



## ENVIRONMENTAL PROTECTION AGENCY

[EPA-HQ-OAR-2014-0535; FRL 9939-94-OAR]

### **California State Nonroad Engine Pollution Control Standards; Small Off-Road Engines Regulations; Tier 4 Off-Road Compression-Ignition Regulations; Exhaust Emission Certification Test Fuel for Off-Road Spark-Ignition Engines, Equipment, and Vehicles Regulations; Notice of Decision**

**AGENCY:** Environmental Protection Agency.

**ACTION:** Notice of Decision.

**SUMMARY:** The Environmental Protection Agency (EPA) is confirming that the California Air Resources Board's (CARB's) 2011 amendments to its Small Off-Road Engines (SORE) regulations (2011 SORE amendments), Tier 4 Off-Road Compression-Ignition (CI) regulations (2011 Tier 4 amendments), and Exhaust Emission Certification Test Fuel for Off-Road Spark-Ignition (SI) Engines, Equipment, and Vehicles regulations (2011 Certification Test Fuel amendments) are within the scope of previous EPA authorizations. The 2011 SORE amendments modify California's existing SORE test procedures by aligning California procedures to be consistent with recent amendments by EPA to the federal certification and exhaust emission testing requirements. The 2011 Tier 4 amendments enhance the harmonization of CARB's exhaust emission requirements for new off-road CI engines with the corresponding federal emissions requirements for nonroad CI engines. The 2011 Certification Test Fuel amendments modify the certification test fuel requirements for off-road spark ignition, gasoline-fueled engines to allow the use of 10-percent ethanol-blend gasoline (E10) as a certification fuel. This decision is issued under the authority of the Clean Air Act ("CAA" or "Act").

**DATES:** Petitions for review must be filed by [INSERT DATE SIXTY DAYS AFTER FR PUBLICATION DATE OF THIS NOTICE].

**ADDRESSES:** EPA has established a docket for this action under Docket ID EPA-HQ-OAR-2014-0535. All documents relied upon in making this decision, including those submitted to EPA by CARB, are contained in the public docket. Publicly available docket materials are available either electronically through [www.regulations.gov](http://www.regulations.gov) or in hard copy at the Air and Radiation Docket in the EPA Headquarters Library, EPA West Building, Room 3334, located at 1301 Constitution Avenue, NW, Washington, DC. The Public Reading Room is open to the public on all federal government working days from 8:30 a.m. to 4:30 p.m.; generally, it is open Monday through Friday, excluding holidays. The telephone number for the Reading Room is (202) 566-1744. The Air and Radiation Docket and Information Center's website is <http://www.epa.gov/oar/docket.html>. The electronic mail (e-mail) address for the Air and Radiation Docket is: [a-and-r-Docket@epa.gov](mailto:a-and-r-Docket@epa.gov), the telephone number is (202) 566-1742, and the fax number is (202) 566-9744. An electronic version of the public docket is available through the federal government's electronic public docket and comment system. You may access EPA dockets at <http://www.regulations.gov>. After opening the [www.regulations.gov](http://www.regulations.gov) website, enter EPA-HQ-OAR-2014-0535 in the "Enter Keyword or ID" fill-in box to view documents in the record. Although a part of the official docket, the public docket does not include Confidential Business Information (CBI) or other information whose disclosure is restricted by statute.

EPA's Office of Transportation and Air Quality (OTAQ) maintains a webpage that contains general information on its review of California waiver and authorization

requests. Included on that page are links to prior waiver *Federal Register* notices, some of which are cited in today's notice; the page can be accessed at

<http://www.epa.gov/otaq/cafr.htm>.

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**SUPPLEMENTARY INFORMATION:**

**I. Background**

*A. 2011 SORE Amendments*

CARB includes within its SORE regulations small off-road engines and equipment<sup>1</sup> rated at or below 19 kilowatts (kW) (25 horsepower (hp)). The vast majority of engines covered by the SORE regulations are SI engines that are used to power a broad range of equipment, including lawn mowers, leaf blowers, generators, and small industrial equipment. Exhaust and evaporative emissions from these engines are a significant source of hydrocarbons and oxides of nitrogen, pollutants that contribute to smog problems in California.

CARB first adopted standards and test procedures applicable to SORE in 1992. In 1993, CARB amended these regulations to delay their implementation until 1995. EPA authorized these initial SORE regulations in 1995.<sup>2</sup> California subsequently amended its regulations in 1994, 1995, and 1996 to clarify certification and implementation procedures, exempt military tactical equipment, and relax emissions standards for certain

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<sup>1</sup> The federal term "nonroad" and the California term "off-road" are used interchangeably.

<sup>2</sup> 60 FR 37440 (July 20, 1995).

engines. EPA confirmed these three amendment packages as within the scope of previous authorizations in 2000.<sup>3</sup>

In 1998, CARB amended the SORE regulation to apply to all engines rated less than 19 kW used in off-road applications. The 1998 amendments also revised the regulations to be based on engine displacement instead of whether the engine is used in a handheld or non-handheld application, delayed implementation of certain portions of the standards, and adopted new emission standards for new engines under 19 kW. EPA confirmed these amendments to be within the scope of previous authorizations in 2000.<sup>4</sup>

In 2004, CARB amended its off-road CI regulations to match federal standards and exhaust emissions standards, and adopted evaporative emissions standards for small off-road SI engines rated at or below 19 kW. EPA granted a full authorization for these amendments in 2006.<sup>5</sup> CARB adopted additional SORE amendments in 2008 which modified the emission credits program to provide manufacturers with additional flexibility and permitted the use of certification fuels with up to ten volume percent ethanol content, provided that the same fuel is used for certification with the EPA. EPA found these amendments to be within the scope of previous authorizations in 2015.<sup>6</sup>

#### *B. 2011 Tier 4 Amendments*

The second element of CARB's request is amendments to its nonroad regulations that include CI engines used in tractors, excavators, dozers, scrapers, portable generators, transport refrigeration units, irrigation pumps, welders, compressors, scrubbers, and

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<sup>3</sup> 65 FR 69763 (November 20, 2000).

<sup>4</sup> *Id.* at 69767.

<sup>5</sup> 71 FR 75536 (December 15, 2006).

