I. GENERAL

A. The Staff Report: Initial Statement of Reasons for Rulemaking (staff report), entitled “Proposed Amendments to the Heavy-Duty Vehicle Inspection Program and the Periodic Smoke Inspection Program,” released April 3, 2018, is incorporated by reference herein. The staff report contains a description of the rationale for the proposed amendments, and on April 3, 2018, all references relied upon and identified in the staff report were made available to the public. All documents associated with this rulemaking were made available to the public and are available on the California Air Resources Board’s (CARB or the Board) website: https://www.arb.ca.gov/regact/2018/hdvippsip18/hdvippsip18.htm.

Background materials to supplement the staff report were also made available to the public at: https://www.arb.ca.gov/msprog/hdim/rulemaking/background_materials.htm.

In this rulemaking, CARB is adopting amendments to the Heavy-Duty Vehicle Inspection Program (HDVIP) and the Periodic Smoke Inspection Program (PSIP) to improve the ability to identify and repair vehicles operating in California with malfunctioning particulate matter (PM) emissions control systems. The amendments establish lower opacity limits for both the HDVIP and PSIP that heavy-duty (HD) vehicles must meet to operate in California. Additionally, the amendments establish smoke tester training requirements for individuals who perform smoke tests in the PSIP, and a voluntary option to submit on-board diagnostics (OBD) data in lieu of performing an annual PSIP smoke opacity test for 2013 model year (MY) and newer engines. The amendments to the regulations are codified in title 13, California Code of Regulations, sections 2180, 2180.1, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, and 2194.

On May 25, 2018, the Board conducted a public hearing on the proposed amendments and approved Resolution 18-20 for adoption with 15-day changes. Staff went back to the Board on July 26, 2018, to address California Environmental Quality Act (CEQA) concerns that were raised in public comments submitted at the May Board Hearing. The Board withdrew
resolution 18-20 and adopted Resolution 18-28 following staff’s responses to the CEQA concerns.

Staff released 15-day changes to the public on September 11, 2018. The 15-day changes exempted military tactical vehicles from the HDVIP and PSIP regulations and extended the time specific vehicles (i.e., “implements of husbandry” and “specialty farm vehicles”) would have to demonstrate compliance if cited in the HDVIP for excess opacity.

Staff released a second 15-day change package on December 12, 2018, that removed from the PSIP regulation the proposed PSIP reporting requirements, as well as the testing requirements upon vehicle sale. Additionally, the second set of 15-day changes clarified the data necessary to be submitted for fleets using the voluntary OBD data submission option and what constitutes a failed test for fleets using this option.

Resolution 18-28 directed the Executive Officer to finalize the Final Statement of Reasons (FSOR) for the regulatory amendments and to submit the final rulemaking package to the Office of Administrative Law for review. This FSOR updates the staff report, and identifies and provides the rationale for the modifications made to the originally proposed regulatory text, including non-substantial modifications and clarifications made after the close of the 15-day comment periods. The FSOR provides written responses to all comments received during the 45-day comment period, oral comments given at the Board Hearings on May 25, 2018, and July 26, 2018, and written comments submitted during the first and second 15-day comment periods.

B. MANDATES AND FISCAL IMPACTS TO LOCAL GOVERNMENTS AND SCHOOL DISTRICTS

The Board has determined that this regulatory action will not result in a mandate to any local agency or school district the costs of which are reimbursable by the state pursuant to Part 7 (commencing with section 17500), Division 4, Title 2 of the Government Code.

C. CONSIDERATION OF ALTERNATIVES

For the reasons set forth in the staff report, in staff’s comments and responses at the hearing, and in this FSOR, the Board determined that no alternative considered by the agency would be more effective in carrying out the purpose for which the regulatory action was proposed, or would be as effective and less burdensome to affected private persons, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provisions of law than the action taken by the Board.
II. MODIFICATIONS MADE TO THE ORIGINAL PROPOSAL

A. MODIFICATIONS APPROVED AT THE BOARD HEARING AND PROVIDED FOR IN THE 15-DAY COMMENT PERIODS

Pursuant to the Board direction provided in Resolution 18-28 on July 26, 2018, CARB released a Notice of Public Availability of Modified Text and Availability of Modified Text (15-Day Notice) on September 11, 2018, and again on December 12, 2018. Substantive modifications to the original proposal and the staff rationale for proposing each are summarized below:

1. In section 2180.1(a)(5), a demonstration of compliance was added to the tasks required by the owner upon receiving a citation. Owners are already required to demonstrate correction upon receiving a citation. The addition to the “citation” makes the definition consistent with these owner responsibilities.

2. In section 2180.1(a)(19), a definition of an “implement of husbandry” was added. It was necessary to add this definition in order to propose additional time for repairs for such vehicles, as discussed below in (A-5).

3. In section 2180.1(a)(37), a definition of a “specialty farm vehicle” was added. It was necessary to add this definition in order to propose additional time for the repairs for such vehicles, as discussed below in (A-5).

4. In section 2182(e), an exemption from the HDVIP for tactical military vehicles was added. These vehicles are designed to operate overseas in regions where California’s ultra-low sulfur diesel fuel may not be available. Because some emissions control technologies such as diesel particulate filters (DPF) can be fouled by high-sulfur diesel fuel, the use of such a technology on tactical military vehicles is typically avoided. As such, these vehicles would likely not be able to meet the same emission standards as those applicable to on-road trucks equipped with DPFs. Similar exemptions were provided for tactical military vehicles in recent regulatory actions such as the Truck and Bus Rule and the In-Use Off-Road Diesel Vehicle regulation.

5. In Section 2185(a)(1)(D), staff proposed to allow vehicles defined as “implements of husbandry” and “specialty farm vehicles” additional time to complete repairs if cited for an opacity violation under the HDVIP regulation. Stakeholders raised concerns that the potential for downtime of farm vehicles during planting or harvest season could present a significant impact for agricultural operations. To address this issue, staff proposed to provide 90 days rather than 45 days for owners of such vehicles to demonstrate compliance.

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6. In section 2190(b)(8), an exemption from the PSIP for tactical military vehicles was added. As discussed above, these tactical vehicles have unique concerns that may make it difficult to meet the proposed emission standards.

7. In section 2192(b)(2), staff proposed to amend the post-repair requirements to specify the requirements for those vehicle owners electing to submit OBD data.

8. Staff proposed to delete section 2193(c) that would have required the seller to provide evidence of a successful smoke opacity test to the new owner within 90 days of a vehicle sale. PSIP generally is based on CARB staff’s conclusion that annual smoke testing is sufficient to demonstrate vehicles are well-maintained. The proposed requirement to require an additional test upon sale would have potentially required more than one test per 12-month period for vehicles that are sold, which would be inconsistent with the conclusion that annual testing is sufficient.

9. In section 2193(e)(1), staff proposed to specify which OBD fault codes would constitute a failed test for vehicles complying through the OBD submission alternative. This change was necessary to ensure that fleet owners know what constitutes a successful OBD submittal and what constitutes a failed OBD submittal. Note, that this was previously section 2193(f)(3) in the originally released regulatory language and first 15-day change notice. However, section 2193(c) was removed, and hence section 2193(f) became section 2193(e).

10. Staff proposed to delete section 2193(e)(3) because that provision applies to previously proposed language in section 2192(e)(2) on reporting requirements, which was proposed to be deleted, hence section 2193(e)(3) was no longer needed.

