APPENDIX B
VEHICLE RECALL AND EMISSIONS MODIFICATION PROGRAM

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VEHICLE RECALL AND EMISSIONS MODIFICATION PROGRAM

I. PURPOSE

This Appendix B establishes how Settling Defendants shall submit Proposed Emissions Modifications, and how the United States Environmental Protection Agency ("EPA") and the California Air Resources Board ("CARB") (collectively, "EPA and CARB" or "EPA/CARB") will approve or disapprove any such proposal, should Settling Defendants choose, at their election, to submit a Proposed Emissions Modification. Settling Defendants must comply with the requirements of this Appendix B. No Emissions Modification may be performed by, or on behalf of, Settling Defendants unless and until EPA/CARB approve the applicable Proposed Emissions Modification. Following approval, any Emissions Modification performed by, or on behalf of, Settling Defendants must conform to the applicable Approved Emissions Modification and the requirements set forth herein.

If Settling Defendants submit a Proposed Emissions Modification according to the terms of this Appendix B, and EPA/CARB determine the proposal satisfies the requirements set forth herein, then EPA/CARB will approve that Proposed Emissions Modification. EPA/CARB will issue decisions, including decisions concerning the approval or disapproval of Proposed Emissions Modifications, in accordance with the definitions and decision-making authorities set forth in Section V of the Consent Decree (Approval of Submissions and EPA/CARB Decisions). EPA/CARB will review any proposal according to this Appendix B, rather than according to the regulatory processes for reviewing applications for Certificates of Conformity, Executive Orders, or administrative recalls; provided, however, except as otherwise expressly stated herein, the applicable regulatory calculation methods, test procedures, protocols, processes, or procedures shall apply unless an alternative approach is approved by the agencies.

II. DEFINITIONS

2.1 Terms used in this Appendix B shall have the meanings set forth below. Terms that are not defined below but are defined in Section IV (Definitions) of the Consent Decree shall have the meaning set forth therein.

2.2 "20º F FTP" means the FTP conducted at 20º Fahrenheit, as specified in 40 C.F.R. Part 1066 Subpart H.

2.3 "2014 Reflash" means the modification of Generation 1 and Generation 2 2.0 Liter Subject Vehicles in 2014 and 2015.

2.4 "Approved Emissions Modification" means an Emissions Modification submitted by Settling Defendants and approved by EPA/CARB.

2.5 "Auxiliary Emission Control Device" or "AECD" has the meaning set forth in 40 C.F.R. § 86.1803-01.

2.6 "AT" means automatic transmission.

2.7 "Calibration" means a specific parameterization of the ECU software that determines how various processes in engine and exhaust aftertreatment are controlled under many different operating conditions. A common example of a process is fuel injection (timing and quantity) under different engine loads and ambient conditions. The term "Calibration" can also be used synonymously for the act of setting the parameters of the ECU software.

2.8 "Critical OBD Demonstration" means the minimum set of OBD emission demonstration tests, pursuant to Cal. Code. Regs. tit. 13, § 1968.2(h) (2013), that must be completed and included in Part B of the Proposed Emissions Modification. For Generation 1, the minimum set of tests includes: PM filter efficiency, NOx trap, EGR low flow, and injection quantity minimum for automatic transmission vehicles only. For Generation 2, the minimum set of tests includes: PM filter efficiency, SCR catalyst efficiency, EGR low flow, and injection quantity minimum for automatic transmission vehicles only. For Generation 3, the minimum set of tests includes: PM filter efficiency, SCR efficiency, EGR low flow, injection quantity minimum, injection quantity maximum, and DOC for automatic transmission vehicles only.

2.9 "Combined Uphill/Downhill and Highway Route" means the driving route shown and described in Appendix B-3 to this Consent Decree.

2.10 "DEF System" means the combination of vehicle components used to store, filter, measure the level and quality of, thaw, and inject the DEF into the exhaust.

2.11 "Defeat Device" has the meaning provided under 42 U.S.C. § 7522(a)(3)(B) and 40 C.F.R. § 86.1803-01.

2.12 "DeNOx Strategies" means an AECD that acts to convert NOx that accumulates on the NOx trap to N2.

2.13 "DeSOx Strategy" means an AECD that acts to remove sulfur that accumulates on the NOx trap.

2.14 "DeSOx Escalation Strategies" means an AECD that acts in stages to improve the removal of sulfur that accumulates on the NOx trap.