<sup>6</sup> 80 FR 26041 (May 6, 2015).

sweepers.<sup>7</sup> In 1992, CARB approved a regulation to control exhaust emissions from heavy-duty off-road CI engines 175 hp and above.<sup>8</sup> EPA granted authorization in 1995.<sup>9</sup> In 2000 CARB harmonized California's emission standards and test procedures to federal standards that EPA promulgated in 1998 for the same nonroad CI engine categories (Tier 1 through Tier 3).<sup>10</sup> In 2004-2005 CARB generally harmonized California's Tier 4 standards to the federal Tier 4 standards for these same off-road CI engines that EPA adopted in 2004.<sup>11</sup> EPA confirmed that the 2000 amendments to the smallest category of engines (less than 19kW) were within the scope of previous authorizations.<sup>12</sup> EPA granted full authorizations for the 2004-2005 amendments as they affected new off-road CI engines less than 19kW, and for the 2000 and 2004-2005 amendments as they affected new off-road CI engines for the other two power categories (19kW-130kW and greater than 130kW).<sup>13</sup>

### *C. 2011 Certification Test Fuel Amendments*

The third element of CARB's request is amendments to its Exhaust Emission Certification Test Fuel for Off-Road SI Engines, Equipment, and Vehicles regulations. Prior to these amendments, California's SORE and Large Spark Ignition (LSI) test procedures allowed gasoline-fueled, SI engines to be tested for compliance with certification exhaust standards using either Indolene or Phase 2 California Reformulated Gasoline (CaRFG2)<sup>14</sup> as an option to federally specified test fuels. Recreational Marine

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<sup>7</sup> See EPA-HQ-OAR-2014-0535-0003, "2013-13-14 Auth Support Document SORE 2011" at 4.

<sup>8</sup> *Id.*

<sup>9</sup> 60 FR 37440 (July 5, 1995).

<sup>10</sup> See EPA-HQ-OAR-2014-0535-0003, "2013-13-14 Auth Support Document SORE 2011" at 5.

<sup>11</sup> *Id.*

<sup>12</sup> 75 FR 8056 (February 23, 2010).

<sup>13</sup> *Id.*

<sup>14</sup> Phase 1 CaRFG, which was implemented in 1992, eliminated lead from gasoline and set regulations for deposit control additives and Reid vapor pressure (RVP). Phase 2 CaRFG (CaRFG2), which was

engines were permitted to use CaRFG2, federal Indolene, or the fuel specified in Table 3 of Appendix A to 40 CFR Part 91, Subpart D. Off Highway Recreational Vehicles (OHRV) that were categorized as off-road motorcycles were required to certify using Indolene. OHRVs that were categorized as go-karts and specialty vehicles were allowed to certify using either Indolene or CaRFG2, and OHRVs that were categorized as all-terrain vehicles (ATVs) were primarily required to use Indolene, but under certain circumstances were allowed to certify using CaRFG2.<sup>15</sup>

The initial SORE regulation and the 1993 amendments to the SORE regulation allowed manufacturers to utilize either Indolene or California Phase 1 fuel as test fuel for certification.<sup>16</sup> EPA granted California a full authorization for the initial SORE regulation and the 1993 amendments.<sup>17</sup> In 1994 CARB amended the SORE regulation to provide manufacturers the option to certify SORE engines using CaRFG2 that was consistent with the certification test fuel specified for on-road motor vehicles. EPA confirmed that the 1994 amendment was within the scope of the previous authorizations.<sup>18</sup> In 2008, EPA confirmed that allowing the use of 10-percent ethanol-blend of gasoline (E10) as a certification fuel for SORE was within the scope of previous authorizations.<sup>19</sup>

The initial LSI regulation specified that the certified gasoline test fuels for LSI engines were either Indolene or CaRFG2. EPA granted California a new authorization for the initial LSI regulation on May 15, 2006.<sup>20</sup>

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implemented in 1996, set specifications for sulfur, aromatics, oxygen, benzene, T50, T90, Olefins, and RVP and established a Predictive Model. Phase 3 CaRFG (CaRFG3), which was implemented in 1999, eliminated methyl-tertiary-butyl-ether from California gasoline.

<sup>15</sup> See EPA-HQ-OAR-2014-0535-0003, “2013-13-14 Auth Support Document SORE 2011” at 9.

<sup>16</sup> *Id.* at 8.

<sup>17</sup> 60 FR 37440 (July 20, 1995).

<sup>18</sup> 65 FR 69763 (November 20, 2000).

<sup>19</sup> 80 FR 26041 (May 6, 2015).

<sup>20</sup> 71 FR 29623 (May 23, 2006).

The initial CARB Marine SI Engine regulation applicable to 2001 and later model year outboard SI marine engines and personal watercraft engines established test procedures that were virtually identical to those in the federal SI Marine Engine regulations. In 2002 CARB adopted regulations establishing exhaust emission standards and related certification and test procedures for 2003 and later model year SI inboard and sterndrive marine engines that specified the same certification test fuels as those applicable to outboard engines and personal water craft.<sup>21</sup> EPA granted California an authorization for these regulations in 2007.<sup>22</sup>

EPA granted California a new authorization for the initial OHRV regulation, which included initial test fuel certification requirements, in 1996,<sup>23</sup> and confirmed that 1996 amendments to the OHRV regulation were within the scope of the initial authorization in 2000.<sup>24</sup>

#### *D. California's Authorization Request*

By letter dated June 13, 2014, CARB submitted a request to EPA pursuant to section 209(e) of the Act for authorization of its 2011 SORE amendments, 2011 Tier 4 amendments, and 2011 Certification Test Fuel amendments (with all three sets of amendments collectively known as the “2011 Amendments”). CARB sought EPA’s confirmation that the 2011 Amendments fell within the scope of EPA’s previous authorizations, or, in the alternate, a full authorization for those amendments.

##### *1. 2011 SORE Amendments*

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<sup>21</sup> See EPA-HQ-OAR-2014-0535-0003, “2013-13-14 Auth Support Document SORE 2011” at 9.

<sup>22</sup> 72 FR 14546 (March 28, 2007).

<sup>23</sup> 61 FR 69093 (December 31, 1996).

<sup>24</sup> 65 FR 69763 (November 20, 2000).