11. Staff proposed to amend the owner and vehicle information required to be submitted by the owner during the voluntary OBD data submission process and move the regulatory language to sections 2193(f)(1) and 2193(f)(2). This owner and vehicle information would ensure that staff has adequate information on who is submitting the OBD data and to which vehicle the data pertains. Similar information is required to be kept in owner records regarding periodic opacity testing.

12. Staff proposed to move the OBD data submittal requirements to section 2193(f)(3). These OBD data submittal requirements are for fleets choosing to use this alternative in lieu of complying with the annual smoke opacity testing requirements. The OBD information submittal requirements were previously proposed for inclusion in section 2194(e). Staff also specified what OBD parameters are required to be submitted.

13. Staff proposed to delete section 2195 that would have required annual reporting of smoke opacity test data, along with owner and vehicle information. CARB has committed in the State Implementation Plan (SIP) for San Joaquin Valley and the 2016 State Strategy for the SIP to seek further emission reductions through a
comprehensive HD inspection and maintenance (I/M) program. Staff believes it makes more sense to consider reporting requirements as part of a more comprehensive HD I/M program, instead of making stakeholders learn a new reporting system now for PSIP, only to have this system be replaced in the near future with a new, more comprehensive reporting system.

**B. NON-SUBSTANTIAL MODIFICATIONS**

Subsequent to the 15-day public comment period mentioned above, staff identified the following additional non-substantive changes to the regulation:

1. Section 2180.1(a): Staff updated the numbering of definitions 19 through 41.

2. Section 2182(a)(3): Staff corrected a spelling error in the term VDECS.

3. Section 2186(b)(1)(A): Staff corrected an error in referencing the definition of a trained smoke tester. Staff incorrectly referenced section 2191(a)(4), whereas the correct reference is section 2191(a)(8).

4. Section 2190(a): Staff edited language to read as “greater than 6000 pounds” to fix a previous error and ensure consistency with how heavy-duty vehicles are defined in section 2180(a)(18).

5. Section 2190(b)(6): Staff edited language to read as “greater than 6000 pounds” to fix a previous error and ensure consistency with how heavy-duty vehicles are defined in section 2180(a)(18).

6. Section 2193(f): Staff corrected a grammatical error to reflect staff’s intention that data will be submitted in an electronic format (not “form”) approved by the Executive Officer.

7. Section 2193(h): Staff corrected a grammatical ambiguity to reflect staff’s intention that the standard of approval for the smoke tester training course are pursuant to the requirements of 2193(h)(1) through (6) only.

The above described modifications constitute non-substantial changes to the regulatory text because they more accurately reflect the numbering of a section and correct spelling and grammatical errors, but do not materially alter the requirements or conditions of the proposed rulemaking action.

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III. DOCUMENTS INCORPORATED BY REFERENCE

The regulations adopted by the Executive Officer incorporate by reference the following document:


This document was incorporated by reference because it would be cumbersome, unduly expensive, and otherwise impractical to publish it in the California Code of Regulations. In addition, the document is copyrighted, and cannot be reprinted or distributed without violating the licensing agreements. The document is lengthy and highly technical test method and engineering document that would add unnecessary additional volume to the regulation. Distribution to all recipients of the California Code of Regulations is not needed because the interested audience for this document is limited to the technical staff at a portion of affected facilities, most of whom are already familiar with this method and document. Also, the incorporated document was made available by CARB upon request during the rulemaking action and will continue to be available in the future. The document is also available from college and public libraries, or may be purchased directly from the publishers.

IV. SUMMARY OF COMMENTS AND AGENCY RESPONSE

Written comments were received during the 45-day comment period in response to the May 25, 2018 public hearing notice, and written and oral comments were presented at the Board Hearing. Listed below are the organizations and individuals that provided comments during the 45-day comment period:

<table>
<thead>
<tr>
<th>Commenter</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Torres, Chris (04/27/2018)</td>
<td>F and L Farms Trucking, Inc. [FLT]</td>
</tr>
<tr>
<td>Bogert, Chris (05/13/2018)</td>
<td>Accurate Truck Inspection and Testing [ATIT]</td>
</tr>
<tr>
<td>Shepherd, Bob (05/18/2018)</td>
<td>California Caterpillar Dealers [CCD]</td>
</tr>
<tr>
<td>Ostapuk, Kathryn (05/21/2018)</td>
<td>US Navy [Navy]</td>
</tr>
<tr>
<td>Tunnel, Mike (05/21/2018)</td>
<td>American Trucking Associations [ATA]</td>
</tr>
<tr>
<td>Lewis, Michael (05/21/2018)</td>
<td>Construction Industry Air Quality Coalition [CIAQC]</td>
</tr>
<tr>
<td>Shimoda, Chris (05/21/2018)</td>
<td>California Trucking Association [CTA]</td>
</tr>
</tbody>
</table>
The following organizations and individuals provided written comments at the public hearing on May 25, 2018:

<table>
<thead>
<tr>
<th>Commenter</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brezny, Rasto</td>
<td>Manufacturers of Emission Controls Association [MECA]</td>
</tr>
<tr>
<td>Edgar, Brad</td>
<td>Red Fox Resources [RFR]</td>
</tr>
<tr>
<td>Merkley, Danny</td>
<td>California Farm Bureau Federation [CFBF]</td>
</tr>
<tr>
<td>Nguyen, Yian</td>
<td>John R. Lawson Rock and Oil, Inc. [Lawson]</td>
</tr>
</tbody>
</table>

The following organizations and individuals, listed in the order that they spoke, provided oral testimony at the public hearing on May 25, 2018:

<table>
<thead>
<tr>
<th>Commenter</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lewis, Michael</td>
<td>CIAQC</td>
</tr>
<tr>
<td>Brezny, Rasto</td>
<td>MECA</td>
</tr>
<tr>
<td>Torres, Chris</td>
<td>F&amp;L Farms Trucking, Inc. [FLT]</td>
</tr>
<tr>
<td>Barret, Will</td>
<td>American Lung Association [ALA]</td>
</tr>
<tr>
<td>Rushing, Rocky</td>
<td>Coalition for Clean Air [CCA]</td>
</tr>
<tr>
<td>Merkley, Danny</td>
<td>California Farm Bureau Federation [CFBF]</td>
</tr>
<tr>
<td>Shimoda, Chris</td>
<td>CTA</td>
</tr>
<tr>
<td>Tunnel, Mike</td>
<td>ATA</td>
</tr>
<tr>
<td>Cram, Rob</td>
<td>Holt of California [HC]</td>
</tr>
<tr>
<td>Edgar, Brad</td>
<td>Red Fox Resources [RFR]</td>
</tr>
</tbody>
</table>

No written or oral comments were provided at the July 26, 2018, Board Hearing.