2.15 "Deterioration Factor" or "DF" means the number, determined pursuant to 40 C.F.R. § 86.1823-08, that represents the change in emissions performance during a vehicle's Full Useful Life. The DF is applied to emission results from the required test cycles, as provided in 40 C.F.R. § 86.1841-01. DFs are used to estimate increases in emissions caused by deterioration of the emission control system as a vehicle ages over its Full Useful Life.

2.16 "Diesel Exhaust Fluid" or "DEF" means a liquid reducing agent (other than engine fuel) used in conjunction with selective catalytic reduction to reduce NO_X emissions. DEF is generally understood to be an aqueous solution of urea conforming to the specification of ISO 22241. DEF is used in Generation 2 and Generation 3 vehicles and is sometimes referred to by the trademarked name, "AdBlue."

2.17 "Drivability" means the smooth delivery of power, as demanded by the driver or operator. Typical elements of Drivability degradation are rough idling, misfiring, surging, hesitation, or insufficient power. Conversion from conventional fuels to alternative fuels may entail losses of volumetric efficiency, resulting in some power loss. Such power loss is not considered to be Drivability degradation.

2.18 "Durability Demonstration Vehicle" or "DDV" means a vehicle with the final emission calibration that is run on the Standard Road Cycle ("SRC") to Full Useful Life. Periodically (at approximately 4,000 miles, 30,000 miles, and every 30,000 miles thereafter) emission testing in the FTP75 is performed and the Deterioration Factor is calculated. After completion of emission testing at Full Useful Life, the vehicle is reflashed with the final engine Calibration, which includes the final emission Calibration (used during mileage accumulation to Full Useful Life) and final OBD Calibration, and the reflashed vehicle is used for Full Useful Life emission compliance and OBD testing required to be reported post-submission according to subparagraph 4.3.4 in this Appendix B. Subject to EPA/CARB approval, a representative Generation 3 vehicle may be used as the DDV for purposes of complying with subparagraph 4.3.4.

2.19 "ECU" or "Engine Control Unit" means the computer, including associated software, which controls various engine functions, including emission control system functions.

2.20 "EGR" or "Exhaust Gas Recirculation" means a device that directs a portion of the exhaust gas into the intake air stream for the purpose of controlling emissions.

2.21 "Eligible Vehicle" has the meaning provided in Appendix A of the Consent Decree.

2.22 "Eligible Lessee" has the meaning provided in Appendix A of the Consent Decree.

2.23 "Eligible Owner" has the meaning provided in Appendix A of the Consent Decree.

2.24 "Emission Control System" means a unique group of emission control devices, auxiliary emission control devices, engine modifications and strategies, and other elements of design designated by EPA/CARB and used to control exhaust emissions of a vehicle.

2.25 "Emission Control System Data Parameters" means the data parameters that Settling Defendants must record while conducting the Required Emissions Test Procedures, including the preconditioning cycles, as set forth in Appendix B-2 to this Consent Decree.

2.26 "Emissions Increasing Auxiliary Emissions Control Device" or "EI-AECD" means any AECD, as defined in Cal. Code. Regs. tit. 13, § 1968.2(c), that reduces the effectiveness of the emission control system under conditions which may reasonably be expected to be encountered in normal vehicle operation and use, provided that the need for such AECD is justified by the protection it provides against vehicle damage or accident. EI-AECDs do not include AECDs that do not sense, measure, or calculate any parameter or command or trigger any action, algorithm, or alternate strategy; or AECDs that are activated solely due to any of the following conditions: (1) operation of the vehicle above 8,000 feet in elevation; (2) ambient temperature; (3) when the engine is warming up and is not reactivated once the engine has warmed up in the same driving cycle; (4) failure detection (storage of a fault code) by the OBD system; (5) execution of an OBD monitor; or (6) execution of an infrequent regeneration event.

2.27 "Emissions Levels" means the emissions levels that represent the best achievable emissions performance, as specified in Appendix B-1 to this Consent Decree (Prior Test Results).

2.28 "Emissions Modification" means the alterations to 2.0 Liter Subject Vehicles including software recalibration and replacement of parts related to the Emissions Control System, that are designed to reduce emissions, remove all Defeat Devices and bring the vehicles into compliance with the Maximum Emissions Modification Limits and the other requirements specified in this Appendix B.

2.29 "Emissions Modification Database" means a searchable database that Settling Defendants make available online, by which users, including Eligible Owners, Eligible Lessees, and potential purchasers, may conduct a free-of-charge search by vehicle VIN to determine whether the Emissions Modification is available for, or has been applied to, a specific vehicle.

