR INTANGIBLE ENTITIES OR FORCES WHICH WILL MAKE AN IMPACT ON LIFE WITHOUT THIS RULE.

1. TITLE OF RULE FILING:

Amendments to Subchapter XI, Low Emission Vehicle Program, Vermont Air Pollution Control Regulations

2. ADOPTING AGENCY:

Agency of Natural Resources

3. CATEGORY OF AFFECTED PARTIES:

LIST CATEGORIES OF PEOPLE, ENTERPRISES, AND GOVERNMENTAL ENTITIES POTENTIALLY AFFECTED BY THE ADOPTION OF THIS RULE AND THE ESTIMATED COSTS AND BENEFITS ANTICIPATED:

The rule will affect automobile consumers; automobile industry; other businesses; and some state agencies. The anticipated costs of the proposed rule are higher purchase prices of zero emission vehicles, such as battery electric and plug-in hybrid electric vehicles. However, these upfront costs will be offset by reduced operating costs. The payback period will depend on a number of factors such as the technology, the amount of electric vehicle miles driven, available incentives, etc. Part of the consumer savings on fueling costs is likely to be spent on other consumer products and services. Depending upon where the consumers direct their expenditures, some Vermont businesses will benefit from the proposed rule. In addition, the proposed rule will likely increase benefits to companies specializing in electric vehicles and electric charging infrastructure. On the other hand, electric vehicles will have some impact on gas tax revenues and businesses in the gasoline distribution sector. The proposed rule also provides some non-monetized societal benefits from reduced emissions of criteria pollutants and greenhouse gases. The zero emission vehicle (ZEV) standards that would be adopted by this rule are part of California's Advanced Clean Cars Program. Vermont adopted the other emission standards that are part of California's Advanced Clean Cars Program (i.e., standards for smog-forming pollutants and for greenhouse gases) in 2012 but postponed adoption of the ZEV standards. Additional information and a more detailed description of the anticipated costs and benefits of adopting the full suite of the California Advanced

Clean Cars Program emission standards is provided in the attached "Background and Technical Support Document."

4. IMPACT ON SCHOOLS:

INDICATE ANY IMPACT THAT THE RULE WILL HAVE ON PUBLIC EDUCATION, PUBLIC SCHOOLS, LOCAL SCHOOL DISTRICTS AND/OR TAXPAYERS:

The proposed rule does not regulate public schools and is not expected to have any unique impacts on schools. The proposed rule does not apply to school buses or other heavy duty vehicles. With respect to the motor vehicles affected by the rule, consumers, including schools, would be expected to pay incrementally higher prices for zero emission vehicles, such as battery electric vehicles and plug-in hybrid electric vehicles, but save on operating costs.

5. COMPARISON:

COMPARE THE ECONOMIC IMPACT OF THE RULE WITH THE ECONOMIC IMPACT OF OTHER ALTERNATIVES TO THE RULE, INCLUDING NO RULE ON THE SUBJECT OR A RULE HAVING SEPARATE REQUIREMENTS FOR SMALL BUSINESS:

As described in Sections I and II of the attached "Background and Technical Support Document," Vermont is preempted by the federal Clean Air Act from adopting its own motor vehicle emissions standards, but may adopt standards that are identical to California's. Thus, the only alternative to the proposed rule is no rule. Adopting this rule will guarantee that the cleanest cars and most advanced technology vehicles are available for sale to Vermonters, guard against allegations that Vermont's regulations do not meet the requirement in Section 177 of the Clean Air Act that Vermont's emission standards be identical to California emission standards, and ensure consistency with the ZEV programs adopted by other states in the region, such as Connecticut, Maine, Massachusetts, New Jersey, New York, and Rhode Island. Thus, in the Agency's view, not adopting the proposed amendments is not a practical alternative. Furthermore, the proposed rule regulates automobile manufacturers and does not include any requirements for small businesses.

6. FLEXIBILITY STATEMENT:

COMPARE THE BURDEN IMPOSED ON SMALL BUSINESS BY COMPLIANCE WITH THE RULE TO THE BURDEN WHICH WOULD BE IMPOSED BY ALTERNATIVES CONSIDERED IN 3 V.S.A. § 832a:

The proposed rule regulates automobile manufacturers and does not include any requirements for small businesses in Vermont. As discussed in Sections I and II of the attached "Background and Technical Support Document," adopting amendments to Vermont's Low Emission Vehicle rules that are not identical to

California's motor vehicle emission standards would violate section 177 of the federal Clean Air Act.

7. GREENHOUSE GAS IMPACT: *EXPLAIN HOW THE RULE WAS CRAFTED TO REDUCE THE EXTENT TO WHICH GREENHOUSE GASES ARE EMITTED, EITHER DIRECTLY OR INDIRECTLY, FROM THE FOLLOWING SECTORS OF ACTIVITIES*:

A. TRANSPORTATION —
IMPACTS BASED ON THE TRANSPORTATION OF PEOPLE OR PRODUCTS (e.g., "THE RULE HAS PROVISIONS FOR CONFERENCE CALLS INSTEAD OF TRAVEL TO MEETINGS" OR "LOCAL PRODUCTS ARE PREFERENTIALLY PURCHASED TO REDUCE SHIPPING DISTANCE."):
The proposed amendments will result in cleaner, advanced technology vehicles that provide for major reductions in greenhouse gas emissions.

B. LAND USE AND DEVELOPMENT —
IMPACTS BASED ON LAND USE AND DEVELOPMENT, FORESTRY, AGRICULTURE ETC. (e.g., "THE RULE WILL RESULT IN ENHANCED, HIGHER DENSITY DOWNTOWN DEVELOPMENT." OR "THE RULE MAINTAINS OPEN SPACE, FORESTED LAND AND /OR AGRICULTURAL LAND."):
No effect

C. BUILDING INFRASTRUCTURE —
IMPACTS BASED ON THE HEATING, COOLING AND ELECTRICITY CONSUMPTION NEEDS (e.g., "THE RULE PROMOTES WEATHERIZATION TO REDUCE BUILDING HEATING AND COOLING DEMANDS." OR "THE PURCHASE AND USE OF EFFICIENT ENERGY STAR APPLIANCES IS REQUIRED TO REDUCE ELECTRICITY CONSUMPTION."):
No effect

D. WASTE GENERATION / REDUCTION —
IMPACTS BASED ON THE GENERATION OF WASTE OR THE REDUCTION, REUSE, AND RECYCLING OPPORTUNITIES AVAILABLE (e.g., "THE RULE WILL RESULT IN REUSE OF PACKING MATERIALS." OR "AS A RESULT OF THE RULE, FOOD AND OTHER ORGANIC WASTE WILL BE COMPOSTED OR DIVERTED TO A 'METHANE TO ENERGY PROJECT'."):
No effect

E. OTHER —
IMPACTS BASED ON OTHER CRITERIA NOT PREVIOUSLY LISTED:
No effect

Run Spell Check

Administrative Procedures – Public Input Statement

Instructions:

In completing the public input statement, an agency describes what it did do, or will do to maximize the involvement of the public in the development of the rule. This form must be completed for the following filings made during the rulemaking process:

- Proposed Rule Filing
- Final Proposed Filing
- Adopted Rule Filing
- Emergency Rule Filing

1. TITLE OF RULE FILING:

   Amendments to Subchapter XI, Low Emission Vehicle Program, Vermont Air Pollution Control Regulations

2. ADOPTING AGENCY:

   Agency of Natural Resources

3. PLEASE LIST THE STEPS THAT HAVE BEEN OR WILL BE TAKEN TO MAXIMIZE PUBLIC INVOLVEMENT IN THE DEVELOPMENT OF THE PROPOSED RULE:

   As part of a regional effort to reduce air pollution from motor vehicles and maintain consistent programs, the Agency has coordinated with other northeastern states including Connecticut, Maine, Massachusetts, New Jersey, New York, and Rhode Island that have already adopted similar amendments to their regulations to remain consistent with the California standards. The Agency also met with a number of automobile manufacturers that would be subject to the rule. The Agency held a public hearing and accepted public comments on the proposed amendments to adopt the next generation of zero emission vehicle standards last year as part of another rulemaking and intends to hold another public hearing on the proposed rule amendments as part of this rulemaking. Details about the hearing will be made available in public notices as required by the Administrative Procedure Act. Additionally, the proposed rule and the rule adoption schedule will be available online at the Air Pollution Control Division's website.

4. BEYOND GENERAL ADVERTISEMENTS, PLEASE LIST THE PEOPLE AND ORGANIZATIONS THAT HAVE BEEN OR WILL BE INVOLVED IN THE DEVELOPMENT OF THE PROPOSED RULE:

   The Agency anticipates that the following people and organizations may be involved or interested in the rulemaking process: automobile manufacturers; automobile dealers; automobile consumers; service stations; businesses specializing in electric vehicles or charging equipment; state agencies such as the Department of Public Service, the Agency of Transportation, and the Health Department; and environmental and public health groups.

Run Spell Check

Administrative Procedures – Scientific Information Statement

Instructions:

In completing the Scientific Information Statement, an agency shall provide a brief summary of the scientific information including reference to any scientific studies upon which the proposed rule is based, for the purpose of validity.

This form is only required when a rule relies on scientific information for its validity.

1. TITLE OF RULE FILING:

   Amendments to Subchapter XI, Low Emission Vehicle Program, Vermont Air Pollution Control Regulations

2. ADOPTING AGENCY:

   Agency of Natural Resources

3. BRIEF EXPLANATION OF SCIENTIFIC INFORMATION:

   An explanation of the scientific information upon which this rule and a rule adopted last year (which collectively adopt the California Advanced Clean Car Program emission standards) is based, is provided in sections III (climate change) and IV (public health impacts) of the attached "Background and Technical Support Document."

4. CITATION OF SOURCE DOCUMENTATION OF SCIENTIFIC INFORMATION:

   California Air Resources Board, Staff Report: Initial Statement of Reasons (ISOR) for the Proposed Rulemaking, Public Hearing to Consider the "LEV III" Amendments (Dec. 7, 2011), available at http://www.arb.ca.gov/regact/2012/leviiighg2012/levisor.pdf

   IPCC. (2007a). Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press,

available at http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf

IPCC. (2007b). Technical Summary: Climate Change 2007: The Physical Science Basis, Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, available at https://www.ipcc-wg1.unibe.ch/publications/wg1-ar4/ar4-wg1-ts.pdf

U.S. Environmental Protection Agency, Ground Level Ozone Health Effects, available at http://www.epa.gov/air/ozonepollution/health.html

U.S. Environmental Protection Agency, Pollutants: Particulate Matter, available at http://www.epa.gov/otaq/invntory/overview/pollutants/pm.htm

Vermont Agency of Natural Resources, Resilience: A Report on the Health of Vermont's Environment (2011), available at http://www.anr.state.vt.us/anr/envrptsb/ANREnvReport2011.pdf

Vermont Climate Change Indicators , available at http://alanbetts.com/understanding-climate-change/topic/vermont-climate-change-indicators/

Vermont Greenhouse Gas Emissions Inventory Update 1990-2008, available at http://www.anr.state.vt.us/anr/climatechange/Pubs/Vermont%20GHG%20Emissions%20Inventory%20Update%201990-2008%20FINAL_09272010.pdf

5. INSTRUCTIONS ON HOW TO OBTAIN COPIES OF THE SOURCE DOCUMENTS OF THE SCIENTIFIC INFORMATION FROM THE AGENCY OR OTHER PUBLISHING ENTITY:

All of the source documents listed above are available online and an http:// address is provided above for each source. Hard copies may also be obtained by contacting the Agency's Air Pollution Control Division at 828-1288.

Run Spell Check

Administrative Procedures – Incorporation by Reference Statement

Instructions:

In completing the incorporation by reference statement, an agency describes any materials that are incorporated into the rule by reference and why the full text was not reproduced within the rule.

This form is only required when a rule incorporates materials by referencing another source without reproducing the text within the rule itself (e.g. federal or national standards, or regulations).

Copies of incorporated materials will be held by the Office of the Secretary of State until adoption or formal withdrawal of the rule is complete. Materials will be returned to the agency upon completion of the rule.

All forms requiring a signature shall be original signatures of the appropriate adopting authority or authorized person.