CARB approved the 2011 SORE amendments at issue on December 16, 2011, and adopted them on October 25, 2012.<sup>25</sup> The 2011 SORE amendments became operative on January 10, 2013.<sup>26</sup> The 2011 SORE amendments modify California’s existing SORE test procedures by aligning California procedures to be consistent with recent amendments by EPA to the federal certification and exhaust emission testing requirements at 40 CFR Parts 1054 and 1065.<sup>27</sup> Part 1054 contains certification protocols, production-line testing requirements, credit-generation allowances, and other related provisions applicable to federally certified engines. Since CARB had previously promulgated California-specific versions of these provisions for SORE engines, the 2011 SORE amendments adopted the language of CFR Part 1054, but with modifications that substitute California’s specific emission standards, production-line testing requirements and credit-allowances for the corresponding federal provisions.<sup>28</sup> Part 1065 specifies the “state-of-the-art” testing equipment, systems, and processes that must be utilized in conducting emissions testing of applicable engines. The 2011 SORE amendments align California test procedures for 2013 and later model year engines with the requirements specified in Part 1065.<sup>29</sup>

## *2. 2011 Tier 4 Amendments*

CARB approved the Tier 4 amendments at issue on December 16, 2011, and adopted them on October 25, 2012.<sup>30</sup> The 2011 Tier 4 amendments became operative on

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<sup>25</sup> See EPA-HQ-OAR-2014-0535-0008, “Enclosure 5 CARB Resolution 11-41”, and EPA-HQ-OAR-2014-0535-0009, “Enclosure 6 Executive Order R-12-005”.

<sup>26</sup> *Id.*

<sup>27</sup> See EPA-HQ-OAR-2014-0535-0003, “2013-13-14 Auth Support Document SORE 2011”.

<sup>28</sup> *Id.* at 11.

<sup>29</sup> *Id.* at 11.

<sup>30</sup> See EPA-HQ-OAR-2014-0535-0008, “Enclosure 5 CARB Resolution 11-41”, and EPA-HQ-OAR-2014-0535-0009, “Enclosure 6 Executive Order R-12-005”.

January 10, 2013.<sup>31</sup> The 2011 Tier 4 amendments enhance the harmonization of CARB’s exhaust emission requirements for new off-road CI engines with the corresponding federal emissions requirements for nonroad CI engines set forth in CFR Parts 1039, 1065, and 1068.<sup>32</sup> EPA most recently amended these Parts in 2011.<sup>33</sup> The 2011 Tier 4 amendments correct clerical errors, standardize measurement specifications, calibrations, and instrumentation, remove unnecessarily burdensome reporting requirements, and provide additional compliance flexibility options.<sup>34</sup> The 2011 Tier 4 amendments also incorporate EPA’s anti-stockpiling provisions, which help ensure the realization of projected emission benefits, and also establish a new interim Tier 4 combined hydrocarbon plus oxides of nitrogen emission standard that has the potential to provide additional emission benefits.<sup>35</sup>

### *3. 2011 Certification Test Fuel Amendments*

The 2011 Certification Test Fuel amendments modify the certification test fuel requirements for off-road spark ignition, gasoline-fueled engines to allow the use of 10-percent ethanol-blend of gasoline (E10) as a certification fuel. The use of the E10 certification fuel is allowed as an option for certification exhaust emission testing of new gasoline-fueled SORE, LSI, Recreational Marine, and OHRV off-road categories from the 2013 through 2019 model years, and is mandatory for certification exhaust emission testing of these categories beginning with the 2020 model year.<sup>36</sup>

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<sup>31</sup> *Id.*

<sup>32</sup> See EPA-HQ-OAR-2014-0535-0003, “2013-13-14 Auth Support Document SORE 2011” at 12.

<sup>33</sup> 76 FR 37977 (June 28, 2011).

<sup>34</sup> See EPA-HQ-OAR-2014-0535-0003, “2013-13-14 Auth Support Document SORE 2011” at 13-18.

<sup>35</sup> *Id.* at 2.

<sup>36</sup> See EPA-HQ-OAR-2014-0535-0003, “2013-13-14 Auth Support Document SORE 2011” at 18.

### *E. Clean Air Act Nonroad Engine and Vehicle Authorizations*

Section 209(e)(1) of the Act permanently preempts any state, or political subdivision thereof, from adopting or attempting to enforce any standard or other requirement relating to the control of emissions for certain new nonroad engines or vehicles.<sup>37</sup> For all other nonroad engines (including “non-new” engines), states generally are preempted from adopting and enforcing standards and other requirements relating to the control of emissions, except that section 209(e)(2)(A) of the Act requires EPA, after notice and opportunity for public hearing, to authorize California to adopt and enforce such regulations unless EPA makes one of three enumerated findings. Specifically, EPA must deny authorization if the Administrator finds that (1) California’s protectiveness determination (i.e., that California standards will be, in the aggregate, as protective of public health and welfare as applicable federal standards) is arbitrary and capricious, (2) California does not need such standards to meet compelling and extraordinary conditions, or (3) the California standards and accompanying enforcement procedures are not consistent with section 209 of the Act.

On July 20, 1994, EPA promulgated a rule interpreting the three criteria set forth in section 209(e)(2)(A) that EPA must consider before granting any California authorization request for nonroad engine or vehicle emission standards.<sup>38</sup> EPA revised these regulations in 1997.<sup>39</sup> As stated in the preamble to the 1994 rule, EPA historically

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<sup>37</sup> States are expressly preempted from adopting or attempting to enforce any standard or other requirement relating to the control of emissions from new nonroad engines which are used in construction equipment or vehicles or used in farm equipment or vehicles and which are smaller than 175 horsepower. Such express preemption under section 209(e)(1) of the Act also applies to new locomotives or new engines used in locomotives.

<sup>38</sup> See “Air Pollution Control; Preemption of State Regulation for Nonroad Engine and Vehicle Standards,” 59 FR 36969 (July 20, 1994).