2.30 "Emissions Modification Proposal" means the required materials Settling Defendants provide in a Submission or multiple Submissions for EPA/CARB review and approval or disapproval of any Proposed Emissions Modification, if Settling Defendants elect to submit such a proposal.

2.31 "Engine Bench-aged" means aging that is conducted on an internal combustion engine test bench using a procedure that is subject to EPA/CARB approval and using a fuel type (diesel or gasoline) as provided herein.

2.32 "Engineering Durability Data" means data which is used to estimate the Official Durability Data. It may be based on a preliminary design of the Emission Modification. It may also be determined from an extrapolation of incomplete Official Durability Data or by simulating the mileage accumulation required under 40 C.F.R. § 86.1823-08.

2.33 "Engineering Durability Testing" means testing to obtain Engineering Durability Data.

2.34 "EPA/CARB" means EPA and CARB when the agencies evaluate Settling Defendants' Submissions and issue decisions, including decisions concerning the approval or

disapproval of Proposed Emissions Modifications, in accordance with the definitions and decision-making authorities set forth in Section V of this Consent Decree (Approval of Submissions and EPA/CARB Decisions).

2.35 "Federal Test Procedure" or "FTP" means the driving schedule in 40 C.F.R. Part 86, Appendix I, Section (a) (EPA Urban Dynamometer Driving Schedule for Light-Duty Vehicles and Light-Duty Trucks).

2.36 "Final OBD Demonstration" means:

2.36.1 For automatic transmission vehicles: all OBD emission demonstration testing required under Cal. Code. Regs. tit.13, § 1968.2(h) (2013), except, if Settling Defendants assert that only a functional check is required because no failure or deterioration of the specific tested system could result in an engine's emissions exceeding the emission malfunction criteria, Settling Defendants must still complete the OBD demonstration and submit with the proposal all emission and fault detection data from vehicles equipped with the Proposed Emissions Modification used to determine that only a functional test of the system(s) is required.

2.36.2 For manual transmission vehicles: all OBD emission demonstration testing required under Cal. Code. Regs. tit. 13, § 1968.2(h) (2013), including the requirements concerning functional check data noted above, except limited to the following monitors:

i. For Gen 1: PM filter efficiency, NOx Trap efficiency, EGR low flow, injection quantity minimum, charge air undercooling, EGR slow response, oxygen sensor upstream LNT slow response, oxygen sensor upstream of NOx Trap positive amplification, oxygen sensor upstream of NOx Trap negative amplification, misfire detection, underboost, and DOC efficiency.

ii. For Gen 2: PM filter efficiency, SCR efficiency, EGR low flow, injection quantity minimum, SCR delivery performance, misfire detection, EGR slow response, underboost, overboost, boost system slow response, charge air undercooling, DEF delivery performance, and DOC efficiency.

iii. For Gen 3: PM filter efficiency, SCR efficiency, EGR low flow, injection quantity minimum, injection quantity maximum, DEF delivery performance, and DOC efficiency.

2.37 "FTP@1620m" means FTP testing at high-altitude conditions, i.e., a test altitude of 1,620 meters (5,315 feet), plus or minus 100 meters (328 feet), or equivalent observed barometric test conditions of 83.3±1 kilopascals.

2.38 "Full Useful Life" or "FUL" means the regulatory period in years or miles for which vehicles must meet emission standards. Full Useful Life is 10 years or 120,000 miles, whichever occurs first, for Model Year 2009-2014 2.0 Liter Subject Vehicles and 15 years or 150,000 miles, whichever occurs first, for Model Year 2015 2.0 Liter Subject Vehicles.

2.39 "Generation" means the different versions of emission control technology installed in various configurations of 2.0 Liter Subject Vehicles.

2.40 "Generation 1" or "GEN 1" means the following 2.0 Liter Subject Vehicles: Volkswagen Jetta (Model Years 2009-2014), Jetta SportWagen (2009-2014), Golf (2010-2014), Beetle (2013-2014), Beetle Convertible (2013-2014), and Audi A3 (2010-2013), containing a lean NOx trap system, within the test groups specified in the Consent Decree.

2.41 "Generation 2" or "GEN 2" means the following 2.0 Liter Subject Vehicles: Volkswagen Passat (Model Year 2012-2014) containing a selective catalytic reduction system with SCR catalyst in under floor position, within the test groups specified in the Consent Decree.