Certification Statement: As the adopting Authority of this rule (see 3 V.S.A. § 801 (b) (11) for a definition), I certify that the text of the matter incorporated has been reviewed by an official of the agency. I further certify that the agency has the capacity and intent to enforce the rule entitled:

Rule Title: Amendments to Subchapter XI, Low Emission Vehicle Program, Vermont Air Pollution Control Regulations

_____, on _____.
(signature) (date)

Printed Name and Title:

Deb Markowitz, Secretary, Agency of Natural Resources

1. TITLE OF RULE FILING:

   Amendments to Subchapter XI, Low Emission Vehicle Program, Vermont Air Pollution Control Regulations

2. ADOPTING AGENCY:

   Agency of Natural Resources

3. DESCRIPTION (*DESCRIBE THE MATERIALS INCORPORATED BY REFERENCE)*:

   Subchapter XI of the Vermont Air Pollution Control Regulations incorporates by reference the following sections of Title 13, California Code of Regulations: 1900, 1903, 1904, 1956.8(c), (g), and (h), 1960.1, 1960.5, 1961, 1961.1, 1961.2, 1961.3, 1962, 1962.1, 1962.2, 1962.3, 1964, 1965, 1968.1, 1968.2, 1976, 1978, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2046, 2047, 2062, 2101, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2222, 2235, and Appendix A to Article 2.1.

4. OBTAINING COPIES: *(EXPLAIN HOW THE MATERIAL(S) CAN BE OBTAINED BY THE PUBLIC, AND AT WHAT COST)*:

   The California Code of Regulations is available at no cost online at: http://www.calregs.com/linkedslice/default.asp?SP=CCR-1000&Action=Welcome

   The latest amendments to California's Advanced Clean Cars Program emission standards, which are not yet codified, are available at no cost online at:

   http://www.arb.ca.gov/msprog/consumer_info/advanced_clean_cars/consumer_acc.htm

   In addition, hard copies are available by contacting the Agency's Air Pollution Control Division.

5. MODIFICATIONS (*PLEASE EXPLAIN ANY MODIFICATION TO THE INCORPORATED MATERIALS E.G., WHETHER ONLY PART OF THE MATERIAL IS ADOPTED AND IF SO, WHICH PART(S)ARE MODIFIED)*:

There are no modifications to the material incorporated by reference.

6. REASONS FOR INCORPORATION BY REFERENCE (*EXPLAIN WHY THE AGENCY DECIDED TO INCORPORATE THE MATERIALS RATHER THAN REPRODUCE THE MATERIAL IN FULL WITHIN THE TEXT OF THE RULE*):

   The Agency decided not to reproduce the incorporated material in full in the text of the rule for the following reasons: (1) to ensure that Vermont's Low Emission Vehicle (LEV) Program is consistent with California's LEV Program, and, when applicable, to meet the requirement in Section 177 of the Clean Air Act that any motor vehicle emission standards adopted by Vermont must be identical to California's standards; (2) the material to be incorporated is too voluminous; and (3) to be consistent with past practice dating back to 1996.

7. THE INCORPORATED MATERIALS HAVE BEEN REVIEWED BY THE FOLLOWING OFFICIAL OF THE AGENCY:
   The materials have been reviewed by staff in the Mobile Sources section of the Agency's Air Pollution Control Division, on behalf of Air Pollution Control Director, Richard A. Valentinetti.

8. THE ADOPTING AGENCY REQUESTS THAT ALL COPIES OF INCORPORATED MATERIALS BE RETURNED TO THE AGENCY .

Run Spell Check

Air Pollution Control Division
Department of Environmental Conservation
Vermont Agency of Natural Resources

BACKGROUND AND TECHNICAL SUPPORT DOCUMENT FOR PROPOSED AMENDMENTS TO SUBCHAPTER XI, LOW EMISSION VEHICLE PROGRAM, VERMONT AIR POLLUTION CONTROL REGULATIONS

July 5, 2012

BACKGROUND AND TECHNICAL SUPPORT DOCUMENT FOR PROPOSED AMENDMENTS TO SUBCHAPTER XI, LOW EMISSION VEHICLE PROGRAM, VERMONT AIR POLLUTION CONTROL REGULATIONS

The Agency of Natural Resources is proposing amendments to its low emission vehicle (LEV) rules set forth in subchapter XI of Vermont's Air Pollution Control Regulations, which incorporate by reference California's motor vehicle emission standard regulations. Vermont first adopted California's vehicle emission standards in 1996 and has periodically amended its LEV regulations since then to remain consistent with California's emission standard regulations. The proposed amendments to Vermont's LEV rules would adopt the next generation of emission standards by incorporating recent changes made to California's vehicle emission standard regulations.

I. BACKGROUND

In 1967, the federal Clean Air Act established the framework for controlling mobile source emissions in the United States. This framework provides for two sets of motor vehicle emission standards by directing EPA to establish emission standards under Section 202,[1] and by authorizing California to set its own emission standards, which must be at least as protective as the federal standards, under Section 209(b).[2] With the exception of California, states are preempted by Section 209(a) from setting or enforcing their own vehicle emission standards.[3] Congress granted California this special status because the state was then, and still is, the nation's leader in controlling pollution from motor vehicles. As one court stated, California "was tasked with a leadership role in developing technological strategies to address air pollution and acting as a national 'laboratory for innovation.'" Motor and Equipment Mfrs. Ass'n, Inc. v. E.P.A., 627 F.2d 1095, 1111 (D.C. Cir. 1979).

Concerned that federal preemption may prevent effective protection of public health in some states, H.Rep. No. 294, 95th Cong., 1st Sess. 309-10 (1977), Congress amended the Clean Air Act in 1977 by adding section 177, which gives other states, including Vermont, the right to adopt emission standards that are identical to the California emission standards.[4] Congress enacted section 177 so that "states attempting to combat their own pollution problems could adopt California's more stringent emission controls." *Motor Vehicles Mfrs Ass'n v. New York State Dept. of Envtl. Conservation*, 17 F.3d 521, 531 (2d Cir. 1994) (citing H.Rep. No. 294, 95th Cong., 1st Sess. 309-10 (1977)).

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[1] Clean Air Act, Title II – Emission Standards for Moving Sources, Part A – Section 202, 42 U.S.C. § 7521.

[2] Clean Air Act, Title II – Emission Standards for Moving Sources, Part A – Section 209(b), 42 U.S.C. §7543(b).

[3] Clean Air Act, Title II – Emission Standards for Moving Sources, Part A – Section 209(a), 42 U.S.C. §7543(a).

[4] Clean Air Act, Title I – Air Pollution Prevention and Control, Part D – Section 177, 42 U.S.C. §7507.

To reduce smog-forming emissions and to stay in compliance with the national ambient air quality standards, Vermont first exercised its authority under Section 177 in 1996 to adopt California's low emission vehicle (LEV) standards for new passenger cars and light-duty trucks sold in Vermont. Since then, Vermont has adopted California's LEV standards for medium-duty vehicles, California's zero emission vehicle (ZEV) requirements, California's greenhouse gas (GHG) emission standards, and various revisions to California's standards to satisfy the requirement in Section 177 that Vermont's standards are identical to the California standards. In short, Vermont's adoption of California's standards has played a critical role in controlling pollution from motor vehicles in Vermont for over a dozen years. Moreover, California's emission standards are part of a regional effort to reduce pollution from motor vehicles. Indeed, Vermont works closely with and coordinates implementation of the standards with other states in the region that have also adopted California's standards, such as Connecticut, Maine, Massachusetts, New Jersey, New York, and Rhode Island.

II. NEED FOR AND SUMMARY OF AMENDMENTS

The proposed amendments are needed to adopt the next generation of California motor vehicle emission standards. As described above, the Agency has revised its LEV rules set forth in subchapter XI of Vermont's Air Pollution Control Regulations numerous times to remain consistent with California's vehicle emission standard regulations and to satisfy Section 177's identicality requirement. Since Vermont last amended its LEV rules in 2008, California has made numerous changes to its vehicle emission standard regulations, including "LEV III" amendments, ZEV amendments, and amendments to the greenhouse gas standards for model year 2009-2016 passenger vehicles. These amendments are briefly summarized below. As with previous amendments to Vermont's LEV rules, the Agency needs to amend its LEV rules to incorporate these recent amendments to California's vehicle emission standard regulations to satisfy Section 177's identicality requirement. The proposed amendments to Vermont's vehicle emission labeling requirements are needed to comply with 10 V.S.A. § 579, as described below.

In addition, the proposed amendments will help Vermont to achieve its greenhouse gas reduction goals set forth in 10 V.S.A. § 578(a) and renewable energy goals set forth in Vermont's Comprehensive Energy Plan. Due to the state's rural character and small industrial base, transportation accounts for nearly half of the greenhouse gas emissions and one third of the energy use in Vermont. As described in Sections III and IV, the proposed amendments will result in significant reductions in greenhouse gas emissions. The vehicle technologies expected to be used in compliance with the amendments typically use fuel more efficiently and/or use alternative fuels with lower carbon emissions. Thus, the proposed amendments will also help to reduce the transportation sector's reliance on petroleum fuels and shift the demand to more renewable energy sources. Thus, the proposed amendments will help the state to achieve the Comprehensive Energy Plan's

overall goal that 90% of the energy consumed in Vermont be renewable energy by 2050 and transportation-specific goal to reduce petroleum consumption in the state.[5]

A. LEV III Amendments

The California Air Resources Board recently adopted a comprehensive set of "LEV III" amendments to the California LEV regulations. The LEV III amendments include the next generation of criteria pollutant emission standards; revisions to vehicle labeling requirements; minor changes to the on-board diagnostics regulations (OBD II regulations); and the next generation of greenhouse gas emission standards. The LEV III amendments that the Agency is proposing to adopt are briefly described below.

The LEV III criteria pollutant emission standards will reduce fleet average emissions from new passenger cars, light-duty trucks, and medium-duty passenger vehicles starting in model year 2015 to a level currently only achieved by a fraction of today's vehicle fleet by model year 2025. The next generation of criteria pollutant emission standards will: replace separate non-methane organic gas (NMOG) and oxides of nitrogen standards (NOx) with combined NMOG plus NOx standards; increase full useful life durability requirements from 120,000 miles to 150,000 miles, which guarantees vehicles operate longer at these proposed extremely low emission levels; create a backstop to assure continued production of super-ultra-low-emission vehicles after partial zero-emission vehicles are moved from the ZEV program to the LEV III program in 2018; establish more stringent particulate matter standards for light- and medium-duty vehicles; establish more stringent supplemental federal test procedure (SFTP) standards for passenger cars and light-duty trucks and, for the first time, require medium-duty vehicles to meet SFTP standards; establish more stringent evaporative emission standards; and allow manufacturers to "pool" fleet average NMOG plus NOx emissions from California and all other states that adopt California's LEV III standards pursuant to section 177 of the Clean Air Act.[6] Collectively, these amendments are expected to reduce emissions of criteria pollutants from new light duty and medium duty vehicles by approximately 70% by 2030. Other minor amendments, such as in-use verification testing requirements, reporting requirements, etc., align existing related procedures with the principal amendments described above.

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[5] Vermont Department of Public Service, Comprehensive Energy Plan, at 280 (Dec. 2011). One of the key strategies that the Plan identifies to meet the renewable energy goal in the transportation sector is "Maintain the state's commitment to the Vermont low emission vehicle (LEV) program, including its zero emission vehicle (ZEV) requirements."

[6] A detailed description of the amendments to California's exhaust emission standards for criteria pollutants is provided in the California Air Resources Board, Staff Report: Initial Statement of Reasons (ISOR) for the Proposed Rulemaking, Public Hearing to Consider the "LEV III" Amendments, 4-29 (Dec. 7, 2011) (hereinafter "LEV III ISOR"). A detailed description of the amendments to California's evaporative emission standards for criteria pollutants is provided in the LEV III ISOR at 46-52.

California also amended its vehicle labeling requirements to harmonize with the federal labeling requirements.[7] The new label will more accurately reflect the emission performance of vehicles and make it more useful to consumers when considering the purchase of a vehicle. Vermont is proposing to adopt California's vehicle labeling amendments to comply with 10 V.S.A. § 579, which establishes requirements for Vermont's vehicle emissions labeling program for new motor vehicles. According to 10 V.S.A. § 579(b), "A label that complies with the requirements of the California vehicle labeling program shall be deemed to meet the requirements of this section and the rules adopted hereunder for the content of labels."

California's minor amendments to the OBD II regulation include relaxation of a few requirements (e.g., delays to the required start dates) in recognition of delays in technology development and clarification to a few existing requirements.[8]

Finally, California's LEV III amendments include the next generation of GHG emission standards for passenger vehicles. These new standards are phased in between the 2017 and 2025 model years. California's new GHG regulation sets emission standards for carbon dioxide (CO_2), CH_4 (methane), and nitrous oxide (N_2O); uses a footprint-based approach to reduce emissions from new light-duty vehicles and medium-duty passenger vehicles; provides credits for improvements to the vehicle air conditioning system (either from the use of a refrigerant with a low Global Warming Potential or by incorporating improvements to the efficiency of the system); provides credits for technologies that reduce CO_2 emissions but are not measured on the applicable test cycles; and provides credits for technology innovations on the largest of pickup trucks.[9] By 2025, the standard targets are expected to reduce car CO_2 emissions by about 36% and truck CO_2 emissions by about 32% from their 2016 levels.[10]

B. ZEV Amendments

The Agency is also proposing to adopt recent amendments to the California ZEV regulations, including amendments to the current ZEV regulation for 2009-2017 model years, and the ZEV regulation for 2018 and subsequent model years. The major amendments to each of these ZEV regulations are described below.