<sup>39</sup> See “Control of Air Pollution: Emission Standards for New Nonroad Compression-Ignition Engines at or Above 37 Kilowatts; Preemption of State Regulation for Nonroad Engine and Vehicle Standards;

has interpreted the consistency inquiry under the third criterion, outlined above and set forth in section 209(e)(2)(A)(iii), to require, at minimum, that California standards and enforcement procedures be consistent with section 209(a), section 209(e)(1), and section 209(b)(1)(C) of the Act.<sup>40</sup>

In order to be consistent with section 209(a), California's nonroad standards and enforcement procedures must not apply to new motor vehicles or new motor vehicle engines. To be consistent with section 209(e)(1), California's nonroad standards and enforcement procedures must not attempt to regulate engine categories that are permanently preempted from state regulation. To determine consistency with section 209(b)(1)(C), EPA typically reviews nonroad authorization requests under the same "consistency" criteria that are applied to motor vehicle waiver requests under section 209(b)(1)(C). That provision provides that the Administrator shall not grant California a motor vehicle waiver if she finds that California "standards and accompanying enforcement procedures are not consistent with section 202(a)" of the Act. Previous decisions granting waivers and authorizations have noted that state standards and enforcement procedures will be found to be inconsistent with section 202(a) if (1) there is inadequate lead time to permit the development of the necessary technology, giving appropriate consideration to the cost of compliance within that time, or (2) the federal and state testing procedures impose inconsistent certification requirements.

In light of the similar language of sections 209(b) and 209(e)(2)(A), EPA has reviewed California's requests for authorization of nonroad vehicle or engine standards

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Amendments to Rules," 62 FR 67733 (December 30, 1997). The applicable regulations are now found in 40 CFR Part 1074, subpart B, section 1074.105.

<sup>40</sup> See *supra* note 12. EPA has interpreted 209(b)(1)(C) in the context of section 209(b) motor vehicle waivers.

under section 209(e)(2)(A) using the same principles that it has historically applied in reviewing requests for waivers of preemption for new motor vehicle or new motor vehicle engine standards under section 209(b).<sup>41</sup> These principles include, among other things, that EPA should limit its inquiry to the three specific authorization criteria identified in section 209(e)(2)(A),<sup>42</sup> and that EPA should give substantial deference to the policy judgments California has made in adopting its regulations. In previous waiver decisions, EPA has stated that Congress intended EPA's review of California's decision-making be narrow. EPA has rejected arguments that are not specified in the statute as grounds for denying a waiver:

The law makes it clear that the waiver requests cannot be denied unless the specific findings designated in the statute can properly be made. The issue of whether a proposed California requirement is likely to result in only marginal improvement in California air quality not commensurate with its costs or is otherwise an arguably unwise exercise of regulatory power is not legally pertinent to my decision under section 209, so long as the California requirement is consistent with section 202(a) and is more stringent than applicable Federal requirements in the sense that it may result in some further reduction in air pollution in California.<sup>43</sup>

This principle of narrow EPA review has been upheld by the U.S. Court of Appeals for the District of Columbia Circuit.<sup>44</sup> Thus, EPA's consideration of all the evidence submitted concerning an authorization decision is circumscribed by its relevance to those questions that may be considered under section 209(e)(2)(A).

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<sup>41</sup> See *Engine Manufacturers Association v. EPA*, 88 F.3d 1075, 1087 (D.C. Cir. 1996): "... EPA was within the bounds of permissible construction in analogizing §209(e) on nonroad sources to §209(a) on motor vehicles."

<sup>42</sup> See *supra* note 12, at 36983.

<sup>43</sup> "Waiver of Application of Clean Air Act to California State Standards," 36 FR 17458 (August 31, 1971). Note that the more stringent standard expressed here, in 1971, was superseded by the 1977 amendments to section 209, which established that California must determine that its standards are, in the aggregate, at least as protective of public health and welfare as applicable Federal standards. In the 1990 amendments to section 209, Congress established section 209(e) and similar language in section 209(e)(1)(i) pertaining to California's nonroad emission standards which California must determine to be, in the aggregate, at least as protective of public health and welfare as applicable federal standards.

<sup>44</sup> See, e.g., *Motor and Equip. Mfrs Assoc. v. EPA*, 627 F.2d 1095 (D.C. Cir. 1979) ("*MEMA I*").

#### *F. Within-the-scope Determinations*

If California amends regulations that were previously authorized by EPA, California may ask EPA to determine that the amendments are within the scope of the earlier authorization. A within-the-scope determination for such amendments is permissible without a full authorization review if three conditions are met. First, the amended regulations must not undermine California's previous determination that its standards, in the aggregate, are as protective of public health and welfare as applicable federal standards. Second, the amended regulations must not affect consistency with section 209 of the Act, following the same criteria discussed above in the context of full authorizations. Third, the amended regulations must not raise any "new issues" affecting EPA's prior authorizations.<sup>45</sup>

#### *G. Deference to California*

In previous waiver decisions, EPA has recognized that the intent of Congress in creating a limited review based on the section 209(b)(1) criteria was to ensure that the federal government did not second-guess state policy choices. This has led EPA to state:

It is worth noting...I would feel constrained to approve a California approach to the problem which I might also feel unable to adopt at the federal level in my own capacity as a regulator. The whole approach of the Clean Air Act is to force the development of new types of emission control technology where that is needed by compelling the industry to "catch up" to some degree with newly promulgated standards. Such an approach...may be attended with costs, in the shape of reduced product offering, or price or fuel economy penalties, and by risks that a wider number of vehicle classes may not be able to complete their development work in time. Since a balancing of these risks and costs against the potential benefits from reduced emissions is a central policy decision for any regulatory agency under the statutory scheme

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<sup>45</sup> See "California State Motor Vehicle Pollution Control Standards; Amendments Within the Scope of Previous Waiver of Federal Preemption," 46 FR 36742 (July 15, 1981).

outlined above, I believe I am required to give very substantial deference to California's judgments on this score.<sup>46</sup>

EPA has stated that the text, structure, and history of the California waiver provision clearly indicate both a congressional intent and appropriate EPA practice of leaving the decision on "ambiguous and controversial matters of public policy" to California's judgment.<sup>47</sup>

The House Committee Report explained as part of the 1977 amendments to the Clean Air Act, where Congress had the opportunity to restrict the waiver provision, it elected instead to explain California's flexibility to adopt a complete program of motor vehicle emission controls. The amendment is intended to ratify and strengthen the California waiver provision and to affirm the underlying intent of that provision, i.e., to afford California the broadest possible discretion in selecting the best means to protect the health of its citizens and the public welfare.<sup>48</sup>

#### *H. Burden and Standard of Proof*

As the U.S. Court of Appeals for the D.C. Circuit has made clear in *MEMA I*, opponents of a waiver request by California bear the burden of showing that the statutory criteria for a denial of the request have been met:

[T]he language of the statute and its legislative history indicate that California's regulations, and California's determinations that they must comply with the statute, when presented to the Administrator are presumed to satisfy the waiver requirements and that the burden of proving otherwise is on whoever attacks them. California must present its regulations and findings at the hearing and thereafter the parties opposing

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<sup>46</sup> 40 FR 23103-23104 (May 28, 1975); *see also* LEV I Decision Document at 64 (58 FR 4166 (January 13, 1993)).