2.42 "Generation 3" or "GEN 3" means the following 2.0 Liter Subject Vehicles: Volkswagen Jetta, Golf, Golf SportWagen, Beetle, Beetle Convertible, Passat and Audi A3 (Model Year 2015), containing an SCR system with the upstream SCR catalyst close-coupled to the engine and an SCR catalyst in the underfloor position, within the test groups specified in the Consent Decree.

2.43 "Highway Fuel Economy Test," "HWFET," or "HWY FE" mean the test cycle that represents highway driving as described in 40 C.F.R. Part 600 Appendix I.

2.44 "Include" and "Including," as used in this Appendix B, are not limiting terms.

2.45 "Infrequent Regeneration Adjustment Factor" or "IRAF" mean the adjustment factor for each pollutant used to account for increased emissions caused by periodic regeneration of certain control devices, such as DPFs, performed by burning particulates that have accumulated in the control device. The increased emissions caused by such regeneration are accounted for over the emission test cycles by adjustment factors, or IRAFs, applicable to the pollutants NMOG, NOx, CO, and PM.

2.46 "Maximum Emissions Modification Limits" means the emissions levels, specified in Tables 1-3, that the Modified Vehicles may not exceed.

2.47 "Modified Vehicle" means a 2.0 Liter Subject Vehicle that Settling Defendants, or an entity acting on behalf of Settling Defendants, have modified in accordance with an Approved Emissions Modification.

2.48 "MT" means manual transmission.

2.49 "Noise Vibration and Harshness" or "NVH," means a measure of the noise level heard during driving, the vibrations felt during driving, and the harshness of the ride of the vehicle.

2.50 "Non-Methane Organic Gases" or "NMOG" means the sum of oxygenated and non-oxygenated hydrocarbons contained in a gas sample as measured using the procedures described in 40 C.F.R. § 1066.635.

2.51 "NOx + NMOG Limit" means an emissions limit concerning the sum of NOx plus Non-Methane Organic Gases (NMOG) and required by this Appendix B.

2.52 "NOx" means oxides of nitrogen, i.e., the sum of the nitric oxide and nitrogen dioxide contained in a gas sample as if the nitric oxide were in the form of nitrogen dioxide.

2.53 "NOx Reduction System" means, for the Generation 1 vehicles, all components in the exhaust system which enable NOx reduction in conjunction with the NOx trap.

2.54 "NOx Sensor" means a sensor located in a vehicle's exhaust system which measures NOx. The reading from the sensor provides feedback to the emission control system.

2.55 "NOx Trap" means an exhaust emission control device which traps (adsorbs or stores) NOx under lean combustion conditions. Periodically, by design, the trapped NOx is reduced to N2 by reaction with hydrocarbons under rich combustion conditions. This type of emission control device is sometimes referred to as a lean NOx trap, NOx adsorber, or NOx storage catalyst and is used on Generation 1 vehicles.

2.56 "Official Durability Data" means emissions data obtained by periodic testing during the accumulation of 100% of Full Useful Life mileage on test vehicles, as described in 40 C.F.R. § 1823-08 and as required under this Appendix B. Official Durability Data is used to determine DFs.

2.57 "Oven-aged Parts" means parts that are exposed to high temperatures to simulate the aging achieved through mileage accumulation on a vehicle.

2.58 "Particulate Matter" or "PM" mean particulates formed during the diesel combustion process and measured by the procedures specified in 40 C.F.R. Part 86 Subpart B.

2.59 "Portable Emissions Measurement System" or "PEMS" mean an emissions measurement system which measures emissions of NOx, CO, CO_2, and THC (Total Hydrocarbons) while a vehicle is driven on the road.

2.60 "Proposed Emissions Modification" means the alterations to 2.0 Liter Subject Vehicles, including software recalibration and replacement of parts related to the Emissions Control System, that Settling Defendants may propose for EPA/CARB approval, and that are designed to reduce emissions, remove all Defeat Devices, and bring the vehicles into compliance with the requirements specified in this Appendix B.

2.61 "Required Emissions Test Procedures" shall have the meaning specified in subparagraph 4.3.2.

2.62 "Road Mode Calibration" means the Calibration installed on Subject 2.0 Liter Vehicles when certified, and not reflecting any modification conducted as part of the 2014 Reflash or an Approved Emissions Modification, that controls Emission Control Systems in the vehicle when driven on the road, as opposed to during tests for emissions compliance.

2.63 "SC03" means the test cycle, described in 40 C.F.R. § 86.160–00 and listed in 40 C.F.R. Part 86, Appendix I, paragraph (h), which is designed to represent driving under urban conditions at elevated temperatures and high solar loading with the air conditioner on.