2009 through 2017 Model Year ZEV Amendments

The amendments to the current ZEV regulation for 2009 through 2017 model year make minor mid-course corrections and clarifications, and will enable manufacturers to

[7] A detailed description of these modifications is provided in the LEV III ISOR at 59-61.

[8] A detailed description of these modifications is provided in the LEV III ISOR at 62-72.

[9] A detailed description of the new GHG emission standards is provided in the LEV III ISOR at 97-101.

[10] LEV III ISOR at 98.

successfully meet 2018 and subsequent model year requirements. Many of the amendments are aimed at providing compliance flexibility, such as the removal of carry forward credit limitations for ZEVs to allow manufacturers to bank ZEV credits indefinitely for use in later years; a slight reduction of the 2015 through 2017 credit requirements for intermediate volume manufacturers (manufacturers that produce less than 60,000 vehicles each year) to allow them to prepare for requirements in 2018; extending the "travel" provision, which allows ZEVs placed in any state that has adopted the California ZEV regulation to count towards the ZEV requirement in all such states through 2017; and providing an optional Section 177 state ZEV compliance path. The amendments to the ZEV regulation for model years 2009-2017 also increase credits for Type V (300 mile range fuel cell vehicles) ZEVs to appropriately incentivize this longer term technology. In addition, the amendments allow manufacturers to meet up to half of their minimum ZEV requirement with a new vehicle category (Type I.5x and Type IIx) for vehicles that are primarily battery electric operated and equipped with a small non-ZEV fuel auxiliary power unit for limited range extension. [11]

2018 and Subsequent Model Year ZEV Amendments

The primary objective of the ZEV amendments for 2018 and subsequent model years is to achieve commercialization of ZEVs and plug-in hybrid electric vehicles (PHEVs), which California now refers to as transitional zero emission vehicles (TZEVs). As described below, this objective is brought about by pushing technology to higher volume production to achieve cost reductions and by simplifying the regulation.[12]

First, the ZEV amendments for 2018 and subsequent model years increase the requirements to push ZEVs and TZEVs to over 15 percent of new sales by 2025. This will ensure production volumes are at a level sufficient to bring battery and fuel cell technology down the cost curve and reduce incremental ZEV prices.

Second, the amendments shift the focus of the 2018 and subsequent model year requirements onto ZEVs and TZEVs by removing partial zero emission allowance vehicle (PZEV, near-zero emitting conventional technology vehicles) and advanced technology partial zero emission allowance vehicle (AT PZEV, typically non-plug-in hybrid electric vehicles) credits as compliance options because these technologies are now commercialized and their emissions are better reflected in the LEV III program. Manufacturers will be allowed to use banked PZEV and AT PZEV credits earned in 2017 and previous model years, but the amendments discount the credits and place a cap on usage in 2018 and subsequent model years.

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[11] A detailed description of the ZEV amendments for the 2009-2017 model years is available in the California Air Resources Board, Staff Report: Initial Statement of Reasons (ISOR), 2012 Proposed Amendments to the California Zero Emission Vehicle (ZEV)Program Regulations, 13-24 (Dec. 7, 2011) (hereinafter "ZEV ISOR").

[12] A detailed description of the ZEV amendments for the 2018 and subsequent model years is available in the ZEV ISOR at 25-43.

Third, a number of amendments will result in applying the ZEV regulation to a larger number of manufacturers beginning in model year 2018. The amendments include revising the manufacturer size definitions and ownership requirements, ultimately resulting in applying the ZEV regulation to manufacturers that represent approximately 97 percent of the light duty vehicle market, and modifying the transition periods for manufacturers switching size categories.

Fourth, the amendments simplify the credit system. For example, credits for ZEVs will be based on range, with 50 mile battery electric vehicles earning one credit each and 350 mile fuel cell vehicles earning four credits each. The range of credits reflects the utility of the vehicle (i.e., the zero emitting miles it may travel) and its expected timing for commercialization. In addition, credits for TZEVs will be based on the vehicle's zero-emission range capability, and ability to perform ten miles on a more aggressive driving schedule.

Fifth, the amendments end the "travel" provision for battery electric vehicles after model year 2017, and extend the "travel" provision for fuel cell vehicles until sufficient complementary polices are in place in states that have adopted the California ZEV regulation. This will increase the number of battery electric vehicles available in Section 177 States, while allowing fuel cell vehicle technology to continue to mature, and providing time for these states to build infrastructure and put in place incentives to foster fuel cell vehicles.

Finally, there are amendments aimed at providing manufacturers with compliance flexibility, such as (1) allowing manufacturers who systematically over comply with the proposed LEV III GHG fleet standard to offset a portion of their ZEV requirement in 2018 through 2021 model years; and (2) providing manufacturers with an optional Section 177 state ZEV compliance path.

C. Amendments to GHG Emission Standards for Model Year 2009-2016 Passenger Vehicles

The Agency is also proposing to adopt amendments to California's existing GHG emission standards for passenger vehicles adopted in 2009 and 2010. These regulations apply on a fleetwide basis to large-volume manufacturers of 2009 through 2016 model year new passenger motor vehicles. The 2009 amendments provide affected manufacturers with the ability to demonstrate compliance with the fleet average greenhouse gas emission requirements by "pooling" the sales in California and all other states that have adopted California's greenhouse gas emission standards pursuant to section 177 of the Clean Air Act. The 2009 amendments also allow manufacturers to use data from the federal Corporate Average Fuel Economy (CAFE) program to demonstrate compliance with the regulations.[13] The 2010 amendments allow manufacturers that comply with the U.S.

[13] For a more detailed description of these amendments, see California Air Resources Board, Staff Report: Initial Statement of Reasons for Proposed Rulemaking,, Public Hearing to Consider

Environmental Protection Agency (U.S. EPA) greenhouse gas vehicle emission standards to be deemed as compliant with California's standards for the 2012 through 2016 model years.[14]

III. CLIMATE CHANGE

Climate change is a long-term shift in the climate of a specific location, region or planet. The shift is measured by changes in features associated with average weather, such as temperature, wind patterns, and precipitation. Available scientific evidence strongly supports the conclusion that most of the increase in average global temperatures since the mid-20th century is very likely due to human activities that are altering the chemical composition of the atmosphere through the buildup of greenhouse gases, principally CO_2, CH_4, N_2O, and HFCs.[15] These gases play a role in the "greenhouse effect", a natural phenomenon that helps regulate the temperature of the Earth. Human activities, primarily the burning of fossil fuels, which emit greenhouse gases into the atmosphere, and deforestation, which removes trees that sequester carbon dioxide and disturbs the underlying soil causing further carbon release to the atmosphere, have greatly intensified the natural greenhouse effect, causing global warming. Emissions of greenhouse gases due to human activities have increased globally since pre-industrial times, with an increase of 70 percent between 1970 and 2004.[16]

Global warming is no longer a matter of the future or of places far away. Climate change is happening now and is already evident in Vermont. Climate change is a critical issue facing Vermont's citizens, ecosystems, and economic vitality. During the past 50 years, Vermont's climate has shown a clear warming trend in all seasons, and especially in winter. Average winter temperatures have risen about 4.5 degrees Fahrenheit over this period, and average

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Proposed Amendments to Consider New Passenger Vehicle Greenhouse Gas Emission Standards (Aug. 2009).

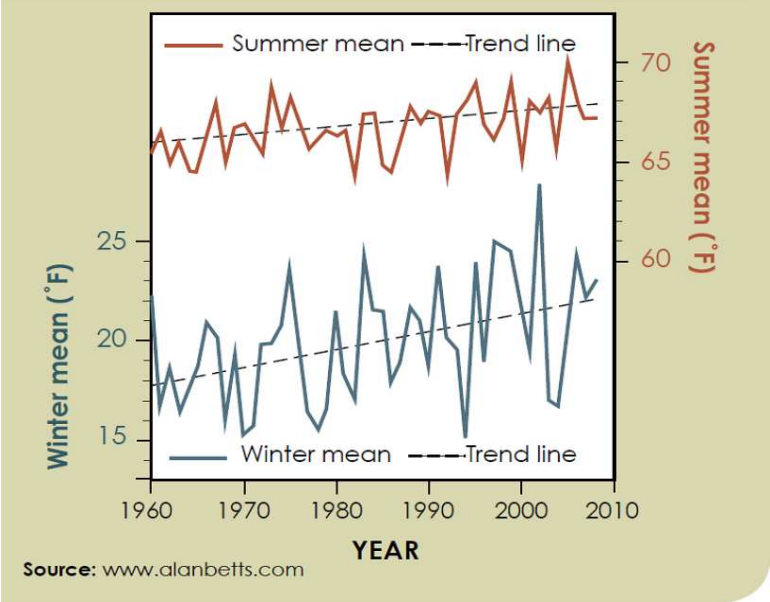
[14] For a more detailed description of these amendments, see California Air Resources Board, Staff Report: Initial Statement of Reasons for Proposed Rulemaking,, Public Hearing to Consider Proposed Amendments to Consider New Passenger Vehicle Greenhouse Gas Emission Standards for Model Years 2012-2016 to Permit Compliance Based on Federal Greenhouse Gas Emission Standards (Jan. 2010).

[15] IPCC. (2007b). Technical Summary: *Climate Change 2007: The Physical Science Basis, Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press. https://www.ipcc-wg1.unibe.ch/publications/wg1-ar4/ar4-wg1-ts.pdf

[16] IPCC. (2007a). *Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press. http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf.

summer temperatures have risen about 2 degrees Fahrenheit.[17] This warming trend is projected to continue in the future.

Figure 1. Summer and winter temperature trends in Vermont since 1960



Despite the variability in our weather from day to day or year to year, it is clear that natural processes in Vermont are responding to the warming trend. Data analyzed by atmospheric researcher Alan Betts show the following changes that have occurred, *on average*, over the last 40 years:[18]

- The growing season for frost-sensitive plants has increased by two weeks.
- The ice-out of Vermont's small lakes has come roughly three days earlier per decade, and the first freeze-up has occurred about four days later per decade. As a result, lakes and ponds, such as Stiles Pond in northeastern Vermont, are frozen each winter for about four weeks less than they were 40 years ago.
- The first leaf of Vermont lilacs, an indicator of early spring, is also occurring earlier, by an average of approximately three days per decade.

Other changes in Vermont's climate provide harbingers of what we can expect in the future. Average annual precipitation has increased by 15 to 20 percent in the past 50 years. Across the Northeast, heavy downpours have increased in frequency and intensity too;

[17] Vermont Agency of Natural Resources, *Resilience: A Report on the Health of Vermont's Environment* (2011), available at http://www.anr.state.vt.us/anr/envrptsb/ANREnvReport2011.pdf

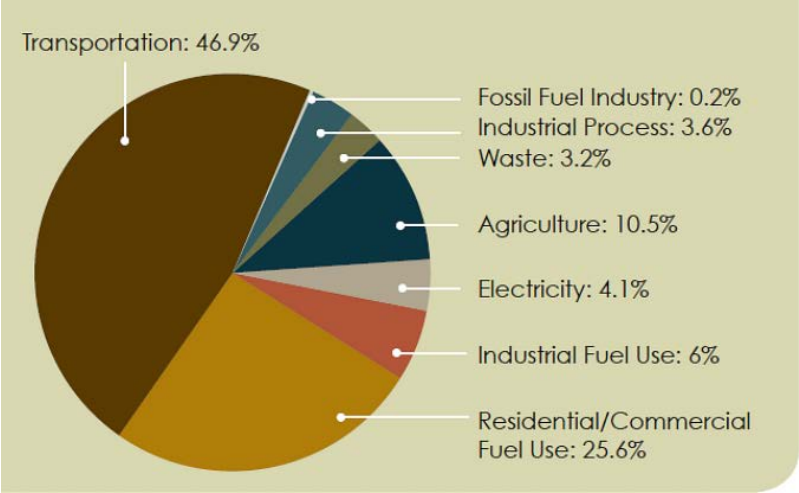
[18] *Vermont Climate Change Indicators* , available at http://alanbetts.com/understanding-climate-change/topic/vermont-climate-change-indicators/

these storms now release 67 percent more rain than they did 50 years ago.[19] These trends could increase flooding in Vermont in the future. Changes in local climate will also affect Vermont's environment and economy by affecting activities dependent on seasonal climate patterns, such as maple sugaring, farming, Vermont's spectacular fall foliage, timber harvesting, and winter sports.