The following organizations and individuals provided comments during the first 15-day comment period:

<table>
<thead>
<tr>
<th>Commenter</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hamilton, Kevin</td>
<td>Central California Asthma Collaborative [CCAC]</td>
</tr>
<tr>
<td>Carranza, Jim [JC]</td>
<td>(9/14/2018)</td>
</tr>
<tr>
<td>Shepherd, Bob</td>
<td>N/A</td>
</tr>
<tr>
<td>Lewis, Michael</td>
<td>CCD</td>
</tr>
<tr>
<td>Kinsey, John</td>
<td>Wagner Jones Helsley PC [Lawson]</td>
</tr>
</tbody>
</table>

The following organizations and individuals provided comments during the second 15-day comment period:

<table>
<thead>
<tr>
<th>Commenter</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gonzalez, Juvenal</td>
<td>Valley Party Bus [VPB]</td>
</tr>
<tr>
<td>Nunamaker, Jean [JN]</td>
<td>(12/14/2018)</td>
</tr>
<tr>
<td>Cremers, Noelle</td>
<td>CFBF</td>
</tr>
<tr>
<td>Rosenfield, Cody</td>
<td>CCA</td>
</tr>
</tbody>
</table>
Comments of Support

1. **Comment:** MECA commends staff for improving the current HDVIP and PSIP regulations to ensure diesel particulate filters (DPF) are working properly. DPFs are extremely efficient at reducing PM emissions and the proposed changes to the opacity limits will result in a cleaner trucking fleet. MECA agrees with the five percent opacity limit for DPF equipped vehicles and independent measurements by MECA DPF retrofit manufacturers have demonstrated that a five percent opacity limit can be easily and repeatedly measured in the field. Programs like the HDVIP and PSIP help safeguard and ensure DPFs are working properly in the field. Regular maintenance is critical for DPF equipped vehicles. [MECA]

**Agency Response:** Staff appreciates support for the proposed rulemaking.

2. **Comment:** The ALA supports the proposal as it is an appropriate and important step in protecting public health against harmful diesel exhaust. The more stringent standards and testing requirements ensure greater protections against excessive diesel emissions that pose a threat to disadvantaged communities and lead to greater emission reductions. [ALA]

**Agency Response:** Staff appreciates the comments.

3. **Comment:** The CCA supports the proposal. The proposed amendments are long overdue and the potential health and economic benefits resulting from the proposed program improvements are many. More stringent federal and State emission standards, along with cleaner burning fuels, and diesel particulate filters have made the current opacity limits obsolete. With the proposed amendments and beefed up enforcement, the HDVIP and PSIP can be important tools in ensuring that dirty trucks get fixed or are retired. [CCA]

**Agency Response:** Staff appreciates the comments.

Lower Opacity Limits

1. **Comment:** Tightening opacity limits will increase costs to farms and ranches with HD trucks. [CFBF]

**Agency Response:** No changes were made in response to this comment.

Costs associated with the regulation were identified and quantified in the ISOR. The cost effectiveness of these amendments is estimated to be about $93 per pound of PM reduced, well within the range of previously adopted CARB regulations. Only vehicles with malfunctioning emissions control systems will face additional costs associated with the lower opacity limits. The stricter opacity limits improve the effectiveness of the HDVIP and PSIP regulations by enabling more vehicles with malfunctioning and damaged emissions control systems to be identified and repaired. Vehicles operating with malfunctioning emissions control systems emit significantly more emissions than a properly functioning vehicle. Ensuring these vehicles get repaired is important to limiting public exposure to these harmful pollutants.
2. **Comment:** CIAQC opposes lowering the opacity limits. The five percent opacity limit that is being set for newer trucks is going to be difficult to meet. [CIAQC]

**Agency Response:** No changes were made in response to this comment.

Staff does not believe meeting the 5 percent opacity limit will be difficult. As long as fleets keep their DPFs in working order, their trucks will meet a 5 percent opacity limit. In-use testing and research conducted by National Renewable Energy Laboratory (NREL) show that vehicles operating with properly functioning DPFs emit opacity levels at or very near zero percent. The data also show that DPF equipped vehicles operating at or above a five percent opacity level are operating with significantly damaged DPFs.

3. **Comment:** CCD and CIAQC have concerns that pre-1991 MY engines may fail the 40 percent opacity limit and this may affect the use of older vehicles currently operating under the low mileage exemption under the Truck and Bus Rule. [CCD], [CIAQC]

**Agency Response:** No changes were made in response to this comment.

Staff does not believe the proposed opacity limits for non-DPF equipped vehicles will affect the continued use of older vehicles operating legally as low use vehicles under CARB’s Truck and Bus Rule. Properly functioning vehicles without DPFs have been shown to readily meet the proposed opacity limits for non-DPF vehicles. Since 2009, the state of New Jersey has required HD diesel vehicles to meet the same opacity limits for non-DPF equipped vehicles as what staff is proposing in these amendments. The overall failure rate in New Jersey is about one percent. Even the oldest vehicles can readily meet their proposed opacity limits. Such vehicles operating as low mileage vehicles under the Truck and Bus Rule therefore would not be impacted.

**Smoke Tester Training Requirements**

1. **Comment:** CIAQC has concerns with the smoke tester training requirements. California Council on Diesel Education (CCDET) training will become a requirement for all smoke testers. Because of this, one or more of a company’s employees would not be available to perform their normal jobs while they go through this new training requirement. [CIAQC]

**Agency Response:** No changes were made in response to this comment.

Staff acknowledges that employees would not be able to perform their normal jobs while undergoing the training. However, the training helps ensure that the smoke test is performed properly and enables vehicles with malfunctioning PM emissions control systems to be readily identified and repaired. The CCDET training is only required for contracted smoke testers. Surveys suggest that about 90 percent of contracted smoke testers are already CCDET certified and maintain their certification every 4 years, so the majority of contracted smoke testers will not be affected by this requirement.
The requirement does, however, level the playing field for contracted smoke testers to ensure that all of them have received proper training.

Individuals performing the testing for their own fleet or are employed by the fleet they are testing for would only need to take an online class. The online course option is a one-time training requirement. The time needed to take this online training (only about an hour) is minimal, and as with the CCDET course, this online training is important to ensure that individuals performing the PSIP smoke opacity test correctly administer the test and fully understand the requirements of the regulation. The online option ensures that fleet employees needing training would incur only minimal impact on their other duties and would not have to take a full day off from work. This will help limit the burden of the mandatory training requirement.

2. **Comment:** CCD would support a proposal to require all smoke testers to take the CCDET training course to ensure consistency in the testing protocol. [CCD]

**Agency Response:** No changes were made in response to this comment.

Staff considered requiring all smoke testers to take the in-person CCDET training course. However, this course is currently only offered at six community colleges throughout the state. Hence, staff was concerned that requiring every tester to take the in-person course would cause these courses to be oversubscribed and in addition would be inconvenient for testers who live far from the six community colleges. Therefore, staff felt it was appropriate to require all contracted smoke testers take the in-person CCDET training class, but allow an alternative method for individuals who perform the tests for their own fleet.

**PSIP Reporting Requirements**

1. **Comment:** CTA opposes the proposed reporting requirements for the PSIP. They unfairly add costs to compliant truck owners and result in little to no emissions benefit and further exacerbate the uneven playing field created by a persistent lack of enforcement of CARB regulations. Fleets operating gross-emitting trucks are likely not going to report. Without fair enforcement, the reporting requirements become another cost bourn solely by already compliant fleets. CTA asks for staff to reconsider the additional reporting requirement. [CTA]

**Agency Response:** The PSIP reporting requirements have been removed with a 15-day change. CARB has committed in the State Implementation Plan (SIP) for San Joaquin Valley and the 2016 State Strategy for the SIP to seek further emission reductions through a comprehensive HD inspection and maintenance (I/M) program.³ Staff believes it makes more sense to consider reporting

requirements as part of a more comprehensive HD I/M program, instead of making stakeholders learn a new reporting system now for PSIP, only to have this system be replaced in the near future with a new, more comprehensive reporting system.