2.64 "SCR Guidelines" means the EPA guidance document, *Certification Procedure for Light-Duty and Heavy-Duty Diesel Vehicles and Heavy-Duty Diesel Engines Using Selective Catalyst Reduction (SCR) Technologies*, CISD 07-07, March 27, 2007, and the SCR presentation by EPA and CARB, *Selective Catalytic Reduction Workshop* (July 20, 2010), http://www.arb.ca.gov/msprog/onroadhd/documents/epa-arb_scr_workshop_7-20-10.pdf.

2.65 "SCR Inducements" or "Inducements" means the limitations imposed on vehicle operation that occur when a vehicle runs out of DEF, has poor quality DEF, or when tampering occurs to the SCR system. Inducements might include limitations on vehicle speed or rendering inoperable the restart function of the vehicle.

2.66 "SCR System" means the combination of components necessary for NOx to be reduced by selective catalytic reduction. These components include the DEF tank, DEF injection system, SCR catalyst(s), and associated sensors.

2.67 "Sea Level" means common altitudes at which Settling Defendants conduct certain tests (0-500 meters height).

2.68 "Second NOx Sensor" means an additional NOx sensor which will be added to Generation 3 vehicles during a Subsequent Service Action.

2.69 "SFTP Composite" means emissions result weighted over three test cycles according to the following formula: SFTP Composite = 0.35 × (FTP) + 0.28 × (US06) + 0.37 × (SC03).

2.70 "Subsequent Service Action" means a removal, addition, installation, replacement, repair, or other modification of an emission related component on a Modified Vehicle that is required to bring the vehicle into compliance with this Appendix B.

2.71 "Supplemental FTP" or "SFTP" mean the additional test procedures designed to measure emissions during aggressive and microtransient driving, as described in 40 C.F.R. § 86.159–00 over the US06 cycle, and also the test procedure designed to measure urban driving emissions while the vehicle's air conditioning system is operating, as described in 40 C.F.R. § 86.160–00 over the SC03 cycle.

2.72 "Switch Calibration" means the computerized program utilized by a Subject 2.0 Liter Vehicle's ECU, prior to receiving an Approved Emissions Modification, to determine if the vehicle is being tested for emissions or driven on the road. The Switch Calibration program changes the operation of the vehicle's Emission Control Systems depending on the driving mode detected by the program.

2.73 "Unified Drive Cycle" means the "Unified Cycle Driving Schedule" defined in Part II of the "California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light Duty Trucks, and Medium Duty Vehicles," incorporated by reference in Cal. Code Regs. tit 13, § 1961.2.

2.74 "Test Group" means the basic classification unit within a durability group used for the purpose of demonstrating compliance with exhaust emission standards in accordance with 40 C.F.R. § 86.1841-01.

2.75 "US06" means the driving schedule described in 40 C.F.R. § 86.159–08 and listed in 40 C.F.R. 86, Appendix I, section (g), as amended July 13, 2005, entitled, "EPA US06 Driving Schedule for Light-Duty Vehicles and Light-Duty Trucks" (e.g., hard acceleration, more power requirement, high speed, high load).

III. EMISSIONS MODIFICATION CRITERIA

3.1 Each Proposed Emissions Modification for any 2.0 Liter Subject Vehicle must:

3.1.1 Specify the emissions levels (the "Emissions Levels") concerning the corresponding vehicles, as demonstrated by the Required Emissions Test Procedure results, and require that the emissions of Modified Vehicles must not exceed the Maximum Emissions Modification Limits set forth in subparagraph 3.1.2, Tables 1 – 3.

i. The demonstrated Emissions Levels must represent the best achievable performance, as demonstrated through Settling Defendants' emissions testing results that Settling Defendants previously submitted to EPA and CARB, set forth in Appendix B-1 to this Consent Decree (Prior Test Results). For each Proposed Emissions Modification, Settling Defendants must conduct the Required Emissions Test Procedures, and, for each such test procedure, including for the preconditioning cycles, record the Emission Control System Data Parameters set forth in Appendix B-2. Settling Defendants may conduct the Required Emissions Test Procedures in regular default mode only, provided that the worst-case configuration is selected (e.g., 4WD-capable vehicles must be tested with the vehicle in 4WD mode), and provided that any compliance tests conducted by EPA/CARB may be conducted in any user-selected mode, as allowed under EPA or CARB regulations. Settling Defendants must submit all results of the Required Emissions Test Procedures, together with all Emission Control System Data Parameters, to EPA and CARB with each Proposed Emissions Modification. For purposes of this Paragraph, "best achievable performance" means that the Emissions Levels for each corresponding Proposed Emissions Modification are consistent with or better than the Prior Test Results. Settling Defendants may make this demonstration on the basis of averaged results for up to 10 test vehicles,