In addition to environmental and economic impacts, climate change has the potential to significantly impact the health of Vermonters. Climate change may alter the frequency, timing, intensity, and duration of extreme weather events (meteorological events that have a significant impact on local communities). Injury and death are the direct health impacts most often associated with natural disasters. In addition, climate change has the potential to influence asthma symptoms, the incidence of infectious disease, and the potential to affect humans indirectly through impacts on food and water supplies and quality.

Vermont has an ambitious goal, set forth in 10 V.S.A. § 578(a), to reduce statewide emissions of greenhouse gases (GHG) to 50 percent below the level of our 1990 emissions by the year 2028, and if practicable using reasonable efforts, by 75 percent by January 1, 2050. As depicted in the figure below, transportation accounts for nearly half of Vermont's GHG emissions.[20] Undoubtedly then, efforts to meet Vermont's statutory greenhouse gas reduction goals will have to address transportation emissions.

Figure 2. Vermont Gross GHG Emissions by Sector (2008)



[19] Vermont Agency of Natural Resources, *Resilience: A Report on the Health of Vermont's Environment* (2011), available at http://www.anr.state.vt.us/anr/envrptsb/ANREnvReport2011.pdf

[20] *Vermont Greenhouse Gas Emissions Inventory Update 1990-2008*, available at http://www.anr.state.vt.us/anr/climatechange/Pubs/Vermont%20GHG%20Emissions%20Inventory%20Update%201990-2008%20FINAL_09272010.pdf

Transportation emissions have declined in Vermont since 2004, as the total number of miles driven in the state has declined. While it is uncertain whether the trend in decreasing vehicle miles travels will continue, additional reductions are expected as a result of Vermont's adoption of California's GHG emissions standards for model year 2009-2016 passenger vehicles and zero emission vehicle (ZEV) requirements. These provisions of Vermont's Low Emission Vehicle (LEV) program promote the use of clean advanced technology vehicles, including those powered by higher-efficiency internal combustion, hybrid electric, and batteries. The proposed amendments to adopt California's GHG emissions standards for model year 2017-2025 passenger vehicles and revisions to California's ZEV requirements will lead to further reductions of GHG emissions.

Existing GHG standards for model year 2009-2016 passenger vehicles, which Vermont adopted in 2005, established the original technical basis for the proposed GHG standards. The proposed rule amendments phase in more stringent GHG standards for model years 2017-2025. These new GHG standards are expected to reduce new passenger vehicle carbon dioxide emissions from their model year 2016 levels by approximately 32 to 36 percent by model year 2025, depending on the mix of vehicles sold.[21] These reductions will be achieved through a mix of existing technologies, the use of stronger and lighter materials, and more efficient drivetrains and engines.

Ultimately, some impacts from climate change will be impossible to avoid because the greenhouse gases already in the atmosphere will persist for a very long time. However, what the future holds will depend in large measure on our ability to reduce future GHG emissions to minimize climate change impacts and to adapt to those unavoidable impacts of climate change.

IV. AIR QUALITY AND PUBLIC HEALTH IMPACTS

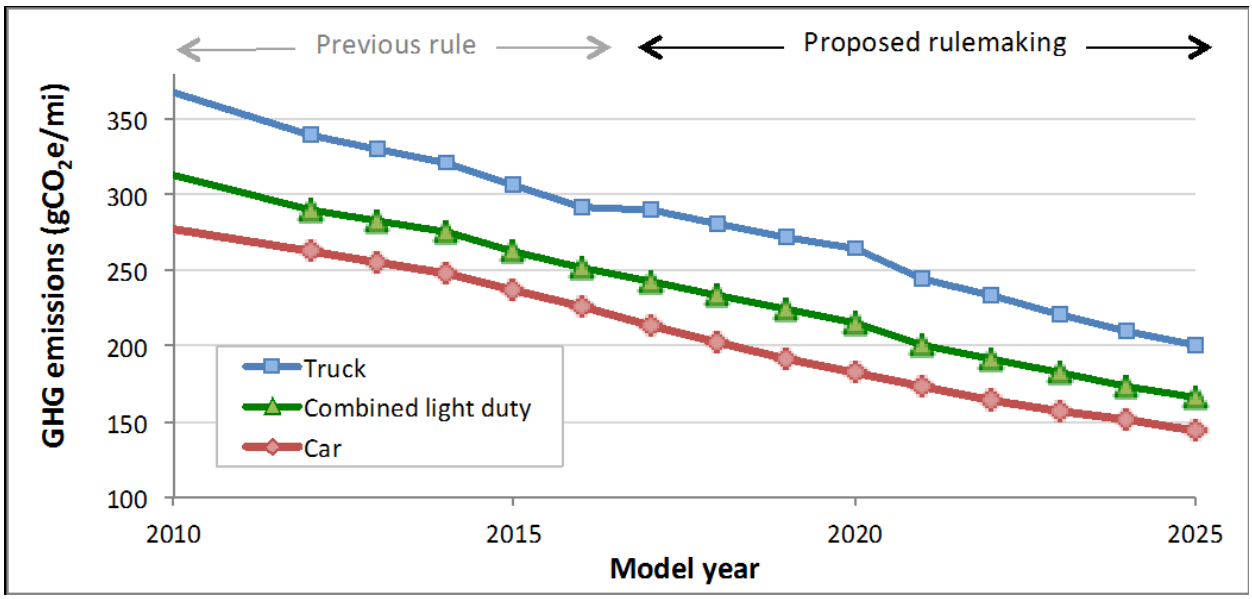
The proposed amendments to adopt the next generation of California's emission standards will result in significant reductions of smog-causing pollutants and greenhouse gas emissions from motor vehicles. The new criteria pollutant emissions standards for model years 2015-2025 and the new greenhouse gas emissions standards for model years 2017-2025 are fleet average requirements. The revised ZEV mandate requires ZEVs to be sold into the fleet, but the ZEVs do not provide additional emissions benefits beyond what the fleet average standards require.

Because the proposed amendments are in the form of standards that are phased in for new vehicles sold in the future, emissions benefits are initially small and increase over time as the standards are fully phased in and as new vehicles replace older vehicles in the vehicle fleet. Emission benefits will be fully realized in the 2035-2040 timeframe when nearly all vehicles operating in the fleet are expected to be compliant with the new LEV III standards. By 2035, the California Air Resources Board estimates the new standards will reduce

[21] LEV III ISOR at 98.

reactive organic gas (ROG) or non-methane organic gas (NMOG) emissions[22] by an additional 34 percent, NOx emissions by an additional 37 percent, and PM2.5 emissions by 10 percent, compared to 2035 without the new standards in effect.[23] The Agency expects that adopting the new LEV III criteria pollutant standards in Vermont will have similar emission benefits in Vermont.

The proposed amendments also provide for major reductions in greenhouse gas emissions from passenger vehicles. The basic structure of the greenhouse gas standards includes two categories – passenger cars and light-duty trucks. The new GHG standard targets would reduce passenger car CO_2 emissions by about 36% from model year 2017 through 2025, from about 226 to about 144 g CO_2/mile. In that same timeframe, light-duty truck CO_2 emissions would be reduced by about 32%, from about 292 to about 200 g CO_2 /mile.[24] The figure below illustrates the basic target emission trends that are projected from the car and truck GHG standards.



Source: CARB ISOR for LEV III

With respect to upstream emissions, the California Air Resources Board concluded the regulated pollutants will have relatively small emission impacts upstream from the regulated vehicles. The upstream emission impacts (i.e., excluding tailpipe emissions) are small but would result in greater emission reduction benefits than would be projected when just analyzing the vehicles. This is the result of the emission benefits of reduced

[22] ROGs are photochemically reactive chemical gases, composed of non-methane hydrocarbons and sometimes referred to as non-methane organic gases (NMOGs), that contribute to the formation of smog.

[23] LEV III ISOR at 176.

[24] LEV III ISOR at 98.

petroleum upstream emissions for GHG, HC, NO_x, and PM outweighing the smaller cumulative emission increases from the vehicle manufacturing, electricity generation, and hydrogen production emissions from advanced vehicle technologies that are projected to be deployed for compliance with the proposed regulation.[25]

As described above, the proposed rule will result in reductions in ROG, NO_x, $PM_{2.5}$, and GHG emissions. There are numerous health impacts associated with emissions of these pollutants. Thus, reducing ROG, NO_x, $PM_{2.5}$, and GHG emissions from motor vehicles will have public health and environmental benefits. The health effects associated with ROG, NO_x, and $PM_{2.5}$ emissions are briefly described below. The potential environmental and health impacts associated with climate change caused by human emissions of greenhouse gases are described in Section III above.

Both NO_x and ROG emissions are precursors to the formation of ground level ozone, which causes smog. Even at low levels, ozone can cause health effects such as lung irritation, reduced lung function, lung damage, and reduced cardiovascular functioning. Exposure to ozone can also aggravate asthma and other chronic lung diseases such as emphysema and chronic bronchitis. Children are especially susceptible to ground level ozone health impacts because their lungs are still developing, and they often play outdoors during the warmer months when ozone levels tend to be higher. People with lung diseases are also particularly sensitive to ozone.[26]

$PM_{2.5}$ is a health concern because these very fine particles can reach the deepest regions of the lungs. Health effects include asthma, difficult or painful breathing, and chronic bronchitis, especially in children and the elderly. Fine particulate matter is also a major cause of haze, which reduces visibility.[27]

In summary, adopting the next generation of California emission standards will result in significant reductions of smog-causing pollutants and greenhouse gases from motor vehicles and corresponding environmental and public health benefits in Vermont.

V. ECONOMIC IMPACTS

The proposed amendments require a combination of technologies in different vehicle classes to comply with both the criteria and greenhouse gas standards. Compliance costs will vary according to the type of emission standard, which in turn varies according to the vehicle class. As discussed previously, the new light-duty criteria pollutant standards start phasing in with model year 2015, the new greenhouse gas standards begin in model year 2017, and the major amendments to the ZEV program would not take effect until the 2018 model year.

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[25] LEV III ISOR at 178-184.

[26] http://www.epa.gov/air/ozonepollution/health.html

[27] http://www.epa.gov/otaq/invntory/overview/pollutants/pm.htm

A. Impacts on Consumers

The California Air Resources Board conducted an extensive economic analysis to evaluate the combined effects of all the proposed amendments and found that the average retail price of 2015 and 2016 model year light-duty vehicles would increase by $5 to $14 per vehicle to comply with the proposed criteria pollutant standards.[28] During 2017-2021 model years, vehicle prices would increase from $180 to $1290 per vehicle as a result of the criteria pollutant and greenhouse gas standards for light-duty vehicles as well as the increasing share of ZEVs required.[29] In model years 2022-2025, the average retail price of light duty vehicles would increase by $1,530 to $1,910 per vehicle.[30] The vehicles prices for medium duty vehicles are expected to increase by roughly $82 per vehicle between model years 2016 and 2025.[31] Note that these costs do not include any federal financial incentives currently offered on the purchase of new alternative fuel vehicles.

There are wide-ranging technology options available to automakers to reduce the CO_2 emissions of vehicles in the 2017-2025 timeframe. Many of the technologies for CO_2 reduction will be combined in packages to deliver substantial CO_2 reduction in new vehicles.[32] Many of the technologies that reduce climate change emissions will also reduce the operating costs of light-duty vehicles.[33] The change in criteria pollutant standards is not expected to change operating costs either positively or negatively.[34] CARB's estimates of the average reduction in fuel-consumption-related operating cost of the new vehicles range from about 4 percent for model year 2017 vehicles to over 25 percent for model year 2025 vehicles.[35] Overall, purchasers of new vehicles in 2017 and beyond would experience a significant reduction in their operating cost as a result of the proposed regulation.[36] The typical payback period for a mid-size vehicle will be 1-3 years for vehicle purchasers.[37] Plug-in electric and fuel cell technology will offer the lowest CO_2 emissions of all, but typically at a greater price premium and thus a longer payback period.[38]

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[28] LEV III ISOR at 192. Note that all costs are presented in year 2009 dollars.

[29] LEV III ISOR at 192.

[30] LEV III ISOR at 192.

[31] LEV III ISOR at 192-193. Note that most medium duty vehicles (MDVs) are only subject to the criteria pollutant standards. The GHG standards only apply to MDVs used primarily for passenger travel. The ZEV amendments do not apply to MDVs.

[32] LEV III ISOR at 101-126.

[33] LEV III ISOR at 194.

[34] LEV III ISOR at 194.

[35] LEV III ISOR at 194.