2. **Comment:** ATA’s primary concern centers on the proposed PSIP reporting requirements. This type of reporting has not been effective in deterring non-compliance and will simply increase costs for compliant fleets. ATA asks for the removal of the proposed reporting requirements. Given the agency’s limited enforcement capabilities and pending efforts to develop a more robust I/M program for trucks, it is difficult to justify the cost-benefit of the newly proposed reporting requirements. ATA would like to see resources spent in a manner that provides a more level playing field. [ATA]

**Agency Response:** Staff does not agree that this type of reporting has not been an effective tool in deterring non-compliance. Reporting requirements aid enforcement and compliance, and help focus limited enforcement resources. However, the PSIP reporting requirements have been removed with a 15-day change, for the reasons discussed in the response immediately prior to this one.

3. **Comment:** To a farmer or rancher, the proposed PSIP reporting requirements can be significant. These requirements are especially difficult for small and mid-sized farms who cannot afford to hire a compliance officer to ensure all reporting requirements are met. These requirements do nothing to improve our air quality. It makes more sense to continue the current process of asking for records and auditing fleets to ensure compliance. [CFBF]

**Agency Response:** Staff does not agree that reporting requirements do not help improve air quality. In fact, reporting requirements are a standard component of most regulations to aid enforcement and compliance and improve air quality by helping increase compliance with important regulations. However, the PSIP reporting requirements have been removed with a 15-day change, for the reasons discussed in response 1 above.

4. **Comment:** CIAQC has concerns about the reporting requirements. California fleets and rental companies are competitively disadvantaged with more reporting, as out of state fleets are not subject to the requirements. These requirements only add to the other CARB reporting requirements in the first quarter. These reporting requirements open up the potential for inappropriate enforcement actions due to inadvertent and innocent omissions of reported vehicles. There are differences in the Department of Motor Vehicles (DMV) and CARB data on existing fleet information as DMV tracks vehicles by vehicle identification number and CARB tracks by engine model year. How is this data going to be synchronized without issuing erroneous paperwork violations? CIAQC suggests staff require a fleet owner to submit an annual affirmation that their fleet is compliant instead of requiring the reporting of smoke opacity tests. [CIAQC]

**Agency Response:** Staff is actively working with DMV to resolve some of the differences between data stored in CARB’s Truck Regulation Upload, Compliance, and Reporting System (TRUCRS) database and data stored in
DMV's registration database sets in preparation for linking vehicle registration to Truck and Bus Rule compliance, as required by Senate Bill 1 passed in 2017. CARB regulations are typically set based on engine MY, a data parameter that DMV does not collect on a regular basis. DMV data include chassis MY, a parameter that is not always the same as engine MY in HD vehicles. This effort will be completed in the near future. However, staff does not view these differences in data collection as a reason to not collect vehicle and testing data reported by fleets. Furthermore, staff does not agree that differences in DMV data and CARB data will lead to erroneous violations and citations in the HDVIP or PSIP. Reporting requirements are a powerful tool to ensure better compliance throughout the state.

However, the PSIP reporting requirements have been removed with a 15-day change, for the reasons discussed in response 1 above.

5. Comment: CCD oppose the PSIP reporting requirements as it is unnecessary and ask for it to be removed. The reporting requirements will not identify fleets that continue to ignore the current regulation and impose a larger regulatory cost to compliant fleets. This requirement would make the PSIP regulation more unenforceable than the current version and put California fleets at a disadvantage compared to out-of-state fleets. Until CARB and DMV have a mechanism in place to synchronize vehicle data, the reporting requirement will only lead to unnecessary enforcement and make it more difficult for fleets to stay in compliance. Caterpillar asks staff to use an annual affirmation approach instead of the reporting approach. [CCD]

Agency Response: Staff does not agree that this type of reporting requirement would be useless in identifying noncompliant fleets. Reporting requirements like these exist for many other regulations and have been shown to been an effective tool in deterring non-compliance. However, the PSIP reporting requirements have been removed with a 15-day change, for the reasons discussed in response 1 above.

6. Comment: There isn’t any reason why fleets should have to send in reporting paperwork. If CARB wants to see the testing records, they can call, and we will provide the records. [FLT]

Agency Response: Calling each fleet as suggested by the commenter would not be practical. Reporting requirements like these have been shown to been an effective tool in deterring non-compliance. However, the PSIP reporting requirements have been removed with a 15-day change, for the reasons discussed in response 1 above.

7. Comment: The California Cattlemen’s Association and California Farm Bureau Federation express support for the proposed amendment to the HDVIP and PSIP and appreciate the changes made during the 15-day change process to remove reporting requirements. [CFBF]

Agency Response: Staff appreciates the comment.
Testing Requirement upon Vehicle Sale:

1. **Comment:** CTA members have raised concerns with the proposed smoke testing requirements prior to vehicle sale. Without fair enforcement, this requirement becomes another cost borne solely by those fleets who intend to comply with the law. [CTA]

   **Agency Response:** Staff does not agree with the implication that enforcement of HDVIP or PSIP is unfair or otherwise biased.

   The proposed testing requirements upon vehicle sale have been removed as part of a 15-day change, in part for consistency with the rest of PSIP, which is based on annual smoke testing, and in part due to stakeholder concerns.

2. **Comment:** CIAQC requests staff remove the testing requirement upon vehicle sale. There is no mechanism to identify who would be performing the smoke tests before sale because it is not a stipulation written in the vehicle code or monitored through registration by DMV. The section is unenforceable. [CIAQC]

   **Agency Response:** Staff does not agree that such a requirement must be written into the vehicle code or monitored through registration by DMV. Nor does staff believe such a requirement is unenforceable. However, after further discussion between staff and stakeholders, the proposed testing requirements upon vehicle sale have been removed as part of a 15-day change, in part for consistency with the rest of PSIP, which is based on annual smoke testing, and in part due to stakeholder concerns.

3. **Comment:** CCD asks for the testing requirement upon vehicle sale to be removed as it is unenforceable. If the requirement is to remain, the 90 day timeframe is too short and should be extended to 12 months instead. It is a redundant test and will increase costs for rental fleets. If the requirement remains, Caterpillar also requests that a provision be added to include single truck owners to test their vehicles upon sale in addition to those vehicles subject to the PSIP. [CCD]

   **Agency Response:** Extending the 90 day timeframe for testing upon vehicle sale to 12 months as suggested by commenter CCD would negate the requirement for such testing since annual PSIP testing is already required. However, the proposed testing requirements upon vehicle sale have been removed as part of a 15-day change, for the reasons discussed in the response immediately prior to this one.

4. **Comment:** FLT notes that the testing upon change of ownership requirement is just more regulation and is unnecessary. [FLT]

   **Agency Response:** A testing requirement upon sale of a vehicle is already required in the light duty smog check program and could potentially help ensure vehicles PM emissions control systems are functioning properly at the time of sale. However, the proposed testing requirements upon vehicle sale have been
removed as part of a 15-day change, for the reasons discussed in response 1 above.