provided, however, Settling Defendants must submit all test results for all test vehicles to EPA and CARB, and all test results must be used in averaging. EPA and CARB intend to compare the emissions calibrations for the vehicles used in this demonstration to the emissions calibrations for the vehicles that have been modified pursuant to each applicable Approved Emissions Modification to confirm the calibrations are unchanged. Modified Vehicles must have the same Calibration as the test vehicles used to make this demonstration. Settling Defendants must make all vehicles used for this testing available to EPA and CARB for inspection and confirmatory testing at a reasonable time and place designated by the agencies within twelve months after submission of the test data. Settling Defendants must submit to EPA and CARB, with the corresponding Emissions Modification Proposal, the compiled software files (i.e., the .HEX Files), ROM checksum values, and CVN numbers for the software calibrations that were installed in the vehicles when Settling Defendants conducted the testing required under this Paragraph;

ii. Settling Defendants must also demonstrate, based on the results of the Required Emissions Test Procedures, in A-to-B comparisons that compare (A) vehicles without the 2014 Reflash and with the Road Mode Calibration active via a purposefully modified ECU and operative during the batch of test cycles with (B) vehicles to which Settling Defendants have applied the Proposed Emissions Modification, that the Proposed Emissions Modification results in a quantifiable reduction in NOx emissions, or that the average of testing results for each Proposed Emissions Modification are within Tier 2 Bin 5, 120,000 miles, NOx standards over the Required Emissions Test Procedures; and

iii. The Emissions Levels must not exceed the values over the applicable test cycles set forth in Tables 1 – 3 (the Maximum Emissions Modification Limits). The Maximum Emissions Modification Limits apply until the vehicle accumulates 120,000 miles for Model Years 2009-2014 vehicles, and 150,000 miles for Model Year 2015 vehicles. For manual transmission models, the Maximum Emissions Modification Limits for NOx + NMOG are calculated by adding 0.030 g/mile to the FTP 75 and High Altitude FTP (“FTP@1620m”) values, and by adding 0.010 g/mile to the SFTP Composite values shown in Tables 1 – 3; all other limits remain the same. No Proposed Emissions Modification will be approved if the Emissions Levels exceed the Maximum Emissions Modification Limits.

3.1.2 Maximum Emissions Modification Limits

TABLE 1 – GENERATION 1

MAXIMUM EMISSIONS MODIFICATION LIMITS FOR AUTOMATIC TRANSMISSION VEHICLES GENERATION 1 (G/MILE)				
Test Procedure	NOx + NMOG	CO	Formaldehyde	PM
FTP 75	0.160[1]	4.2	0.018	0.01
Hwy FE Test	0.160	4.2	0.018	0.01
SFTP Composite	0.250[2]	4.2	0.018	0.01
FTP@1620m	0.360	4.2	0.018	0.01

[1] In-Use Level = Table value + 0.030 g/mile
[2] In-Use Level = Table value + 0.050 g/mile

TABLE 2 – GENERATION 2

MAXIMUM EMISSIONS MODIFICATION LIMITS FOR AUTOMATIC TRANSMISSION VEHICLES GENERATION 2 (G/MILE)				
Test Procedure	NOx + NMOG	CO	Formaldehyde	PM
FTP 75	0.160	4.2	0.018	0.01
Hwy FE Test	0.100	4.2	0.018	0.01
SFTP Composite	0.200[1]	4.2	0.018	0.01
FTP@1620m	0.190[1]	4.2	0.018	0.01

[1] In-Use Level = Table value + .050 g/mile

TABLE 3 – GENERATION 3

MAXIMUM EMISSIONS MODIFICATION LIMITS FOR AUTOMATIC TRANSMISSION VEHICLES GENERATION 3 (G/MILE)				
Test Procedure	NOx + NMOG	CO	Formaldehyde	PM
FTP 75	0.160	4.2	0.018	0.01
Hwy FE Test	0.100	4.2	0.018	0.01
SFTP Composite	0.180	4.2	0.018	0.01

FTP@1620m	0.160[1]	4.2	0.018	0.01

[1] In-Use Level = Table value + .050 g/mile

3.1.3 Require Settling Defendants to remove all Defeat Devices, including the Switch and Road Mode Calibrations, from each and every Modified Vehicle. Settling Defendants must also provide evidence, as described in subparagraphs 4.3.5, 4.3.12, and 4.3.14, to EPA and CARB that demonstrates that the Modified Vehicles do not have Defeat Devices.