[36] LEV III ISOR at 195.

[37] LEV III ISOR at 122-126.

[38] LEV ISOR at 122-126.

As described above, the proposed rule is expected to increase the price of new MY2025 average fleet vehicle by about $1,900. For vehicles that are financed, this would increase the average monthly payment for a typical consumer about $35.[39] Concurrently, typical consumers would benefit from monthly fuel savings of about $48 producing a net monthly savings of about $12 and net lifetime savings of roughly $4,000.[40] As shown in the table below, these savings would pay back the initial increase in vehicle purchase price in less than three years.

Potential Impact on Monthly Loan Payment and Operating Savings for New 2025 MY Vehicles (2009 dollars)

Description	Advanced Clean Cars Program
Average Increase in New Vehicle Price	$1,900
Increase in Monthly Loan Payment	$35
Net Lifetime Savings	$4,000
Monthly Operating Savings	$48
Net Monthly Savings	**$12**
Payback Period (Years)	**2.9**

Source: CARB ISOR for LEV III

B. Impact on Auto Manufacturers and Dealers

Automobile manufacturers are expected to pass on their full cost of compliance to consumers, as described above. No change is expected on the profitability or employment of new automotive dealers.[41] Analyses conducted by the California Air Resources Board show that new vehicle sales are expected to increase slightly due to the proposed amendments and that used vehicle sales may decrease.[42] The gain in profit associated with the expected increase in sales volume and higher vehicle prices is estimated to be roughly equivalent with the decrease in profit associated with any reduction in used vehicle sales.[43] The effects on used vehicle dealers are more ambiguous. Assuming that the higher price of new vehicles translates into proportionally higher used vehicle prices, this increase in revenue could offset some or all of the losses from reduced used vehicle sales volumes.[44]

C. Impact on Other Businesses

The proposed rule affects both light- and medium-duty vehicles for criteria pollutants; for greenhouse gas emissions, it affects light-duty vehicles and only medium duty vehicles that

[39] LEV III ISOR at 209.

[40] LEV III ISOR at 209.

[41] LEV III ISOR at 219,

[42] LEV III ISOR at 201.

[43] LEV III ISOR at 219.

[44] LEV III ISOR at 201-202.

are primarily used for passenger travel. Therefore, the majority of medium duty vehicles, especially those that businesses use, would only be affected by the criteria pollutant portion of the proposed regulation, whose costs are expected to be minimal.[45] With respect to light duty vehicles, businesses, like individual consumers, would be expected to pay incrementally higher prices for model year 2017-2025 vehicles but save on operating costs. As discussed above, the reduced operating costs are expected to greatly outweigh the effect of the incremental vehicle price increase over the life of the vehicle.

In addition, the reduction in fuel consumption from vehicles subject to the regulation is expected to save consumers a significant amount of money. Part of the consumer savings is likely to be spent on non-liquid fuel such as electricity and the balance will be spent on other consumer products and services.[46] Depending upon where the consumers direct their expenditures, many Vermont businesses will benefit from the proposed regulations. In addition, the proposed amendments will likely increase benefits to companies specializing in electric vehicles and electric charging infrastructure.[47] On the other hand, businesses in the gasoline distribution sector will likely be impacted by more fuel efficient cars. This impact may be offset to some extent by projected growth in both population and vehicle miles traveled.[48] Likewise, some service stations may be able to transition to providing alternative fuel types to offset these losses.[49]

D. Potential Costs to State Agencies

As new complying gasoline vehicles consume less fuel and ZEVs and TZEVs enter the fleet in larger numbers, there will likely be an impact to state and local revenue from vehicle and fuel sales taxes. Such fiscal impacts would not occur from the proposed amendments until 2017. Large revenue losses could occur in later years (10-15 years from now) unless fuel tax policy changes occur. The vast majority of the fuel tax loss will result from gasoline vehicles given that the existing tax structure applies only to gasoline and diesel fuel and has not changed over the years to adjust for inflation or changes in consumption levels. Although a small portion of the funding shortfall, ZEVs will result in a loss of fuel taxes because, for example, there are currently no road taxes on electricity sold for battery electric vehicles. Vermont's General Assembly is already starting to grapple with these issues as evidenced by Act 153, which requires the Vermont Agency of Transportation to: (1) submit a report in November 2012 analyzing options for user fees and fee collection mechanisms for motor vehicles that use energy sources not currently taxed so as to contribute to the transportation fund; and (2) chair a transportation funding committee to evaluate potential new state revenue sources and how existing state revenue sources could

[45] LEV III ISOR at 192-193.

[46] LEV III ISOR at 219-220; ZEV ISOR at 68.

[47] ZEV ISOR at 68.

[48] LEV III ISOR at 219.

[49] LEV III ISOR at 201.

optimally be modified to address expected transportation funding gaps from improved vehicle fuel efficiency and vehicles using alternative fuels.

In any event, state revenue losses will partially be offset by higher vehicle sales tax revenues given the higher incremental vehicle prices. Although not quantified, it is expected that a considerable percentage of the fuel savings resulting from the proposed regulations will be redirected toward goods and services subject to sales tax, in which case some of the tax revenues, in addition to increased vehicle sales taxes, would be recouped. However, there is no guarantee that these revenues would be dedicated to transportation-related purposes as would be the case with state and federal excise tax revenue.

Finally, implementation of the LEV regulation, including the ZEV requirements, requires staff resources from the Air Pollution Control Division of Vermont's Department of Environmental Conservation to oversee annual compliance by manufacturers. As the ZEV regulation compliance requirements increase in future years, and more manufacturers are classified as large volume manufacturers that are subject to ZEV requirements, this state oversight role may require additional resources.

E. Non-Monetized Societal Benefits

There are also societal benefits associated with reducing emissions of criteria pollutants and greenhouse gases, such as avoided morbidity and mortality impacts from criteria pollutant emission reductions, missed work days, avoidance of future damages from climate change impacts by reducing GHG emissions, and energy security benefits from reductions in petroleum-based fuel consumption. Indeed, many of the health effects from ozone and fine particulate matter, which are described above in Section IV, can result in increased absences from school or work, doctor and emergency room visits, and hospital admissions. The ancillary benefits of the proposed amendments have not been quantified or monetized and are not included in primary economic analysis for this rule. Nevertheless, these ancillary benefits would serve to improve the overall economic benefits of the rule.

Subchapter XI. Low Emission Vehicle Program.

5-1101 DEFINITIONS

The terms defined in this section shall apply to this subchapter only, and for purposes of this subchapter shall supersede definitions contained in any other regulation or in statutes. The definitions contained in *Air Pollution Control Regulations* § 5-101 shall govern in the absence of a superseding definition in this section.

(a) *"California-certified"* means approved by *CARB* for sale in California.

(b) "*CARB*" means the California Air Resources Board.

(c) "*Dealer*" means any person engaged in the business of selling, offering to sell, soliciting or advertising the sale of *new vehicle*s who holds a valid sales and service agreement, franchise or contract, granted by the *manufacturer* or distributor for the retail sale of said *manufacturer's* or distributor's *new vehicles*.

(d) "*Emergency Vehicle*" means any authorized *vehicle* publicly owned and operated that is used by a peace officer, used for fighting fires or responding to emergency fire calls, used by emergency medical technicians or paramedics, used for towing or servicing other *vehicle*s, or used for repairing damaged lighting or electrical equipment.

(e) "*Emission Control Label*" means a paper, plastic, metal or other permanent material, welded, riveted or otherwise permanently attached to an area within the engine compartment (if any), or to the engine, in such a way that it will be visible to the average person after installation of the engine in all *new vehicles* certified for sale in California, in accordance with Title 13, California Code of Regulations Section 1965.

(f) *"Environmental Performance Label"* means a paper or plastic decal securely affixed by the manufacturer to a window of all passenger cars, light-duty trucks, and medium-duty passenger vehicles which discloses the global warming and smog score for the vehicle in accordance with Title 13, California Code of Regulations Section 1965.

(g) "*Fleet Average Emission*" means a *vehicle manufacturer's* average *vehicle* emissions of all greenhouse gases, non-methane organic gases (NMOG), or NMOG plus oxides of nitrogen (NOx), as applicable, from all *new vehicle*s delivered for sale or lease in Vermont in any *model-year*.

(h) "Greenhouse gas" means the following gases: carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons.

(i) "GHG Credit" means *greenhouse gas* credit.

(j) "*Light-duty Truck*" means any 2000 and subsequent model *vehicle* certified to standards in Title 13, California Code of Regulations Section 1961(a)(1) rated at 8500 pounds gross *vehicle* weight or less, and any other *vehicle* rated at 6000 pounds gross

vehicle weight or less, which is designed primarily for purposes of transportation of property or is a derivative of such a *vehicle*, or is available with special features enabling off-street or off-highway operation and use.

(k) "*Manufacturer*" means any independent low volume, small, intermediate or large volume *vehicle manufacturer* as defined in Title 13, California Code of Regulations Section 1900.

(l) "Medium-duty passenger vehicle" means any medium-duty vehicle with a gross vehicle weight rating of less than 10,000 pounds that is designed primarily for the transportation of persons. The medium-duty passenger vehicle definition does not include any vehicle which: (1) is an "incomplete truck," i.e., a truck that does not have the primary load carrying device or container attached; or (2) has a seating capacity of more than 12 persons; or (3) is designed for more than 9 persons in seating rearward of the driver's seat; or (4) is equipped with an open cargo area of 72.0 inches in interior length or more. A covered box not readily accessible from the passenger compartment will be considered an open cargo area, for purposes of this definition.

(m) "*Medium-duty Vehicle*" means any 2000 through 2006 *model-year* heavy-duty low-emission, ultra-low-emission, super-ultra-low-emission or zero-emission *vehicle* certified to the standards in Title 13, California Code of Regulations Section 1960.1(h)(2), having a *manufacturer*'s gross *vehicle* weight rating of 14,000 pounds or less; any 2000 through 2003 *model-year* heavy duty *vehicle* certified to the standards in Title 13, California Code of Regulations Section 1960.1(h)(1) having a manufacturer gross vehicle weight rating of 14,000 lbs. or less; and any 2000 and subsequent model heavy-duty low-emission, ultra-low-emission, super-ultra-low-emission or zero-emission vehicle certified to the standards in Title 13, California Code of Regulations Sections 1961(a)(1), 1962, or 1962.1 having a manufacturer's gross vehicle weight rating between 8,501 and 14,000 pounds.

(n) "Model-year" means, for each vehicle manufacturer the period which begins January 1 of the calendar year in which the model is first offered for sale and ends December 31 of the final calendar year of sale or, if the manufacturer has no annual production period, the calendar year. In case of any vehicle manufactured in two or more stages, the time of manufacture shall be the date of completion of the chassis.

(o) "New Vehicle" means any vehicle with 7,500 miles or fewer on its odometer.

(p) "NMOG Credit" means non-methane organic gas credit.

(q) "NMOG + NOx Credit" means non-methane organic gas plus oxides of nitrogen credit.

(r) "Passenger Car" means any vehicle designed primarily for transportation of persons and having a design capacity of twelve persons or less.

(s) "Recall" means:

(1) the issuing of notices directly to consumers that vehicles in their possession or control should be corrected, and/or

(2) efforts to actively locate and correct vehicles in the possession or control of consumers.

(t) "Smog Index Label" means a decal securely affixed by the manufacturer to a window of all passenger cars and light-duty trucks which discloses the smog index for the vehicle in accordance with Title 13, California Code of Regulations Section 1965.

(u) "VECs" means vehicle equivalent credits.

(v) "Vehicle" means a motor vehicle.

(w) "ZEV Credit" means zero emission vehicle credit.

5-1102 INCORPORATION BY REFERENCE

(a) This subchapter incorporates by reference certain sections of Title 13, California Code of Regulations. Appendix F lists the sections Title 13, California Code of Regulations incorporated by reference. The sections of Title 13, California Code of Regulations incorporated by reference in this subchapter are the version of the section adopted as of the incorporation by reference date in Appendix F.

(b) For purposes of applying the incorporated sections of the California Code of Regulations, unless clearly inappropriate, "California" shall mean "Vermont". For example, "delivered for sale in California" and "placed in service" are interpreted, except for determinations of whether a manufacturer is a large, intermediate, small or independent low volume manufacturer, as referring to vehicles in "Vermont".