Emission Benefits Estimate Comments

1. **Comment:** CTA comments that the estimated benefits of the proposed amendments are significantly higher than what was estimated as part of the 2016 Statewide Implementation Plan. The increased estimated benefits can be attributed to changes made to the speed correction factor and overall activity. Technical documentation for EMFAC 2017 indicate that there was significant uncertainty on the relationship between speed and emission rate. Because of this uncertainty, CTA believes it is reasonable to include an upper and lower bound emission reduction and cost-effectiveness estimate using both EMFAC 2014 and EMFAC 2017. [CTA]

**Agency Response:** No changes were made in response to this comment.

As noted by CTA, the increase in baseline PM emissions (and thus emission benefit, which is estimated as a percentage reduction from the baseline) in EMFAC2017 is primarily due to the revision of the PM speed correction factors (SCF). As part of EMFAC 2017 development, PM emission rates and SCFs were developed based on emission test data from 26 2010+ MY HD diesel trucks, which included 3 trucks from the 2012 CARB testing project, 4 trucks from the Engine Manufacturers Association-University of California, Riverside (EMA-UCR) testing project with 3 of these also re-tested by CARB, and 19 trucks from the CARB’s Truck and Bus Surveillance Program (TBSP). All 26 trucks were tested on chassis dynamometers over a suite of test cycles with different average speeds. For HD truck emissions analysis, this dataset is fairly large and covers high volume sales of all major engine manufacturers.

The test data from the 26 trucks show that PM emissions are significantly higher than estimated in EMFAC2014 during a large fraction of high speed cycles (i.e., speeds above 40 mph) and are likely a result of DPF regeneration. In the TBSP, all vehicles were tested “as is” with no knowledge about a vehicle’s last DPF regeneration event and therefore regeneration could occur in any of the cycles during testing – just as in regular driving such events can occur periodically as determined by the engine control module (ECM). DPF regeneration tends to occur more frequently during high speed driving as exhaust temperatures increase due to higher levels of engine load. It should be noted that due to the short duration of dynamometer test cycles, DPF regeneration did not occur in every high speed cruise cycle and one should not expect to see a regeneration event in every repeat of this cycle, which likely is the main reason for the large variations in the PM emission test data. As a result, in revising SCFs of HD trucks in EMFAC2017, staff used all available PM data from 2010+ MY trucks

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4 Regeneration is the term used to describe the cleaning of the DPF and removal of accumulated soot particles. This is done either passively (from the engine’s exhaust heat in normal operation or by adding a catalyst to the filter) or actively introducing very high heat into the exhaust system.
to determine the relationship between emission rate and vehicle speed. This update only impacts 2010+ MY engines, and not the older model years.

Staff believes that CTA’s comment on the EMFAC2017 technical documentation regarding the variations of PM emission data is not accurate. Specifically, the part of the technical document cited in CTA’s comment discusses staff’s attempt to analyze the test data for 2010-2012 MY and 2013+ MY vehicles as two separate groups for PM, as is the case for NOx; however, staff found that because of the “randomness” of occurrence of DPF regeneration during the testing, combining the data of the two model year groups, all of which are equipped with DPFs, would yield an SCF curve that can provide a better characterization of the in-use PM emissions and at the same time capture the impact of DPF regeneration on real world diesel PM emissions.

In summary, based on the above discussion and clarification, staff does not believe that the variability of PM emissions in the test data used to revise the SCFs introduces unwarranted uncertainties in emissions benefit estimates. Based on a significant amount of test data from a variety of different emission testing and research programs, EMFAC2017 reflects our latest understanding of criteria and GHG emissions from medium and HD diesel trucks. Compared to EMFAC2017, EMFAC2014 is based on far fewer emission data points for 2010+ MY engines and thus estimates of emission benefits based on EMFAC2014 should be deemed outdated, hence staff does not suggest using it to estimate emission benefits for the HDVIP/PSIP.

Agricultural Vehicles

1. The CFBF and the California Cattlemen’s Association request that “implements of husbandry” be exempted from the HDVIP and PSIP. Vehicles that are cited for needed repairs and ultimately forced to be parked during planting, harvest, or seasonal livestock shipping can have a significant impact on operations. Flexibility in the application of the requirements for these vehicles is urged as to not put these vehicles out of service during these important times of the year. [CFBF]

Agency Response: A 15-day change has been included to provide flexibility for “implements of husbandry.” Staff is proposing to allow “implements of husbandry” 90 days to demonstrate compliance upon receiving a HDVIP citation instead of the current 45 days to allow agricultural truck owners greater flexibility as to when they make required repairs. This will allow the fleet to complete the planting, harvest, or livestock season before bringing the vehicle in for the needed repair. Fleets have flexibility as to when the annual PSIP test is performed and hence, this test can be completed during the offseason. Therefore, staff does not believe additional PSIP flexibility is needed. Finally, as these vehicles have been subject to both the HDVIP and PSIP since the 1990’s, staff does not believe an outright exemption for these vehicles is warranted.
CEQA Comments

1. **Comment:** CARB has failed to comply with CEQA. [Lawson]

   **Agency Response:** Staff disagrees with this comment. Given the general nature of the comment, it is not possible to respond more specifically. Therefore, generally speaking, staff believes CARB has followed the requirements of its Certified Regulatory Program (CRP) in preparing the Environmental Analysis (EA). No changes to the EA are necessary.

2. **Comment:** CARB’s CRP does not authorize a finding of exemption from CEQA, and therefore a full EA must be prepared and circulated for public review. [Lawson]

   **Agency Response:** Staff disagrees with this comment. First, the EA prepared for this item satisfies all requirements of CARB’s certified regulatory program (CRP). CARB’s CRP provides that its staff reports “shall contain a description of the proposed action, an assessment of anticipated significant long or short term adverse or beneficial environmental impacts associated with the proposed action, and a succinct analysis of those impacts. The analysis shall address feasible mitigation measures and feasible alternatives to the proposed action which would substantially reduce any significant adverse impact identified.” (17 CCR § 60005(b).) The EA in this case satisfies this requirement. As no significant impacts are associated with this proposed action, the analysis does not need to, and cannot, assess any significant adverse impacts from the proposed action (as there are none). The analysis also does not need to address mitigation measures or alternatives, as under both CARB’s CRP and long-established CEQA principles, those are only required where potentially significant impacts exist. (Id.; see also Pub. Resources Code §§ 21100(b)(3), 21150; and 14 CCR § 15126.4(a)(3).)

   Second, it is also long-established that an agency’s CRP exempts it from Chapters 3 and 4 of CEQA only. (Pub. Resources Code § 21080.5(c).) CEQA’s exemption authority is not contained in Chapter 3 or 4; rather, it is located elsewhere in CEQA, mainly in Chapter 2.6. (See, e.g., Public Resources Code §§ 21080, 21083.) So, the commenter is incorrect that CARB lacks authority to properly determine that certain activities are exempt from CEQA.

   Finally, contrary to the commenter’s claim, the staff report does indeed include an environmental analysis to the extent it is possible to conduct one for an activity that has no negative environmental impacts. It is included in Chapter V, entitled “ENVIRONMENTAL IMPACT ANALYSIS.” In brief, that analysis showed that the proposed amendments to the HDVIP and PSIP qualify as exempt under CEQA because the action is both an action taken by a regulatory agency for protection of the environment (as described in CEQA Guidelines §15308 for “class 8” exemptions), and because it can be seen with certainty that there is no possibility that the proposed amendments may have a significant effect on
the environment. Therefore, there is no need to revise the staff report and circulate it for additional review.