<sup>47</sup> 40 FR 23104; 58 FR 4166.

<sup>48</sup> *MEMA I*, 627 F.2d at 1110 (citing H.R.Rep. No. 294, 95 Cong., 1st Sess. 301-02 (1977)).

the waiver request bear the burden of persuading the Administrator that the waiver request should be denied.<sup>49</sup>

The Administrator's burden, on the other hand, is to make a reasonable evaluation of the information in the record in coming to the waiver decision. As the court in *MEMA I* stated: "here, too, if the Administrator ignores evidence demonstrating that the waiver should not be granted, or if he seeks to overcome that evidence with unsupported assumptions of his own, he runs the risk of having his waiver decision set aside as 'arbitrary and capricious.'"<sup>50</sup> Therefore, the Administrator's burden is to act "reasonably."<sup>51</sup>

With regard to the standard of proof, the court in *MEMA I* explained that the Administrator's role in a section 209 proceeding is to:

[...]consider all evidence that passes the threshold test of materiality and \* \* \* thereafter assess such material evidence against a standard of proof to determine whether the parties favoring a denial of the waiver have shown that the factual circumstances exist in which Congress intended a denial of the waiver.<sup>52</sup>

In that decision, the court considered the standards of proof under section 209 for the two findings related to granting a waiver for an "accompanying enforcement procedure."

Those findings involve: (1) whether the enforcement procedures impact California's prior protectiveness determination for the associated standards, and (2) whether the procedures are consistent with section 202(a). The principles set forth by the court, however, are similarly applicable to an EPA review of a request for a waiver of preemption for a standard. The court instructed that "the standard of proof must take account of the nature

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<sup>49</sup> *MEMA I*, *supra* note 19, at 1121.

<sup>50</sup> *Id.* at 1126.

<sup>51</sup> *Id.* at 1126.

<sup>52</sup> *Id.* at 1122.

of the risk of error involved in any given decision, and it therefore varies with the finding involved. We need not decide how this standard operates in every waiver decision.”<sup>53</sup>

With regard to the protectiveness finding, the court upheld the Administrator’s position that, to deny a waiver, there must be “clear and compelling evidence” to show that proposed enforcement procedures undermine the protectiveness of California’s standards.<sup>54</sup> The court noted that this standard of proof also accords with the congressional intent to provide California with the broadest possible discretion in setting regulations it finds protective of the public health and welfare.<sup>55</sup>

With respect to the consistency finding, the court did not articulate a standard of proof applicable to all proceedings, but found that the opponents of the waiver were unable to meet their burden of proof even if the standard were a mere preponderance of the evidence. Although *MEMA I* did not explicitly consider the standards of proof under section 209 concerning a waiver request for “standards,” as compared to a waiver request for accompanying enforcement procedures, there is nothing in the opinion to suggest that the court’s analysis would not apply with equal force to such determinations. EPA’s past waiver decisions have consistently made clear that: “[E]ven in the two areas concededly reserved for Federal judgment by this legislation – the existence of ‘compelling and extraordinary’ conditions and whether the standards are technologically feasible – Congress intended that the standards of EPA review of the State decision to be a narrow one.”<sup>56</sup>

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<sup>53</sup> *Id.*

<sup>54</sup> *Id.*

<sup>55</sup> *Id.*

<sup>56</sup> *See, e.g.*, “California State Motor Vehicle Pollution Control Standards; Waiver of Federal Preemption,” 40 FR 23102 (May 28, 1975), at 23103.

## *I. EPA's Administrative Process in Consideration of California's Amendment Requests for Authorization*

On November 21, 2014, EPA published a *Federal Register* notice announcing its receipt of California's authorization request. In that notice, EPA invited public comment on the 2011 SORE amendments, the 2011 Tier 4 amendments, and 2011 Certification Test Fuel amendments (collectively known as the 2011 Amendments) and an opportunity to request a public hearing.<sup>57</sup>

EPA requested comment on the 2011 Amendments, as follows: (1) Should California's amendments be considered under the within-the-scope analysis, or should they be considered under the full authorization criteria?; (2) If those amendments should be considered as a within-the-scope request, do they meet the criteria for EPA to grant a within-the-scope confirmation?; and (3) If the amendments should not be considered under the within-the-scope analysis, or in the event that EPA determines they are not within the scope of the previous authorization, do they meet the criteria for making a full authorization determination?

EPA received no written comments. Additionally, EPA received no requests for a public hearing. Consequently, EPA did not hold a public hearing.

## **II. Discussion**

### *A. California's 2011 SORE Amendments*

The 2011 SORE amendments incorporate provisions of 40 Code of Federal Regulations (CFR) Parts 1054 and 1065 into the test procedures applicable to 2013 and

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<sup>57</sup> See "California State Nonroad Engine Pollution Control Standards; Small Off-Road Engines Regulations; Tier 4 Off-Road Compression-Ignition Regulations; Exhaust Emission Certification Test Fuel for Off-Road Spark-Ignition Engines, Equipment, and Vehicles Regulations; Request for Within-the-Scope and Full Authorization; Opportunity for Public Hearing and Comment," 79 FR 69465 (November 21, 2014).

later model year engines, and incorporate citations to the newly modified test procedures. The 2011 SORE amendments dealt with three specific topics: (1) improved alignment with 40 CFR Part 1054; (2) improved alignment with 40 CFR Part 1065; and (3) amendments to CA-Part 1065 that maintain differences between California and EPA test procedures. CARB asserts that the 2011 SORE amendments do not affect the stringency of the exhaust emission standards and associated test procedures for SORE engines.