5-1103 NEW VEHICLE EMISSION REQUIREMENTS

(a) No person, including a *manufacturer* or *dealer*, shall deliver for sale or lease, offer for sale or lease, sell or lease, import, acquire, receive, purchase, or rent a *new vehicle* that is a 2000 or subsequent *model-year passenger car* or *light-duty truck* or a 2004 or subsequent *model-year medium-duty vehicle* in Vermont unless the *vehicle* is *California-certified* and complies with the following criteria:

(1) the exhaust emissions standards, as applicable, in Title 13, California Code of Regulations Sections 1956.8(c),(g) or (h), 1960.1, 1961, 1961.1, 1961.2, 1961.3, 1962, or 1962.1, or 1962.2, and

(2) the e*mission control label* requirements, *the smog index label* or the *environmental performance label* requirements for 2002 through 2009 *model-year* vehicles, and the

environmental performance label requirements for 2010 and subsequent *model year* vehicles in accordance with Title 13, California Code of Regulations Section 1965, except as otherwise provided by 10 V.S.A. § 579(d), and

(3) the evaporative emissions standards in Title 13, California Code of Regulations Sections 1976, and

(4) the refueling emissions standards in Title 13, California Code of Regulations Section 1978, and

(5) the malfunction and diagnostic system requirements in Title 13, California Code of Regulations Sections 1968.1 and 1968.2, and

(6) the assembly-line testing procedure requirements in Title 13, California Code of Regulations Section 2062, and

(7) the specifications for fill pipes and openings of motor *vehicle* fuel tanks in Title 13, California Code of Regulations Section 2235.

(b) Subsection 5-1103(a) shall not apply to a *new vehicle*:

(1) defined as an *emergency vehicle*;

(2) with a right-hand drive configuration that is not available in a *California-certified* model, purchased by a rural route postal carrier and used primarily for work;

(3) designed exclusively for off-highway use; or

(4) certified to standards promulgated pursuant to the authority contained in 42 U.S.C. Section 7521 and which is in the possession of a vehicle rental agency in Vermont and is next rented with a final destination outside of Vermont.

(c) Subsection 5-1103(a) shall not apply to new vehicles in the following transactions:

(1) a transfer by court decree;

(2) a transfer by inheritance;

(3) a purchase by a nonresident prior to establishing residency in Vermont; or

(4) a sale for the purpose of being wrecked or dismantled.

5-1104 WARRANTY

(a) For all 2000 and subsequent model-year California-certified vehicles delivered for sale or lease in Vermont, each manufacturer shall provide a warranty for the ultimate purchaser and each subsequent purchaser that complies with the requirements of Title 13, California Code of Regulations Sections 2035 through 2038, 2040 and 2046.

(b) For 2002 and subsequent model-years, each manufacturer shall include the emission control system warranty statement required by Title 13, California Code of Regulations Sections 2039, modified by some means (e.g. printed within the text or a sticker) to clearly inform Vermont owners of California-certified vehicles that the California Warranty applies to the vehicle. This statement shall provide a telephone number appropriate for Vermont.

5-1105 RECALL

For all 2000 and subsequent model-year California-certified vehicles registered in Vermont, each manufacturer shall undertake an action equivalent to that which is required by any order or enforcement action taken by CARB, or any voluntary or influenced emission related recall initiated by any manufacturer pursuant to Title 13, California Code of Regulations Sections 2101 through 2120, 2122 through 2133, and 2135 through 2149, unless within 30 days of CARB approval of said recall, the manufacturer demonstrates to the Agency that such recall is not applicable to vehicles registered in Vermont. Each manufacturer must send to owners of Vermont registered California-certified vehicles the same notice that is used for California owners required by Title 13, California Code of Regulations Sections 2118 or 2127, except that it should contain a telephone number appropriate for Vermont.

5-1106 MANUFACTURER FLEET REQUIREMENTS.

(a) Each manufacturer shall meet the following fleet requirements for the new vehicles delivered for sale or lease in Vermont.

(1) Effective for the 2004 through 2014 model-years, each manufacturer shall comply with the fleet average NMOG emission requirements (or NMOG + NOx for 2014 model year only) and LEV II phase-in requirements for *passenger cars* and *light-duty trucks* and, for 2000 and subsequent model-years, may earn and bank NMOG credits, both in accordance with Title 13, California Code of Regulations Section 1961, except NMOG credits earned prior to model-year 2004 shall be treated as though they were earned in model-year 2004.

(2) Effective for the 2004 through 2014 model-years, each manufacturer shall comply with the LEV II medium-duty vehicle phase-in requirements and, for 2004 through 2014 model-years, may earn and bank VECs, both in accordance with Title 13, California Code of Regulations Section 1961, except VECs earned prior to model-year 2007 shall be treated as though they were earned in model-year 2007. Starting with *model-year* 2007 through model year 2014, all medium-duty vehicles are subject to the LEV II standards in accordance with Title 13, California Code of Regulations Section 1961.

(3) Effective for the 2015 and subsequent model-years, each manufacturer shall comply with the fleet average NMOG + NOx emission requirements and the LEV III phase-in requirements for passenger cars, light-duty trucks, and medium-duty

vehicles, and may earn and bank NMOG + NOx credits or VECs as applicable, all in accordance with Title 13, California Code of Regulations Section 1961.2.

(4) Effective for the 2007 through 2008 model years, each manufacturer shall comply with the Zero Emission Vehicle sales requirement and, starting with 2000 model year vehicles, may earn and bank ZEV credits, both in accordance with Title 13, California Code of Regulations Sections 1962.

(5) Effective for the 2009 through 2017 model years, each manufacturer shall comply with the Zero Emission Vehicle sales requirement and, and starting with 2000 model year vehicles, may earn and bank ZEV credits, both in accordance with Title 13, California Code of Regulations Section 1962.1.

(6) Effective for 2018 and subsequent model years, each manufacturer shall comply with the Zero Emission Vehicle sales requirement and, and starting with 2000 model year vehicles, may earn and bank ZEV credits, both in accordance with Title 13, California Code of Regulations Section 1962.2.

(7) Effective for the 2009 through 2016 *model-years*, each *manufacturer* shall comply with the *fleet average emission greenhouse gas* requirements for *passenger cars*, *light-duty trucks*, and *medium-duty passenger vehicles*, and for 2000 and subsequent *model-years* may earn and bank *GHG credits*, in accordance with Title 13, California Code of Regulations Section 1961.1.

(8) Effective for the 2017 and subsequent model years, each manufacturer shall comply with the *fleet average emission greenhouse gas* requirements for *passenger cars*, *light-duty trucks*, and *medium-duty passenger vehicles*, and may earn and bank *GHG credits*, in accordance with Title 13, California Code of Regulations Section and 1961.3.

5-1107 MANUFACTURER REPORTING REQUIREMENTS

(a) Delivery Reporting.

Commencing with the 1999 model-year for passenger cars and light-duty trucks and the 2000 model-year for medium-duty vehicles, each manufacturer shall submit annually, to the Agency, by March 1 following the end of each model-year, a report, itemized by test group and emissions standard, documenting total new vehicles delivered for sale or lease in Vermont.

(b) Fleet Reporting.

(1) Each manufacturer shall submit annually to the Agency, by no later than May 1 following the end of each model-year, a report, itemized by test group and emissions standard, that

demonstrates that the manufacturer has met the fleet requirements of subsection 5-1106(a) in Vermont.

(2) If a manufacturer wants to bank VECs or GHG, NMOG, NMOG + NOx, or ZEV credits, the manufacturer shall submit annually, by no later than May 1 following the end of the model-year, a report which demonstrates that such manufacturer has earned VECs or GHG, NMOG, or ZEV credits in Vermont. Credits are to be calculated in the same manner as required by CARB

(c) Recall Reporting.

(1) For information and not for approval by Vermont, for 2000 and subsequent model-year vehicles, each manufacturer shall submit, within 30 days of CARB approval, a copy of any CARB approved voluntary, influenced or ordered recall plan specified by Title 13, California Code of Regulations Sections 2114 and 2125, supplemented with the number of affected vehicles registered in Vermont.

(2) For information and not for approval by Vermont, each manufacturer shall, upon request, submit recall campaign progress reports for vehicles registered in Vermont, within the timelines of, and containing the information required by, Title 13, California Code of Regulations Sections 2119 and 2133. Reports need not be submitted to the Agency if the equivalent reports have been waived by CARB.

(d) Documentation.

A manufacturer, a dealer or a transporter of new vehicles shall, upon request, provide to the Agency of Natural Resources or the Agency of Transportation any documentation which either Agency determines to be necessary for the effective administration and enforcement of this subchapter.

(e) Reports and other information required by this subsection must be submitted to:

Director, Air Quality and Climate Division
Davis 2
One National Life Drive
Montpelier, VT 05620-3802

5-1108 INSPECTIONS

(a) The Secretary of the Agency of Natural Resources or the Secretary of the Agency of Transportation or their designees may conduct inspections of any new and used vehicles and any related documentation for the purpose of determining compliance with the requirements of this subchapter.

(1) Inspections may be conducted on any conveyance used to transport new vehicles or on any premises owned or controlled by any dealer or manufacturer.

(2) Inspections may extend to all emission-related parts and may require the on-premises operation and testing of an engine or vehicle.

(3) Inspections may include functional tests and other tests as necessary to verify compliance with this subchapter.

(b) Upon request, during an inspection, such dealer or manufacturer must make available to either Agency any related records, including records documenting vehicle origin, certification, delivery, or sales and records of emission related part repairs performed under warranty.

5-1109 SEVERABILITY

Each provision of this Subchapter is severable, and in the event that any provision of this Subchapter is held to be invalid, the remainder of the Subchapter shall continue in full force and effect.

Appendix F

Provisions of the California Code of Regulations (CCR)
Incorporated by Reference in Subchapter XI of the
Vermont Air Pollution Control Regulations

Incorporation by Reference Date: [INSERT DATE OF AMENDMENT]

Title 13 CCR	Title
Chapter 1	Motor *Vehicle* Pollution *Control Devices*.
Article 1	General Provisions.
1900	Definitions.
1903	Plans Submitted
1904	Applicability to Vehicles Powered by Fuels Other Than Gasoline.
Article 2	Approval of Motor *Vehicle* Pollution *Control Devices* (*New Vehicles*).
1956.8(c),(g), and (h)	Exhaust Emissions Standards and Test Procedures — 1985 and Subsequent Model Heavy-Duty Engines and *Vehicles*.
1960.1	Exhaust Emissions Standards and Test Procedures — 1981 and through 2006 Model *Passenger Cars*, Light-Duty and *Medium-Duty Vehicles*.
1960.5	Certification of 1983 and Subsequent Model-Year Federally-Certified Light-Duty Motor Vehicles for Sale in California
1961	Exhaust Emission Standards and Test Procedures – 2004 through 2019 Model *Passenger Cars*, *Light-Duty Trucks*, and *Medium-Duty Vehicles*.
1961.1	Greenhouse Gas Exhaust Emission Standards and Test Procedures – 2009 through 2016 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.
1961.2	Exhaust Emission Standards and Test Procedures - 2015 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.
1961.3	Greenhouse Gas Exhaust Emission Standards and Test Procedures - 2017 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.
1962	Zero-Emission *Vehicle* Standards for 2005 and through 2008 Model Year *Passenger Cars*, *Light-Duty Trucks*, *and Medium-Duty Vehicles*.
1962.1	Zero-Emission Vehicle Standards for 2009 through 2017 Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.
1962.2	Zero-Emission Vehicle Standards for 2018 and Subsequent Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.
1962.3	Electric Vehicle Charging Requirements.
1964	Special Test Procedures for Certification and Compliance – New Modifier Certified Motor Vehicles.
1965	Emission Control, Smog Index, and Environmental Performance Labels — 1979 and Subsequent *Model-Year* Motor *Vehicles*.
1968.1	Malfunction and Diagnostic System Requirements — 1994 and Subsequent *Model-Year Passenger Cars*, *Light-Duty Trucks* and *Medium-Duty Vehicles* and Engines.