3.1.4 Require that the Modified Vehicles conform to the OBD regulatory protocol and process requirements set forth in Cal. Code Regs. tit. 13, § 1968.2 (2013), except that (1) the emissions threshold malfunction criteria set forth in this Appendix B shall apply instead of the emission threshold malfunction criteria specified in Cal. Code. Regs. tit. 13, § 1968.2(f) (2013); (2) allowances for OBD noncompliances set forth in this Appendix B shall apply instead of the deficiency provisions for OBD noncompliances in Cal. Code Regs. tit 13, § 1968.2(k) (2013); (3) test vehicle aging for monitoring system demonstration testing shall be conducted based on the provisions set forth in this Appendix B instead of Cal. Code Regs. tit. 13, § 1968.2(h)(2.3) (2013); and (4) the required demonstration tests shall be conducted based on this Appendix B instead of Cal. Code Regs. tit. 13, § 1968.2(h)(4) (2013). With respect to the requirements under Cal. Code Regs. tit. 13, § 1968.2 (2013), for all Generation 1 and 2 vehicles, the provisions for Model Year 2014 vehicles apply, and for all Generation 3 vehicles, the provisions for Model Year 2015 apply. In order to meet such demonstration testing requirements for approval of a Proposed Emissions Modification, Critical OBD Demonstration testing for Generations 1, 2, and 3 vehicles may be conducted using Oven-Aged or Bench-Aged Parts, using diesel and/or gasoline fuel to represent Full Useful Life aging, and for the Critical OBD Demonstration for Generation 3, subject to EPA/CARB approval, representative vehicles may be used; provided, however, that after approval of a Proposed Emissions Modification, and for each Generation, Settling Defendants must also complete Final OBD Demonstration testing using the Durability Demonstration Vehicle aged to Full Useful Life. Except as otherwise provided in this Appendix B, (1) Engineering Durability Data vehicles may not be used for Final OBD Demonstration testing and (2) to obtain EPA/CARB approval to sell or lease vehicles, Settling Defendants must conduct Critical OBD Demonstration testing as specified in subparagraph 7.2.2. With respect to the test vehicle for Final OBD Demonstration testing, Settling Defendants must:

i. Conduct Final OBD Demonstration testing on vehicles aged to Full Useful Life. For Generation 3 OBD Demonstration test vehicles, Settling Defendants must conduct Full Useful Life aging on Model Year 2015 vehicle(s). For Generation 1 and Generation 2 OBD Demonstration test vehicles, Settling Defendants must conduct Full Useful Life aging on representative vehicles;

ii. Exercise best efforts to procure vehicles for aging with the lowest initial mileage possible, and in no event may the initial mileage exceed 10,000 miles for the Generation 3 vehicle(s) or 30,000 miles for the Generation 1 and Generation 2 vehicles. Alternatively, upon EPA/CARB approval, vehicles with higher mileage may be used if the vehicle is retrofitted with a new engine, gearbox, and exhaust gas system and the vehicle is aged for an additional 150,000 miles for Generation 3 or an additional 120,000 miles for Generation 1 and Generation 2; and

iii. Test vehicles that meet the additional requirements described in subparagraph 3.6.

Settling Defendants may not use Oven-aged Parts to represent Full Useful Life aging during Final OBD Demonstration testing. Settling Defendants must complete Final OBD Demonstration testing no later than November 30, 2017, for Approved Emissions Modifications concerning Generation 1 vehicles; February 28, 2018, for Approved Emissions Modifications concerning Generation 2 vehicles; and March 31, 2018, for Approved Emissions Modifications concerning Generation 3 vehicles. Settling Defendants must supply all results of the Final OBD Demonstration tests for each Generation to EPA and CARB upon completion of such tests. Settling Defendants must certify the Final OBD Demonstration test results in accordance with the certification requirements of Paragraphs 33 and 34 of this Consent Decree. If, when submitting any Emissions Modification Proposal, Settling Defendants cannot demonstrate that the corresponding vehicles will meet the OBD regulatory requirements, Settling Defendants must specify in such proposal each and every requested OBD noncompliance, in accordance with subparagraphs 3.2.5, 3.3.2, 3.4.4, and Paragraphs 3.5 and 3.6, and within the limitations set forth therein. Mandatory recall requirements, pursuant to Cal. Code Regs. tit. 13, § 1968.5, concerning Settling Defendants' noncompliance with the requirements described in this Appendix B shall apply.