3. **Comment:** A “fair argument” exists that the Proposed Amendments would have significant environmental impacts. In particular, due to CARB’s “pervasive and costly regulations,” and “CARB’s unwillingness to evenly enforce its own regulations,” truckers have decided not to comply with CARB’s regulations. CARB “cannot enforce, and has no intention of enforcing,” the Proposed Amendments. The Proposed Amendments constitute a regulatory taking, interfere with the contract clause, and will create further disincentives for non-responsible truckers to comply with CARB’s programs relating to heavy duty trucks, which will cause them to decline to comply with CARB’s regulations even further. [Lawson]

**Agency Response:** Staff disagrees with this comment on multiple levels.

First, as explained below, staff properly concluded the proposed amendments are exempt from CEQA. (See discussion regarding that issue in response to CEQA comment 2, above.) Therefore, staff disagrees that the “fair argument” standard applies in this case. Rather, staff’s determination that the proposed amendments are exempt from CEQA is subject to the “substantial evidence” standard of review. As explained in the staff report and elsewhere in the record, substantial evidence supports staff’s determination.

Second, there is no substantial evidence to support a fair argument that the Proposed Amendments would increase emissions or cause any other potentially significant environmental impacts. Commenter’s contentions in this regard defy logic or evidence.

CEQA provides that “[w]hether a fair argument can be made that the project may have a significant effect on the environment is to be determined by examining the whole record before the lead agency. Argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence.” (CEQA Guidelines § 15384 (emphasis added).) Here, the commenter suggests that multiple environmental regulations, combined with what it characterizes as a “policy of under-enforcement”, combine to “incentivize non-compliance” and generate “unintended environmental effects.” This general claim regarding environmental impacts can properly be addressed with a general response, which is that commenter’s conclusion involves multiple layers of speculation. CEQA does not require an agency to engage in speculation when future actions that may follow from an activity are uncertain. (See *Environmental Council of Sacramento v. City of Sacramento* (2006) 142 Cal.App.4th 1018, 1032; 14 CCR 15145.) In particular, courts have repeatedly held that “speculation about possible violations does not constitute substantial evidence of a significant impact.”

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5 See *Covina Residents for Responsible Dev. v. City of Covina* (2018) 21 Cal. App. 5th 712, 729; see also *East Sacramento Partnership for a Livable City v. City of Sacramento* (2016) 5 Cal.App.5th 281, 297 (“[i]n the absence of a specific factual foundation in the record, dire predictions by nonexperts regarding the
The commenter provides no evidence that more protective regulations have any potential to increase emissions above the existing conditions baseline; indeed, the evidence in the record shows otherwise. In support of this claim, the commenter vaguely suggests that CARB is under-enforcing its regulations, and that this under-enforcement somehow incentivizes noncompliance that the proposed action will exacerbate. In claiming CARB selectively enforces its regulations against large fleets and not small fleets, the commenter purports to quote language from the staff report, but it erroneously adds a non-existent term – “large” fleets – to its quoted staff report text. That term does not appear in the actual staff report text that commenter references.6

Contrary to the commenter’s claims, CARB vigorously enforces its diesel truck program requirements. Since 2011 CARB has successfully closed 1,015 fleet investigations and assessed more than $22 million in penalties for violations of CARB diesel rules. Over this same period, CARB also issued 27,413 citations and collected more than $11 million in penalties for violations of diesel program requirements on individual vehicles.

CARB’s 2017 Annual Report is publicly available, and provides detailed information about the Board’s diesel enforcement activities. For example, in 2017, CARB closed 132 diesel fleet investigations and assessed $3,249,907 in penalties. CARB also issued 3,963 citations and collected $1,222,314 in penalties. Moreover, as described on page 19 of the Annual report, CARB is implementing a streamlined enforcement process designed to greatly increase the efficiency in truck enforcement efforts. (See the attached 2017 Annual Enforcement Report at pages 17-23 (particularly the top of page 19), and the attached staff presentation for the 2017 Annual Enforcement Report at pages 24-27.)

Overall CARB’s vigorous enforcement efforts bring fleets and trucks into compliance, and assess penalties that serve as a deterrent to future non-compliance both for individual violators and the industry as a whole. While certain fleets have experienced compliance issues, CARB has developed a comprehensive compliance assistance and enforcement presence to help bring these fleets into compliance and penalize those who will not comply. For the past several years, a data-driven process to identify noncompliant fleets has been used by CARB’s Enforcement Division.

As the commenter correctly notes, compliance with the current PSIP regulation is relatively low, at approximately 50%. However, that is not evidence that CARB’s

6 Specifically, at pages 4 and 6 of its letter, the commenter claims the staff report states that staff would use “submitted data to better target large fleet audits toward fleets that are not performing the required PSIP testing.” This is incorrect. In actuality, the referenced language in the staff report does not include the key word “large”; rather, it states that “Staff would use the submitted data to better target fleet audits toward fleets that are not performing the required PSIP testing.”
proposed amendments would decrease compliance. Indeed, as explained in detail in the staff report and other places in the record, a primary purpose of the proposed amendments is to increase compliance (staff report at 14-15, 24-25.) This, in combination with further outreach, recordkeeping requirements, and staff audits, will ensure robust enforcement of the PSIP regulation. The staff report also notes additional factors which are expected to increase compliance under the Truck & Bus Rule, including implementation of SB 1, which will further incentivize turnover to cleaner engine technologies (staff report at 17.) Taken together, these improvements will greatly assist CARB with enforcing this program. (See staff report at 14-15.)

Finally, the commenter’s claims regarding the proposed amendments’ potential to somehow increase emissions are directly at odds with the other claims in its comment letter, which include claims that the proposed amendments would require compliance so expensive as to constitute a regulatory taking (comment letter at page 10) and which would amount to unconstitutional interference with contract (comment letter at page 11). Commenter attempts to have it both ways: it claims that the Proposed Amendments would both somehow increase emissions by causing entities to not comply with CARB’s regulations, while somehow also increasing costs to industry to such an extent that would violate the Constitution by requiring companies to comply with its regulations. These arguments are contradictory. The record is clear that the proposed amendments are designed to cost-effectively improve compliance across all of California’s truck fleets subject to the proposed amendments.

4. Comment: CARB is improperly seeking to improperly “piecemeal” environmental review by declining to analyze in a single EA all of the “upcoming regulations that affect the trucking industry together.” [Lawson]

Agency Response: CEQA requires agencies to consider the “whole of the action” proposed, rather than just a part of it that could conceal broader environmental impacts. However, staff disagrees that the CEQA “project” here encompasses more than the proposed amendments. As set forth in more detail in the staff report, the proposed amendments only encompass proposed modifications to the HDVIP and PSIP, which regulate opacity and smoke emitted from HD vehicles.

Specifically, the proposed amendments primarily involve: (1) lower opacity limits for on-road HD vehicles that apply to both the HDVIP and PSIP; (2) training requirements for the PSIP smoke testers; and (3) voluntary OBD reporting in lieu of the annual PSIP opacity test for vehicles with 2013 MY and newer engines.