1968.2	Malfunction and Diagnostic System Requirements – 2004 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles and Engines.
1976	Standards and Test Procedures for Motor *Vehicle* Fuel Evaporative Emissions.
1978	Standards and Test Procedures for *Vehicle* Refueling Emissions.
Article 6	Emission Control System Warranty.
2035	Purpose, Applicability, and Definitions.
2036	Defects Warranty Requirements for 1979 Through 1989 Model *Passenger Cars*, *Light-Duty Trucks*, and *Medium-Duty Vehicles*; 1979 and Subsequent Model Motorcycles and Heavy-Duty *Vehicles*; and Motor *Vehicle* Engines Used in Such *Vehicles*.
2037	Defects Warranty Requirements for 1990 and Subsequent Model *Passenger Cars*, *Light-Duty Trucks*, *and Medium-Duty Vehicles*, and Motor *Vehicle* Engines Used in Such *Vehicles*.
2038	Performance Warranty Requirements for 1990 and Subsequent Model *Passenger Cars*, *Light-Duty Trucks*, *Medium-Duty Vehicles* and Motor *Vehicle* Engines Used in Such *Vehicles*.
2039	Emissions Control System Warranty Statement.
2040	*Vehicle* Owner Obligations.
2041	Mediation; Finding of Warrantable Condition.
2046	Defective Catalyst.
2047	Certification procedures for Used Modifier-certified Motor Vehicles.
Chapter 2	Enforcement of *Vehicle* Emission Standards and Surveillance Testing.
Article 1	Assembly-Line Testing.
2062	Assembly-Line Test Procedures - 1998 and Subsequent *Model-years*.
Article 2	Enforcement of New and In-Use *Vehicle* Standards.
2101	Compliance Testing and Inspection — *New Vehicle* Selection, Evaluation and Enforcement Action.
2109	*New Vehicle Recall* Provisions.
2110	Remedial Action for Assembly-Line Quality Audit Testing of Less Than a Full Calendar Quarter of Production Prior to the 2001 *Model-year*.
Article 2.1	Procedures for In-Use *Vehicle* Voluntary and Influenced *Recalls*.
2111	Applicability.
2112	Definitions.
	Appendix A to Article 2.1.
2113	Initiation and Approval of Voluntary and Influenced Emission-Related *Recalls*.
2114	Voluntary and Influenced *Recall* Plans.
2115	Eligibility for Repair.
2116	Repair Label.
2117	Proof of Correction Certificate.
2118	Notification.
2119	Recordkeeping and Reporting Requirements.
2120	Other Requirements Not Waived.
Article 2.2	Procedures for In-Use *Vehicle* Ordered *Recalls*.

2121	Penalties.
2122	General Provisions.
2123	Initiation and Notification of Ordered Emission-Related *Recalls*.
2124	Availability of Public Hearing.
2125	Ordered *Recall* Plan.
2126	Approval and Implementation of *Recall* Plan.
2127	Notification of Owners.
2128	Repair Label.
2129	Proof of Correction Certificate.
2130	Capture Rates and Alternative Measures.
2131	Preliminary Tests.
2132	Communication with Repair Personnel.
2133	Recordkeeping and Reporting Requirements.
2134	Penalties.
2135	Extension of Time.
Article 2.3.	In-Use *Vehicle* Enforcement Test Procedures.
2136	General Provisions.
2137	*Vehicle* Selection.
2138	Restorative Maintenance.
2139	Testing.
2140	Notification and Use of Test Results.
Article 2.4	Procedures for Reporting Failure of Emission-Related Components.
2141	General Provisions.
2142	Alternative Procedures.
2143	Failure Levels Triggering *Recall*.
2144	Emission Warranty Information Report.
2145	Field Information Report.
2146	Emissions Information Report.
2147	Demonstration of Compliance with Emission Standards.
2148	Evaluation of Need for *Recall*.
2149	Notification of Subsequent Action.
Chapter 4	Criteria for the Evaluation of Motor Vehicle Pollution Control Devices and Fuel Additives.
Article 2	Aftermarket Parts.
2222	Add-On Parts and Modified Parts.
Chapter 4.4	Specifications for Fill Pipes and Openings of Motor *Vehicle* Fuel Tanks
2235	Requirements.

Subchapter XI. Low Emission Vehicle Program.

5-1101 DEFINITIONS

The terms defined in this section shall apply to this subchapter only, and for purposes of this subchapter shall supersede definitions contained in any other regulation or in statutes. The definitions contained in *Air Pollution Control Regulations* § 5-101 shall govern in the absence of a superseding definition in this section.

(a) *"California-certified"* means approved by *CARB* for sale in California.

(b) "*CARB*" means the California Air Resources Board.

(c) "*Dealer*" means any person engaged in the business of selling, offering to sell, soliciting or advertising the sale of *new vehicle*s who holds a valid sales and service agreement, franchise or contract, granted by the *manufacturer* or distributor for the retail sale of said *manufacturer's* or distributor's *new vehicles*.

(d) "*Emergency Vehicle*" means any authorized *vehicle* publicly owned and operated that is used by a peace officer, used for fighting fires or responding to emergency fire calls, used by emergency medical technicians or paramedics, used for towing or servicing other *vehicle*s, or used for repairing damaged lighting or electrical equipment.

(e) "*Emission Control Label*" means a paper, plastic, metal or other permanent material, welded, riveted or otherwise permanently attached to an area within the engine compartment (if any), or to the engine, in such a way that it will be visible to the average person after installation of the engine in all *new vehicles* certified for sale in California, in accordance with Title 13, California Code of Regulations Section 1965.

(f) *"Environmental Performance Label"* means a paper or plastic decal securely affixed by the manufacturer to a window of all passenger cars, light-duty trucks, and medium-duty passenger vehicles which discloses the global warming and smog score for the vehicle in accordance with Title 13, California Code of Regulations Section 1965.

(g) "*Fleet Average Emission*" means a *vehicle manufacturer's* average *vehicle* emissions of all greenhouse gases, non-methane organic gases (NMOG), or NMOG plus oxides of nitrogen (NOx), as applicable, from all *new vehicle*s delivered for sale or lease in Vermont in any *model-year*.

(h) "Greenhouse gas" means the following gases: carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons.

(i) "GHG Credit" means *greenhouse gas* credit.

(j) "*Light-duty Truck*" means any 2000 and subsequent model *vehicle* certified to standards in Title 13, California Code of Regulations Section 1961(a)(1) rated at 8500 pounds gross *vehicle* weight or less, and any other *vehicle* rated at 6000 pounds gross

vehicle weight or less, which is designed primarily for purposes of transportation of property or is a derivative of such a *vehicle*, or is available with special features enabling off-street or off-highway operation and use.

(k) "*Manufacturer*" means any independent low volume, small, intermediate or large volume *vehicle manufacturer* as defined in Title 13, California Code of Regulations Section 1900.

(l) "Medium-duty passenger vehicle" means any medium-duty vehicle with a gross vehicle weight rating of less than 10,000 pounds that is designed primarily for the transportation of persons. The medium-duty passenger vehicle definition does not include any vehicle which: (1) is an "incomplete truck," i.e., a truck that does not have the primary load carrying device or container attached; or (2) has a seating capacity of more than 12 persons; or (3) is designed for more than 9 persons in seating rearward of the driver's seat; or (4) is equipped with an open cargo area of 72.0 inches in interior length or more. A covered box not readily accessible from the passenger compartment will be considered an open cargo area, for purposes of this definition.

(m) "*Medium-duty Vehicle*" means any 2000 through 2006 *model-year* heavy-duty low-emission, ultra-low-emission, super-ultra-low-emission or zero-emission *vehicle* certified to the standards in Title 13, California Code of Regulations Section 1960.1(h)(2), having a *manufacturer*'s gross *vehicle* weight rating of 14,000 pounds or less; any 2000 through 2003 *model-year* heavy duty *vehicle* certified to the standards in Title 13, California Code of Regulations Section 1960.1(h)(1) having a manufacturer gross vehicle weight rating of 14,000 lbs. or less; and any 2000 and subsequent model heavy-duty low-emission, ultra-low-emission, super-ultra-low-emission or zero-emission vehicle certified to the standards in Title 13, California Code of Regulations Sections 1961(a)(1), 1962, or 1962.1 having a manufacturer's gross vehicle weight rating between 8,501 and 14,000 pounds.

(n) "Model-year" means, for each vehicle manufacturer the period which begins January 1 of the calendar year in which the model is first offered for sale and ends December 31 of the final calendar year of sale or, if the manufacturer has no annual production period, the calendar year. In case of any vehicle manufactured in two or more stages, the time of manufacture shall be the date of completion of the chassis.

(o) "New Vehicle" means any vehicle with 7,500 miles or fewer on its odometer.

(p) "NMOG Credit" means non-methane organic gas credit.

(q) "NMOG + NOx Credit" means non-methane organic gas plus oxides of nitrogen credit.

(r) "Passenger Car" means any vehicle designed primarily for transportation of persons and having a design capacity of twelve persons or less.

(s) "Recall" means:

(1) the issuing of notices directly to consumers that vehicles in their possession or control should be corrected, and/or

(2) efforts to actively locate and correct vehicles in the possession or control of consumers.

(t) "Smog Index Label" means a decal securely affixed by the manufacturer to a window of all passenger cars and light-duty trucks which discloses the smog index for the vehicle in accordance with Title 13, California Code of Regulations Section 1965.

(u) "VECs" means vehicle equivalent credits.

(v) "Vehicle" means a motor vehicle.

(w) "ZEV Credit" means zero emission vehicle credit.

5-1102 INCORPORATION BY REFERENCE

(a) This subchapter incorporates by reference certain sections of Title 13, California Code of Regulations. Appendix F lists the sections Title 13, California Code of Regulations incorporated by reference. The sections of Title 13, California Code of Regulations incorporated by reference in this subchapter are the version of the section adopted as of the incorporation by reference date in Appendix F.

(b) For purposes of applying the incorporated sections of the California Code of Regulations, unless clearly inappropriate, "California" shall mean "Vermont". For example, "delivered for sale in California" and "placed in service" are interpreted, except for determinations of whether a manufacturer is a large, intermediate, small or independent low volume manufacturer, as referring to vehicles in "Vermont".

5-1103 NEW VEHICLE EMISSION REQUIREMENTS

(a) No person, including a *manufacturer* or *dealer*, shall deliver for sale or lease, offer for sale or lease, sell or lease, import, acquire, receive, purchase, or rent a *new vehicle* that is a 2000 or subsequent *model-year passenger car* or *light-duty truck* or a 2004 or subsequent *model-year medium-duty vehicle* in Vermont unless the *vehicle* is *California-certified* and complies with the following criteria:

(1) the exhaust emissions standards, as applicable, in Title 13, California Code of Regulations Sections 1956.8(c),(g) or (h), 1960.1, 1961, 1961.1, 1961.2, 1961.3, 1962, or 1962.1, or 1962.2, and

(2) the e*mission control label* requirements, *the smog index label* or the *environmental performance label* requirements for 2002 through 2009 *model-year* vehicles, and the

environmental performance label requirements for 2010 and subsequent *model year* vehicles in accordance with Title 13, California Code of Regulations Section 1965, except as otherwise provided by 10 V.S.A. § 579(d), and

(3) the evaporative emissions standards in Title 13, California Code of Regulations Sections 1976, and

(4) the refueling emissions standards in Title 13, California Code of Regulations Section 1978, and

(5) the malfunction and diagnostic system requirements in Title 13, California Code of Regulations Sections 1968.1 and 1968.2, and

(6) the assembly-line testing procedure requirements in Title 13, California Code of Regulations Section 2062, and

(7) the specifications for fill pipes and openings of motor *vehicle* fuel tanks in Title 13, California Code of Regulations Section 2235.

(b) Subsection 5-1103(a) shall not apply to a *new vehicle*:

(1) defined as an *emergency vehicle*;

(2) with a right-hand drive configuration that is not available in a *California-certified* model, purchased by a rural route postal carrier and used primarily for work;

(3) designed exclusively for off-highway use; or

(4) certified to standards promulgated pursuant to the authority contained in 42 U.S.C. Section 7521 and which is in the possession of a vehicle rental agency in Vermont and is next rented with a final destination outside of Vermont.

(c) Subsection 5-1103(a) shall not apply to new vehicles in the following transactions:

(1) a transfer by court decree;

(2) a transfer by inheritance;

(3) a purchase by a nonresident prior to establishing residency in Vermont; or

(4) a sale for the purpose of being wrecked or dismantled.

5-1104 WARRANTY

(a) For all 2000 and subsequent model-year California-certified vehicles delivered for sale or lease in Vermont, each manufacturer shall provide a warranty for the ultimate purchaser and each subsequent purchaser that complies with the requirements of Title 13, California Code of Regulations Sections 2035 through 2038, 2040 and 2046.

(b) For 2002 and subsequent model-years, each manufacturer shall include the emission control system warranty statement required by Title 13, California Code of Regulations Sections 2039, modified by some means (e.g. printed within the text or a sticker) to clearly inform Vermont owners of California-certified vehicles that the California Warranty applies to the vehicle. This statement shall provide a telephone number appropriate for Vermont.

5-1105 RECALL

For all 2000 and subsequent model-year California-certified vehicles registered in Vermont, each manufacturer shall undertake an action equivalent to that which is required by any order or enforcement action taken by CARB, or any voluntary or influenced emission related recall initiated by any manufacturer pursuant to Title 13, California Code of Regulations Sections 2101 through 2120, 2122 through 2133, and 2135 through 2149, unless within 30 days of CARB approval of said recall, the manufacturer demonstrates to the Agency that such recall is not applicable to vehicles registered in Vermont. Each manufacturer must send to owners of Vermont registered California-certified vehicles the same notice that is used for California owners required by Title 13, California Code of Regulations Sections 2118 or 2127, except that it should contain a telephone number appropriate for Vermont.