*1. Improved alignment with Part 1054*

Part 1054 contains certification protocols, production-line testing requirements, credit-generation allowances, and other related provisions applicable to federally certified engines. Since CARB had already promulgated California-specific versions of these provisions for SORE engines, the 2011 SORE amendments adopted language similar to Part 1054, but with modifications that substitute California’s specific emission standards, production-line testing requirements and credit-generations allowances for the corresponding federal provisions.<sup>58</sup>

*2. Improved Alignment with Part 1065*

Part 1065 specifies the “state-of-the-art” testing equipment, systems, and processes that must be utilized in conducting emissions testing of applicable engines. The 2011 SORE amendments largely align the test procedures applicable to 2013 and later model year engines with the requirements specified in Part 1065, and will therefore prevent the need for manufacturers to conduct separate emissions tests for certifying engines with EPA and CARB.<sup>59</sup> Additionally, CARB states that a majority of engine manufacturers had already upgraded their test equipment in order to be compliant with

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<sup>58</sup> See EPA-HQ-OAR-2014-0535-0003, “2013-13-14 Auth Support Document SORE 2011” at 11.

<sup>59</sup> *Id.* at 11.

Part 1065, and not aligning California and federal test procedures would mean that the use of the existing California test procedures would become increasingly impractical for manufacturers, independent testing facilities, and CARB.<sup>60</sup> CARB adopted Part 1065 into the SORE test procedures except for the modifications discussed below.

### *3. Amendments to CA-Part 1065 that Maintain Differences between California and EPA Test Procedures*

The 2011 SORE amendments maintain California-specific requirements applicable to new 2013 and later model year SORE engines in the following areas: allowance for supplemental engine cooling, measurement of particulate matter (PM) emissions from two-stroke engines, and exhaust emission certification test fuel requirements (discussed later in the decision).<sup>61</sup> CARB believes that the existing California provisions in the SORE test procedures regarding supplemental cooling are more representative of in-use conditions than the corresponding federal provision, and are needed to maintain the stringency of California's existing test procedures. The California provisions require that manufacturers justify the need for and the use of any auxiliary fans used to provide supplemental cooling, and further require that manufacturers demonstrate that the supplemental cooling is representative of in-use engine operation. CARB's SORE emission standards include a PM emissions standard for two-stroke engines while EPA's small nonroad engine standards do not.<sup>62</sup> California's existing regulations provide manufacturers the option of demonstrating compliance with the PM standard for two-stroke engines by using measured hydrocarbon emissions as a surrogate

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<sup>60</sup> *Id.*

<sup>61</sup> *Id.* at 12.

<sup>62</sup> *Id.*

in lieu of determining actual PM emission levels.<sup>63</sup> CARB determined that extending this option was warranted as it provides manufacturers flexibility in conducting the testing required for demonstrating emissions compliance, without affecting the stringency of the current PM emission standards.

#### *B. California's 2011 Tier 4 Amendments*

The 2011 Tier 4 amendments enhance the harmonization of CARB's exhaust emission requirements for new off-road CI engines with the corresponding federal emissions requirements for nonroad CI engines in 40 CFR Parts 1039, 1065, and 1068, as most recently amended by EPA in 2011.<sup>64</sup> CARB states that the amendments correct clerical errors, standardize measurement specifications, calibrations, and instrumentation, remove unnecessarily burdensome reporting requirements, and provide additional compliance flexibility options without sacrificing air quality benefits.<sup>65</sup> The 2011 Tier 4 amendments dealt with three specific areas: (1) modifications to Tier 4 off-road CI exhaust emission standards; (2) updated test procedures; and (3) amendments that maintain needed differences between California and EPA Nonroad CI programs.

##### *1. Modifications to Tier 4 Off-Road CI Exhaust Emission Standards*

The 2011 Tier 4 amendments aligned with the federal alternate combined oxides of nitrogen and non-methane hydrocarbons (ALT NO<sub>x</sub>+NMHC) standards and the corresponding family emission limit (FEL) caps for Tier 4 engines ranging from 56kW through 560kW.<sup>66</sup> The amendments corrected clerical errors that unintentionally limited the years of applicability for several alternative FEL caps erroneously identified in the

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<sup>63</sup> *Id.*

<sup>64</sup> *Id.* at 13.

<sup>65</sup> *Id.*

<sup>66</sup> *Id.*

regulations and test procedures. The California Tier 4 Off-Road CI regulation and the federal Tier 4 nonroad CI regulation allowed engine manufacturers to continue producing a small number of Tier 3 off-road CI engines using emission credits after the Tier 4 standards began.<sup>67</sup> However, both the original EPA and California regulations inadvertently hindered manufacturers from using these certification allowances because the Tier 4 averaging programs did not allow manufacturers to show compliance with the existing 0.19 g/kW-hr NMHC standard using credits. To correct this, the 2011 Tier 4 amendments establish new Tier 4 alternative combined NO<sub>x</sub> + NMHC standards for off-road CI engines that align with the amendments to EPA's nonroad CI regulation in 2007, which similarly provides manufacturers the option to use credits to show compliance with the new alternative NO<sub>x</sub> + NMHC standards for engines ranging from 56kW through 560kW.<sup>68</sup> The 2011 Tier 4 amendments also revise the start dates for the ALT 20% NO<sub>x</sub> FEL caps to correct an inconsistency in a regulatory table regarding the period of applicability for certifying engines to the ALT 20% NO<sub>x</sub> FEL caps that stated the period was only one or two years to the correct four-year period.<sup>69</sup>

## 2. *Updated Test Procedures*

The 2011 Tier 4 amendments primarily revise California's Tier 4 off-road CI engine test procedures to align them with the modifications to the corresponding federal nonroad CI engine test procedures that have been enacted by EPA since 2005 to improve the accuracy and precision of the measurement and reporting of emissions data. The new California off-road CI engine test procedures are comprised of three separate documents that largely incorporate provisions of the federal test procedures contained in 40 CFR

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<sup>67</sup> *Id.*

<sup>68</sup> *Id.*

<sup>69</sup> *Id.* at 14.