It remains unclear why the commenter believes the proposed amendments are similar enough to other HD regulations to constitute part of the same “project”. Even if the proposed amendments were related to other CARB efforts in a general sense, the proposed amendments have utility independent of CARB’s other HD vehicle regulations. Courts have consistently found that a related activity need not be treated as part of the project under review when the project has independent utility or serves an independent purpose, and is not dependent on completion of the related activity. (See, e.g., Del Mar Terrace Conservancy,
Inc. v. City Council (1992) 10 Cal.App.4th 712, 736.) For example, the proposed amendments will help ensure that on-road vehicles and engines continue to comply with the applicable opacity standards, and that vehicle owners have an incentive to properly maintain and timely seek repairs of defects that cause such vehicles and engines to exceed opacity standards. As noted above, increasing enforceability and enforcement of the HDVIP/PSIP requirements is a key driver for the proposed amendments. The HDVIP and PSIP serve distinct purposes from CARB’s other HD vehicle regulations (like the Truck & Bus Rule). This is a discrete and independent project of independent utility, which staff appropriately analyzed.

Nothing in CARB’s certified regulatory program requires wholesale reevaluation of all regulations affecting an entire sector each time one part of an individual regulation is amended. It would not be appropriate under CEQA, or sensible as a matter of California administrative law, to require separate regulatory proposals that generally relate to the same general subject matter or class of vehicles to be treated as a shared project, as commenter seems to assert is the case. Because regulations are necessarily developed over time, to address specific issues and legislative mandates, it would be difficult and unnecessary to analyze all potential regulations that (in the view of some) relate in some way to a class or category of vehicles together in one document at one moment in time; the delays and complexities involved in attempting to do so, moreover, could well delay critical public health protections mandated by the legislature, while not providing additional useful public transparency. Furthermore, treating all regulations applicable to a given sector as a single CEQA “project” would require extensive over-noticing of entire industries, at taxpayer expense, every time a discreet rulemaking affecting specific subsectors is undertaken. This would prevent CARB from providing efficient regulatory relief to those subsectors, where necessary and justified.

Even if the proposed amendments were considered part of a broader “project” (which they are not here), staff disagrees that any undisclosed potentially significant impacts could exist. To the extent staff can discern an environmental claim from the commenter’s “piecemealing” arguments, the premise is that CARB’s more protective environmental regulations are increasing the very emissions they are designed to reduce by a combination of what the commenter characterizes as inadequate enforcement and introducing new costs to the trucking industry. In addition to being entirely speculative, such a premise is contrary to both logic and reality, and does not constitute evidence of an environmental impact. See discussion in response to CEQA comment 3, above.

Miscellaneous Comments

1. Comment: Some trucking companies feel there is a lack of enforcement of the PSIP and take a “wait until I get caught attitude.” Others claim they have never heard of the regulation. Additional education and enforcement of the regulation requirements is needed, or companies will continue to ignore the requirements. [ATIT]
Agency Response: CARB vigorously enforces its diesel truck program requirements. Since 2011 CARB has successfully closed 1,015 fleet investigations and assessed more than $22 million in penalties for violations of CARB diesel rules. Over this same period, CARB also issued 27,413 citations and collected more than $11 million in penalties for violations of diesel program requirements on individual vehicles.

CARB’s 2017 Annual Report is publicly available, and provides detailed information about the Board’s diesel enforcement activities. For example, in 2017, CARB closed 132 diesel fleet investigations and assessed $3,249,907 in penalties. CARB also issued 3,963 citations and collected $1,222,314 in penalties. Moreover, as described on page 19 of the Annual Report, CARB is implementing a streamlined enforcement process designed to greatly increase the efficiency in truck enforcement efforts.

Overall CARB’s vigorous enforcement efforts bring fleets and trucks into compliance, and assess penalties that serve as a deterrent to future non-compliance both for individual violators and the industry as a whole. CARB has developed a comprehensive compliance assistance and enforcement presence to help bring fleets into compliance and penalize those who will not comply and staff is constantly striving to refine this system further. For the past several years, for example, CARB’s Enforcement Division has been moving to a more data-driven process to identify noncompliant fleets and target enforcement efforts.

Additionally, CARB has implemented an outreach and education program that has been in place for years to improve compliance and to help enforce the requirements for diesel vehicle regulations, including smoke testing requirements. These activities include training classes, industry field events, and “One-Stop Truck” events. During One-Stop Truck events, which are held throughout the State, attendees can receive one-on-one assistance with compliance issues, attend classes, attend enforcement inspection demonstrations, receive information on financial incentives, and have the opportunity to meet vendors and other regulatory agencies. Diesel Hotline staff are trained to advise callers on their smoke testing requirements. For these regulatory amendments specifically, staff conducted several email blasts to registrants in its Truck Regulation Upload, Compliance and Reporting System, and mailed over 32,000 postcards to fleets to inform them of the changes to CARB’s heavy-duty truck inspection programs. Additionally, CARB has made use of social media including Facebook and Twitter to provide outreach to fleets on the new requirements.

Staff will continue its current efforts, and will be doing additional outreach on these amendments. Staff will update printable informational pamphlets about CARB’s smoke testing programs, and mail information to registered truck owners using the DMV mailing list, as well as post frequently asked questions on the Truck Stop website to help fleets be prepared for the new requirements. Staff is coordinating with the California Council on Diesel Education and Technology (CCDET) to update their certification class on opacity measurement and to develop an online class for fleets to conduct self-testing.
2. **Comment:** The Department of Defense asks for military tactical vehicles to be exempt from the HDVIP and PSIP regulations, similar to the exemption previously granted to tactical military vehicles in the Truck and Bus Rule and the In-Use Heavy-Duty Off-Road Regulation. Both HDVIP and PSIP regulations are intended to monitor and enforce the emission standards for HD vehicles, operating in the State of California. These standards are generally met when the vehicle is equipped with emission control devices, however, this requirement is not applicable to military tactical vehicles, under §1905.  

**Agency Response:** Staff agrees and has added an exemption in the HDVIP and PSIP for military tactical vehicles.

3. **Comment:** CARB should focus on enforcing the current programs it has. CARB does not have the funds to enforce any of the programs that it has. The smoke inspection programs are ludicrous. New trucks burn clean. If the filters are plugged or defective, the trucks won’t run.  

**Agency Response:** No changes were made in response to this comment.

The amendments made to the HDVIP and PSIP are directly designed to improve a current CARB program. These amendments enable the HDVIP and PSIP to better identify malfunctioning vehicles so they are repaired in a timely manner. These smoke inspection programs are vital to ensuring that vehicles are operating with properly functioning DPFs and that PM emissions are low in vehicles operating in California. Many vehicles with malfunctioning DPFs continue to operate on California roadways as is evident from the roadside smoke opacity test data gathered by CARB enforcement staff. These studies estimated that almost 10 percent of vehicles operating in California currently have malfunctioning PM emissions control systems and indicated that some newer vehicles with 2010 MY and newer engines were operating with malfunctioning DPFs.

4. **Comment:** The Standardized Regulatory Impact Analysis (SRIA) for the Proposed Amendments does not meet the applicable standards required under the Administrative Procedures Act (APA) as the SRIA’s analysis of the disadvantages for businesses currently doing business within the state is incomplete as the proposed amendments exacerbate an uneven playing field caused by CARB’s failure to evenly enforce the regulations it has imposed on the trucking industry. The SRIA should be amended to consider the adverse cumulative impact of numerous rulemakings CARB is considering including the California Phase 2 Tractor-Trailer Regulation, the Heavy-Duty Diesel Vehicle Emission Control System Warranty Regulation, the Truck and Bus Regulation and an anticipated regulation governing transport refrigeration units (TRU) in 2019 and the likelihood that CARB will continue to fail to enforce the regulations against non-compliant truckers.  