5-1106 MANUFACTURER FLEET REQUIREMENTS.

(a) Each manufacturer shall meet the following fleet requirements for the new vehicles delivered for sale or lease in Vermont.

(1) Effective for the 2004 through 2014 model-years, each manufacturer shall comply with the fleet average NMOG emission requirements (or NMOG + NOx for 2014 model year only) and LEV II phase-in requirements for *passenger cars* and *light-duty trucks* and, for 2000 and subsequent model-years, may earn and bank NMOG credits, both in accordance with Title 13, California Code of Regulations Section 1961, except NMOG credits earned prior to model-year 2004 shall be treated as though they were earned in model-year 2004.

(2) Effective for the 2004 through 2014 model-years, each manufacturer shall comply with the LEV II medium-duty vehicle phase-in requirements and, for 2004 through 2014 model-years, may earn and bank VECs, both in accordance with Title 13, California Code of Regulations Section 1961, except VECs earned prior to model-year 2007 shall be treated as though they were earned in model-year 2007. Starting with *model-year* 2007 through model year 2014, all medium-duty vehicles are subject to the LEV II standards in accordance with Title 13, California Code of Regulations Section 1961.

(3) Effective for the 2015 and subsequent model-years, each manufacturer shall comply with the fleet average NMOG + NOx emission requirements and the LEV III phase-in requirements for passenger cars, light-duty trucks, and medium-duty

vehicles, and may earn and bank NMOG + NOx credits or VECs as applicable, all in accordance with Title 13, California Code of Regulations Section 1961.2.

(4) Effective for the 2007 through 2008 model years, each manufacturer shall comply with the Zero Emission Vehicle sales requirement and, starting with 2000 model year vehicles, may earn and bank ZEV credits, both in accordance with Title 13, California Code of Regulations Sections 1962.

(5) Effective for the 2009 through 2017 model years, each manufacturer shall comply with the Zero Emission Vehicle sales requirement and, and starting with 2000 model year vehicles, may earn and bank ZEV credits, both in accordance with Title 13, California Code of Regulations Section 1962.1.

(6) Effective for 2018 and subsequent model years, each manufacturer shall comply with the Zero Emission Vehicle sales requirement and, and starting with 2000 model year vehicles, may earn and bank ZEV credits, both in accordance with Title 13, California Code of Regulations Section 1962.2.

(7) Effective for the 2009 through 2016 *model-years*, each *manufacturer* shall comply with the *fleet average emission greenhouse gas* requirements for *passenger cars*, *light-duty trucks*, and *medium-duty passenger vehicles*, and for 2000 and subsequent *model-years* may earn and bank *GHG credits*, in accordance with Title 13, California Code of Regulations Section 1961.1.

(8) ~~(7)~~ Effective for the 2017 and subsequent model years, each manufacturer shall comply with the *fleet average emission greenhouse gas* requirements for *passenger cars*, *light-duty trucks*, and *medium-duty passenger vehicles*, and may earn and bank *GHG credits*, in accordance with Title 13, California Code of Regulations Section and 1961.3.

5-1107 MANUFACTURER REPORTING REQUIREMENTS

(a) Delivery Reporting.

Commencing with the 1999 model-year for passenger cars and light-duty trucks and the 2000 model-year for medium-duty vehicles, each manufacturer shall submit annually, to the Agency, by March 1 following the end of each model-year, a report, itemized by test group and emissions standard, documenting total new vehicles delivered for sale or lease in Vermont.

(b) Fleet Reporting.

(1) Each manufacturer shall submit annually to the Agency, by no later than May 1 following the end of each model-year, a report, itemized by test group and emissions standard, that

demonstrates that the manufacturer has met the fleet requirements of subsection 5-1106(a) in Vermont.

(2) If a manufacturer wants to bank VECs or GHG, NMOG, NMOG + NOx, or ZEV credits, the manufacturer shall submit annually, by no later than May 1 following the end of the model-year, a report which demonstrates that such manufacturer has earned VECs or GHG, NMOG, or ZEV credits in Vermont. Credits are to be calculated in the same manner as required by CARB

(c) Recall Reporting.

(1) For information and not for approval by Vermont, for 2000 and subsequent model-year vehicles, each manufacturer shall submit, within 30 days of CARB approval, a copy of any CARB approved voluntary, influenced or ordered recall plan specified by Title 13, California Code of Regulations Sections 2114 and 2125, supplemented with the number of affected vehicles registered in Vermont.

(2) For information and not for approval by Vermont, each manufacturer shall, upon request, submit recall campaign progress reports for vehicles registered in Vermont, within the timelines of, and containing the information required by, Title 13, California Code of Regulations Sections 2119 and 2133. Reports need not be submitted to the Agency if the equivalent reports have been waived by CARB.

(d) Documentation.

A manufacturer, a dealer or a transporter of new vehicles shall, upon request, provide to the Agency of Natural Resources or the Agency of Transportation any documentation which either Agency determines to be necessary for the effective administration and enforcement of this subchapter.

(e) Reports and other information required by this subsection must be submitted to: ~~*the Air Pollution Control Officer.*~~

Director, Air Quality and Climate Division
Davis 2
One National Life Drive
Montpelier, VT 05620-3802

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5-1108 INSPECTIONS

(a) The Secretary of the Agency of Natural Resources or the Secretary of the Agency of Transportation or their designees may conduct inspections of any new and used vehicles and any related documentation for the purpose of determining compliance with the requirements of this subchapter.

(1) Inspections may be conducted on any conveyance used to transport new vehicles or on any premises owned or controlled by any dealer or manufacturer.

(2) Inspections may extend to all emission-related parts and may require the on-premises operation and testing of an engine or vehicle.

(3) Inspections may include functional tests and other tests as necessary to verify compliance with this subchapter.

(b) Upon request, during an inspection, such dealer or manufacturer must make available to either Agency any related records, including records documenting vehicle origin, certification, delivery, or sales and records of emission related part repairs performed under warranty.

5-1109 SEVERABILITY

Each provision of this Subchapter is severable, and in the event that any provision of this Subchapter is held to be invalid, the remainder of the Subchapter shall continue in full force and effect.

Appendix F

Provisions of the California Code of Regulations (CCR)
Incorporated by Reference in Subchapter XI of the
Vermont Air Pollution Control Regulations

Incorporation by Reference Date: ~~December 11, 2012~~[INSERT DATE OF AMENDMENT]

Title 13 CCR	Title
Chapter 1	Motor *Vehicle* Pollution *Control Devices*.
Article 1	General Provisions.
1900	Definitions.
1903	Plans Submitted
1904	Applicability to Vehicles Powered by Fuels Other Than Gasoline.
Article 2	Approval of Motor *Vehicle* Pollution *Control Devices* (*New Vehicles*).
1956.8(c),(g), and (h)	Exhaust Emissions Standards and Test Procedures — 1985 and Subsequent Model Heavy-Duty Engines and *Vehicles*.
1960.1	Exhaust Emissions Standards and Test Procedures — 1981 and through 2006 Model *Passenger Cars*, Light-Duty and *Medium-Duty Vehicles*.
1960.5	Certification of 1983 and Subsequent Model-Year Federally-Certified Light-Duty Motor Vehicles for Sale in California
1961	Exhaust Emission Standards and Test Procedures – 2004 through 2019 Model *Passenger Cars*, *Light-Duty Trucks*, and *Medium-Duty Vehicles*.
1961.1	Greenhouse Gas Exhaust Emission Standards and Test Procedures - 2009 through 2016 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.
1961.2	Exhaust Emission Standards and Test Procedures - 2015 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.
1961.3	Greenhouse Gas Exhaust Emission Standards and Test Procedures - 2017 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.
1962	Zero-Emission *Vehicle* Standards for 2005 and through 2008 Model Year *Passenger Cars*, *Light-Duty Trucks*, *and Medium-Duty Vehicles*.
1962.1	Zero-Emission Vehicle Standards for 2009 through 2017 Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.
1962.2	Zero-Emission Vehicle Standards for 2018 and Subsequent Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.
1962.3	Electric Vehicle Charging Requirements.
1964	Special Test Procedures for Certification and Compliance - New Modifier Certified Motor Vehicles.
1965	Emission Control, Smog Index, and Environmental Performance Labels — 1979 and Subsequent *Model-Year* Motor *Vehicles*.
1968.1	Malfunction and Diagnostic System Requirements — 1994 and Subsequent *Model-Year Passenger Cars*, *Light-Duty Trucks*

	and *Medium-Duty Vehicles* and Engines.
1968.2	Malfunction and Diagnostic System Requirements – 2004 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles and Engines.
1976	Standards and Test Procedures for Motor *Vehicle* Fuel Evaporative Emissions.
1978	Standards and Test Procedures for *Vehicle* Refueling Emissions.
Article 6	Emission Control System Warranty.
2035	Purpose, Applicability, and Definitions.
2036	Defects Warranty Requirements for 1979 Through 1989 Model *Passenger Cars*, *Light-Duty Trucks*, and *Medium-Duty Vehicles*; 1979 and Subsequent Model Motorcycles and Heavy-Duty *Vehicles*; and Motor *Vehicle* Engines Used in Such *Vehicles*.
2037	Defects Warranty Requirements for 1990 and Subsequent Model *Passenger Cars*, *Light-Duty Trucks*, *and Medium-Duty Vehicles*, and Motor *Vehicle* Engines Used in Such *Vehicles*.
2038	Performance Warranty Requirements for 1990 and Subsequent Model *Passenger Cars*, *Light-Duty Trucks*, *Medium-Duty Vehicles* and Motor *Vehicle* Engines Used in Such *Vehicles*.
2039	Emissions Control System Warranty Statement.
2040	*Vehicle* Owner Obligations.
2041	Mediation; Finding of Warrantable Condition.
2046	Defective Catalyst.
2047	Certification procedures for Used Modifier-certified Motor Vehicles.
Chapter 2	Enforcement of *Vehicle* Emission Standards and Surveillance Testing.
Article 1	Assembly-Line Testing.
2062	Assembly-Line Test Procedures - 1998 and Subsequent *Model-years*.
Article 2	Enforcement of New and In-Use *Vehicle* Standards.
2101	Compliance Testing and Inspection — *New Vehicle* Selection, Evaluation and Enforcement Action.
2109	*New Vehicle Recall* Provisions.
2110	Remedial Action for Assembly-Line Quality Audit Testing of Less Than a Full Calendar Quarter of Production Prior to the 2001 *Model-year*.
Article 2.1	Procedures for In-Use *Vehicle* Voluntary and Influenced *Recalls*.
2111	Applicability.
2112	Definitions.
	Appendix A to Article 2.1.
2113	Initiation and Approval of Voluntary and Influenced Emission-Related *Recalls*.
2114	Voluntary and Influenced *Recall* Plans.
2115	Eligibility for Repair.
2116	Repair Label.
2117	Proof of Correction Certificate.
2118	Notification.
2119	Recordkeeping and Reporting Requirements.
2120	Other Requirements Not Waived.

Article 2.2	Procedures for In-Use *Vehicle* Ordered *Recalls.*
2121	Penalties.
2122	General Provisions.
2123	Initiation and Notification of Ordered Emission-Related *Recalls*.
2124	Availability of Public Hearing.
2125	Ordered *Recall* Plan.
2126	Approval and Implementation of *Recall* Plan.
2127	Notification of Owners.
2128	Repair Label.
2129	Proof of Correction Certificate.
2130	Capture Rates and Alternative Measures.
2131	Preliminary Tests.
2132	Communication with Repair Personnel.
2133	Recordkeeping and Reporting Requirements.
2134	Penalties.
2135	Extension of Time.
Article 2.3.	In-Use *Vehicle* Enforcement Test Procedures.
2136	General Provisions.
2137	*Vehicle* Selection.
2138	Restorative Maintenance.
2139	Testing.
2140	Notification and Use of Test Results.
Article 2.4	Procedures for Reporting Failure of Emission-Related Components.
2141	General Provisions.
2142	Alternative Procedures.
2143	Failure Levels Triggering *Recall*.
2144	Emission Warranty Information Report.
2145	Field Information Report.
2146	Emissions Information Report.
2147	Demonstration of Compliance with Emission Standards.
2148	Evaluation of Need for *Recall*.
2149	Notification of Subsequent Action.
Chapter 4	Criteria for the Evaluation of Motor Vehicle Pollution Control Devices and Fuel Additives.
Article 2	Aftermarket Parts.
2222	Add-On Parts and Modified Parts.
Chapter 4.4	Specifications for Fill Pipes and Openings of Motor *Vehicle* Fuel Tanks
2235	Requirements.