Parts 1039, 1065, and 1068, but that also incorporate several California-specific modifications.<sup>70</sup>

The 2011 Tier 4 amendments incorporate EPA’s June 28, 2011 modifications to Part 1039 into the new test procedure entitled “California Exhaust Emission Standards and Test Procedures for New 2011 and Later Tier 4 Off-Road Compression Ignition Engines, Part I-D”. Included among the alignments are modification of the criterion for selecting engine families regarding engine cylinder arrangement (§1039.230(b)(7)), removal of unnecessary and/or redundant labeling and notification instructions regarding the equipment manufacturer flexibility program (§1039.625), correction of clerical errors that inadvertently elevated the minimum standard for equipment flexibility engines beyond that originally intended (§1039.625(e)(3)), and clarification regarding the rounding of Averaging, Banking, and Trading credits (§1039.705(b)).<sup>71</sup>

The 2011 Tier 4 amendments deleted CARB’s existing CA-Part 1065-based test procedures and created a brand-new version in Part I-E based solely on CARB’s modifications to EPA’s 40 CFR 1065 as it existed on June 28, 2011.<sup>72</sup> The California alignments with 40 CFR 1065 included in the 2011 Tier 4 amendments are provisions for using and calculating an optional declared speed value (§1065.510(f)(3)(i)), and provisions regarding the standardization of calculating exhaust restriction set points (§1065.130(h)).<sup>73</sup>

The 2011 Tier 4 amendments incorporate EPA’s modifications to 40 CFR Part 1068 into the new test procedure entitled “California Exhaust Emission Standards and

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<sup>70</sup> *Id.*

<sup>71</sup> *Id.* at 15.

<sup>72</sup> *Id.*

<sup>73</sup> *Id.*

Test Procedures for New 2011 and Later Tier 4 Off-Road Compression Ignition Engines, Part I-F”. The 2011 Tier 4 amendments included alignments regarding allowance for distributors to replace incorrect labels prior to sale of the engine to an ultimate purchaser (§1068.101(b)(7)(i)(D)), incorporation of provisions related to the duration and applicability of Executive Orders (§1068.103(c)), incorporation and clarification of anti-stockpiling provisions (§1068.103 and 105), revisions to the label content for replacement engines (§1068.240), clarification of the provisions for shipping engines independently of required after treatment and for delegated final assembly (§1068.260 and 261), clarification that defect reporting applies only to regulated pollutants and revision of thresholds for filing reports (§1068.501), and incorporation of the federal definition for “Date of Manufacture” (§1068.801).<sup>74</sup>

The 2011 Tier 4 amendments also included a new section that establishes an anti-stockpiling provision that is consistent with recently added federal provisions in 40 CFR 1068.103 and 1068.105 which address intentional over-production of engines prior to a year in which a change in the emissions standards occur.<sup>75</sup> The new section makes clear that manufacturers cannot deviate from normal production and inventory practices to circumvent the regulations.<sup>76</sup>

### *3. Amendments that Maintain Needed Differences between California and EPA Nonroad CI Programs*

The 2011 Tier 4 amendments also maintain differences from the federal provisions that are needed to support California’s unique air quality programs. These differences primarily consist of documentation requirements. CARB states that none of

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<sup>74</sup> *Id.* at 16.

<sup>75</sup> *Id.*

<sup>76</sup> *Id.*

the differences present any technical obstacles for off-road engine manufacturers.<sup>77</sup> The differences include: enhanced emissions control labeling beyond that required on federal labels to include information such as the certification power category or an explicit designation of the emissions tier to which the engine conforms; removing the prior assurance to manufacturers that preliminary approvals of certification will not usually be reversed absent the discovery of new information contrary to the findings that resulted in the preliminary approval; not exempting a small number of replacement engines from engine labeling requirements; and not incorporating EPA’s amended definitions of “engine,” which define an engine to be an engine block with an installed crankshaft and “partially complete engine” as defined in 40 CFR 1068.30 and 1068.240.<sup>78</sup>

### *C. California’s 2011 Certification Test Fuel Amendments*

The 2011 Certification Test Fuel amendments modify the certification test fuel requirements for off-road SI, gasoline-fueled engines to allow the use of 10-percent ethanol-blend of gasoline (E10) as a certification fuel.<sup>79</sup> The use of the E10 certification test fuel is allowed as an option for certification exhaust emission testing of new gasoline-fueled LSI, SORE, OHRV, and Recreational Marine off-road categories from the 2013 through the 2019 model years, and is mandatory for certification exhaust emission testing of these categories beginning with the 2020 model year.<sup>80</sup> The 2011 Certification Test Fuel amendments also provide manufacturers the option of using other renewable fuel blends that have been certified by CARB as yielding test results equivalent to, or more stringent than those resulting from E10, and which are appropriate

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<sup>77</sup> *Id.* at 17.

<sup>78</sup> *Id.* at 17, 18.

<sup>79</sup> *Id.* at 18.

<sup>80</sup> *Id.*

for the certification of small off-road engines beginning with the 2013 model year.<sup>81</sup> The amendments maintain test fuel consistency between on-road motor vehicles and most of the off-road categories and establish complete consistency between the off-road categories' certification test fuels and commercially available fuels.<sup>82</sup>

#### *D. Within-the-Scope Analysis*

California requested that the Administrator confirm that the 2011 Amendments detailed above are within the scope of previously granted authorizations.<sup>83</sup> California asserted that all three sets of 2011 amendments met all three within-the-scope criteria, i.e. that the amendments: (1) do not undermine the original protectiveness determination underlying California's regulations; (2) do not affect the consistency of the regulations with section 202(a); and (3) do not raise any new issues affecting the prior authorizations.<sup>84</sup> We received no adverse comments or evidence suggesting a within-the-scope analysis is inappropriate, or that any of the three sets of 2011 amendments fail to meet any of the three criteria for within-the-scope confirmation.

In regard to the first within-the-scope criterion, CARB found that the 2011 Amendments did not cause the California emissions standards, in the aggregate, to be less protective of public health and welfare than applicable federal standards. California asserts their protectiveness determination is not arbitrary or capricious, and that the elements of the 2011 Amendments do not affect the stringency of the previously

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<sup>81</sup> *Id.*

<sup>82</sup> *Id.*

<sup>83</sup> This request excluded the amendment that establishes the Tier 4 alternative NOx + NMHC standards for off-road CI engines because this amendment will only be utilized by manufacturers that have accumulated emission credits. Such standards do not constitute mandatory compliance requirements, but instead provide a compliance alternative and do not require authorization. *See Motor and Equipment Mfrs. Ass'n, Inc. v. Environmental Protection Agency (MEMA II)*, 627 F.2d 1128, 1132 (D.C. Cir. 1979)(a regulatory compliance option is only a mandate that can result in a denial of a waiver if the regulation does not specify another technically feasible compliance option.)