**Agency Response:** No changes were made in response to this comment.
The SRIA for the HDVIP and PSIP meets all Administrative Procedures Act (APA) and State Administrative Manual (SAM) standards and requirements. The SRIA analyzes the economic impact of the proposed amendments, including the impacts on California jobs, creation or elimination of new businesses, and competitive advantages or disadvantages for businesses currently doing business in the State. Economic impacts were evaluated using the Regional Economic Models, Inc. (REMI), Policy Insight Plus. REMI is a structural macro-economic forecasting and policy analysis model that integrates input-output, computable general equilibrium, econometric and economic geography methodologies. The SRIA analyzed competitive advantages and disadvantages in Section D.7 of the staff report. Staff disagrees with Lawson’s assertion that the proposed amendments exacerbate an uneven playing field. The proposed amendments actually help improve the playing field for fleets operating in California by increasing the ability to diagnose trucks operating with malfunctioning PM emissions control systems.

The APA requires the SRIA to consider the incremental impacts of the proposal; impacts of existing regulations were analyzed as part of each regulation’s respective past rulemaking. See Govt. Code, 11346.3(2) “The state agency, prior to submitting a proposal to adopt, amend, or repeal a regulation to the office, shall consider the proposal’s impact on business…” (Emphasis added).

As discussed in more detail in CEQA comment 4, even if the proposed amendments were related to other CARB efforts in a general sense, the proposed amendments have utility independent of CARB’s other HD vehicle regulations. Courts have consistently found that a related activity need not be treated as part of the project under review when the project has independent utility or serves an independent purpose, and is not dependent on completion of the related activity. (See, e.g., Del Mar Terrace Conservancy, Inc. v. City Council (1992) 10 Cal.App.4th 712, 736.) It would not be appropriate under CEQA, or sensible as a matter of California administrative law, to require separate regulatory proposals that generally relate to the same general subject matter or class of vehicles to be treated as a shared project, as commenter seems to assert is the case.

5. **Comment:** The proposed amendments represent a violation of equal protection and due process as the amendments provide significant benefits to truckers who have actively chosen not to comply with the PSIP and other CARB regulations. [Lawson]

**Agency Response:** No changes were made in response to this comment.

Staff disagrees with this comment. As discussed in more detail in CEQA comment 3, CARB vigorously enforces its diesel truck program requirements. Since 2011 CARB has successfully closed 1,015 fleet investigations and assessed more than $22 million in penalties for violations of CARB diesel rules. Over this same period, CARB also issued 27,413 citations and collected more than $11 million in penalties for violations of diesel program requirements on individual vehicles.
Overall CARB’s vigorous enforcement efforts bring fleets and trucks into compliance, and assess penalties that serve as a deterrent to future non-compliance both for individual violators and the industry as a whole. While certain fleets have experienced compliance issues, CARB has developed a comprehensive compliance assistance and enforcement presence to help bring these fleets into compliance and penalize those who will not comply. For the past several years, a data-driven process to identify noncompliant fleets has been used by CARB’s Enforcement Division. The proposed amendments help improve CARB enforcement staff’s ability to find and catch vehicles operating with malfunctioning PM emissions control systems, thus actually increasing the enforceability of both the HDVIP and PSIP regulations.

CARB also disagrees with the premise that a trucker that chooses to violate PSIP or other CARB regulations thereby receives a “significant benefit.” Any such violator risks substantial civil liability, and any perceived short-term gain from refusal to comply with state regulations could be quite costly in the long-term. CARB also disagrees that the scenario posed by the commenter represents a violation of equal protection.

In addition, the proposed amendments have gone through a rigorous public process in compliance with the California Administrative Procedure Act and therefore do not violate due process protections.

6. Comment: An exception for vehicles operating within the low mileage limits of the Truck and Bus Rule should be provided. [CCD], [CIAQC]

Agency Response: Staff does not believe a low-mileage exemption is appropriate. Vehicles operating with malfunctioning PM emissions control systems emit substantially more PM emissions than a properly functioning vehicle. These excess diesel PM emissions can cause serious health effects for individuals living in affected areas. Therefore, staff believes it is important that every HD diesel vehicle be checked on a regular basis to ensure emissions are controlled.

7. Comment: JN believes a mileage driven each year should be considered. It doesn’t seem fair for cars that only put on about 2,000 miles each year need to get smogged every year. [JN]

Agency Response: The HDVIP and PSIP do not affect vehicles that get smogged on a biannual basis through the light-duty smog check program. Staff is not proposing any changes to the light-duty smog check program. Passenger cars will not be affected by the proposed amendments to the HDVIP and PSIP. However, in terms of the HDVIP and PSIP, staff does not believe a low-mileage exemption is appropriate, as discussed in the response to comment 6, above.
Comments Outside the Scope of the Rulemaking

1. **Comment:** MECA is concerned with PM emissions from off-road Tier 4 engines certified without DPFs. MECA asks CARB to closely scrutinize Tier 4 final certification packages of non-DPF engines and allocate more enforcement resources to follow up with in-use emissions on these engines and believes CARB should consider the adoption of a manufacturer run in-use emissions testing program for off-road Tier 4 final engines. [MECA]

**Agency Response:** This comment is outside the scope of the proposed amendments to the HDVIP and PSIP. However, staff will continue to pursue avenues to reduce emissions from the off-road engine sector.

2. **Comment:** MECA encourages CARB to continue to explore potential concepts for a future comprehensive HD I/M program and supports the use of OBD, and potentially telematics, to screen vehicles. [MECA]

**Agency Response:** Staff will continue to pursue options to further reduce emissions from the HD vehicle sector and will consider the use of OBD and telematics screening in the future.

3. **Comment:** RFR recommends that owners recycle their used DPFs as they can have significant recycle value due to the potential recovery of precious metals. [RFR]

**Agency Response:** Staff appreciates the comment, limiting waste can be beneficial for the environment.

4. **Comment:** FLT discussed the struggles that fleets throughout the state have had in complying with the Truck and Bus Rule and adjusting to vehicles with aftertreatment. The squeezed in time period for new trucks to transition to aftertreatment systems made it extremely difficult and challenging for both manufacturers and end users. Early versions of aftertreatment equipped trucks never really worked right. [FLT]

**Agency Response:** This comment is outside the scope of the proposed HDVIP and PSIP amendments, but staff appreciates the comments and will take the lessons learned from previous experiences into account when proposing future regulations.

5. **Comment:** VPB has concerns with the 1,000 mile threshold to be considered a low-usage vehicle in the Truck and Bus Rule. VPB also has concerns related to financial aid assistance for new businesses and believes CARB hinders small business. [VPB]

**Agency Response:** This comment is outside the scope of the proposed amendments to the HDVIP and PSIP.
V. Peer Review

Health and Safety Code Section 57004 sets forth requirements for peer review of identified portions of rulemakings proposed by entities within the California Environmental Protection Agency, including CARB. Specifically, the scientific basis or scientific portion of a proposed rule may be subject to this peer review process. Staff determined that the rulemaking at issue does not contain a scientific basis or scientific portion subject to peer review, and thus, no peer review as set forth in section 57004 was needed to be performed.