<sup>84</sup> *Id.* at 21.

authorized SORE or Tier 4 Off-Road CI emission standards and associated test procedures, or the other regulations and test procedures affected by these amendments (LSI, Recreational Marine, and OHRV).<sup>85</sup> CARB asserts that, therefore, the subject regulations and test procedures continue to be at least as protective of public health and welfare as the federal nonroad emissions standards and test procedures.

Based on the record before us and in the absence of any evidence to the contrary, we cannot find that California's protectiveness determination regarding the implementation of 2011 Amendments is arbitrary or capricious.

In regard to the second within-the-scope criterion, the 2011 Amendments do not attempt to regulate new motor vehicles or motor vehicles engines and so are consistent with section 209(a). They likewise did not attempt to regulate any of the permanently preempted engines or vehicles, and so are consistent with section 209(e)(1). Finally, they did not cause any technological feasibility issues for manufacturers or cause inconsistency between state and federal test procedures, per section 209(b)(1)(C). No manufacturer raised technical feasibility or lead time concerns regarding the 2011 Amendments.<sup>86</sup> Additionally, the 2011 Amendments are later than EPA's corresponding amendments to the federal nonroad regulations and associated test procedures. Given these facts, EPA cannot find that the 2011 Amendments are not technically feasible or do not provide sufficient lead time.<sup>87</sup> CARB enacted the 2011 Amendments at the behest of manufacturers who had already implemented modifications to their emissions facilities that are required by EPA's corresponding amendments to the federal nonroad regulations. No technical feasibility or lead time concerns were raised regarding the elements of the

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<sup>85</sup> *Id.*

<sup>86</sup> *Id.* at 22.

<sup>87</sup> *Id.*

2011 Certification Test Fuel amendments either.<sup>88</sup> These amendments establish complete consistency between the certification and the commercially available fuels for off-road engines subject to California's SORE, LSI, Recreational Marine, and OHRV regulations.<sup>89</sup> Manufacturers of off-road spark-ignition, gasoline-fueled engines have needed to account for the usage of E10 in their engines since December 31, 2009, and those engines have been capable of being emissions tested using E10 by that date, which precedes the 2020 model-year requirement to use E10 by ten years.<sup>90</sup>

The 2011 Amendments present no issue of incompatibility between California and federal test procedures, as they essentially harmonize California's test procedures associated with the SORE, Off-Road CI Engine, LSI, Recreational Marine, and OHRV regulations with the corresponding federal test procedures. The corresponding federal regulations for such engines have already designated E10 as a test fuel for exhaust emissions testing, so the amendments do not impose inconsistent certification requirements so as to make manufacturers unable to meet both California and federal requirements with one test vehicle or engine.<sup>91</sup>

In regard to the third within-the-scope criterion, California stated that it is not aware of any new issues presented by the 2011 Amendments that affect the previously granted authorizations for the SORE, Off-Road CI Engine, LSI, Recreational Marine, or OHRV regulations, and EPA has received no evidence to the contrary.<sup>92</sup> We therefore do not find any new issues raised by the amendments.

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<sup>88</sup> *Id.*

<sup>89</sup> *Id.* at 23.

<sup>90</sup> *Id.*

<sup>91</sup> *Id.*

<sup>92</sup> *Id.*

Having received no contrary evidence regarding these amendments, we find that California has met the three criteria for a within-the-scope authorization approval, and the 2011 Amendments are confirmed as within the scope of previous EPA authorizations of California's SORE, Off-Road CI Engine, LSI, Recreational Marine, or OHRV regulations.

### **III. Decision**

The Administrator has delegated the authority to grant California section 209(e) authorizations to the Assistant Administrator for Air and Radiation. After evaluating the 2011 amendments to CARB's SORE regulations, Tier 4 Off-Road CI regulations, and Exhaust Emission Certification Test Fuel for Off-Road Spark-Ignition Engines, Equipment, and Vehicles regulations described above and CARB's submissions for EPA review, EPA is taking the following actions.

First, EPA confirms that California's 2011 amendments modifying its SORE regulations is within the scope of prior authorizations. Second, EPA confirms that California's amendment modifying its Tier 4 Off-Road CI regulations is within the scope of prior authorizations. Third, EPA confirms that California's amendment modifying its Exhaust Emission Certification Test Fuel for Off-Road Spark-Ignition Engines, Equipment, and Vehicles regulations is within the scope of prior authorizations.

This decision will affect persons in California and those manufacturers and/or owners/operators nationwide who must comply with California's requirements. In addition, because other states may adopt California's standards for which a section 209(e)(2)(A) authorization has been granted if certain criteria are met, this decision would also affect those states and those persons in such states. *See* CAA section

209(e)(2)(B). For these reasons, EPA determines and finds that this is a final action of national applicability, and also a final action of nationwide scope or effect for purposes of section 307(b)(1) of the Act. Pursuant to section 307(b)(1) of the Act, judicial review of this final action may be sought only in the United States Court of Appeals for the District of Columbia Circuit. Petitions for review must be filed by [INSERT 60 DAYS AFTER PUBLICATION OF THIS NOTICE IN THE FEDERAL REGISTER]. Judicial review of this final action may not be obtained in subsequent enforcement proceedings, pursuant to section 307(b)(2) of the Act.

#### **IV. Statutory and Executive Order Reviews**

As with past authorization and waiver decisions, this action is not a rule as defined by Executive Order 12866. Therefore, it is exempt from review by the Office of Management and Budget as required for rules and regulations by Executive Order 12866.

In addition, this action is not a rule as defined in the Regulatory Flexibility Act, 5 U.S.C. § 601(2). Therefore, EPA has not prepared a supporting regulatory flexibility analysis addressing the impact of this action on small business entities.

Further, the Congressional Review Act, 5 U.S.C. § 801, *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, does not apply because this action is not a rule for purposes of 5 U.S.C. § 804(3).

Dated: December 1, 2015.

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Janet G. McCabe,  
Acting Assistant Administrator,  
Office of Air and Radiation.  
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