3.1.5 Specify the fuel economy and emissions impacts of the Proposed Emissions Modification. Settling Defendants must measure, and provide to EPA and CARB, the fuel economy and emissions impacts of the Proposed Emissions Modification by using the FTP, US06, SC03, HWFET, and 20°F FTP test cycles, based on A-to-B testing that compares (A) vehicles without the 2014 Reflash and with the Road Mode Calibration active and operative during the batch of test cycles with (B) vehicles to which Settling Defendants have applied the Proposed Emissions Modification. The comparison testing must be conducted on the same vehicle, and using the same testing parameters that could affect emissions, including but not limited to fuel. Settling Defendants must conduct such test cycles on Generation 1 Model Years 2011 and 2014 Jetta automatic transmission vehicles; Generation 2 Model Years 2012 and 2014 Passat automatic transmission vehicles; and Generation 3 Jetta automatic transmission and Golf manual transmission vehicles, at a minimum. For automatic transmission vehicles, the comparisons may be conducted in "D" mode. Settling Defendants must provide all emissions and fuel consumption data for all cycles for the tests described in this

subparagraph. Fuel economy must be calculated according to the vehicle specific five-cycle methodology described in 40 C.F.R. Part 600. The same percentage difference calculated for the fuel economy of the sample vehicles will be applied to all vehicles in that Generation, unless Settling Defendants choose to provide specific measurements for specific vehicle types.

3.1.6 Require Settling Defendants to permanently affix the labels described in this subparagraph 3.1.6, and in the form approved by EPA/CARB, to each and every Modified Vehicle. Such labels must (1) not cover any previously affixed labels, except in the case of recall labels concerning Subsequent Service Actions where the recall label may be affixed on top of the Emissions Modification recall label(s), provided the subsequent recall label contains all information in the prior recall label; (2) inform potential vehicle purchasers and potential Lessees that the vehicle has received the applicable Approved Emissions Modification, in accordance with this Appendix B; (3) clearly specify, in the form and manner required for the applicable labels, the applicable Maximum Emissions Modification Limits, and the fuel economy rating of the Modified Vehicle; and (4) identify all emission control components installed in accordance with the applicable Approved Emissions Modification. The form of, information contained in, and application of the labels must conform with the Vehicle Emissions Compliance Information ("VECI") label required under 40 C.F.R. § 86.1807-01, the recall label required under 40 C.F.R. Part 85, Subpart S, and the current EPA fuel economy label. Settling Defendants may provide the required fuel economy information to Eligible Owners and Eligible Lessees that elect the Emissions Modification in a notice printed on paper, provided that the Settling Defendants provide such notice upon returning the Modified Vehicle to such Owners and Lessees. For each Modified Vehicle offered for sale or lease, Settling Defendants must affix a temporary Monroney fuel economy label on the window of such Modified Vehicle.

3.1.7 Settling Defendants must, within 10 Days of submitting a Proposed Emissions Modification, provide EPA and CARB with four test vehicles from each Generation (twelve vehicles, total) that have been modified pursuant to the Proposed Emissions Modification for the purpose of (1) evaluating the Proposed Emissions Modification to determine whether such vehicles meet the requirements of this Appendix B, and (2) conducting in-use compliance testing. If Settling Defendants deliver such test vehicles after 10 Days following submission of any proposal, the EPA/CARB expected response dates shall be extended by the length of delay in delivery, beginning from the date the proposal was submitted. Settling Defendants must certify, in accordance with the certification requirements of Paragraphs 33 and 34 of this Consent Decree, that each test vehicle provided to EPA and CARB has the same Calibration as vehicles that receive the applicable Proposed Emissions Modification.

3.1.8 Require the following specifications for test vehicles: For durability demonstrations and emissions testing required for Emissions Modification Proposals concerning Generation 3 vehicles, subject to EPA/CARB approval, Settling Defendants may use Generation 3 vehicles other than the Model Year 2015 vehicles, provided such

vehicles are appropriately representative of the Proposed Emissions Modification for Generation 3. With respect to the vehicle used for Official Durability Demonstration, in the event parts break down, subject to EPA/CARB approval, Settling Defendants may replace such failed parts with parts from an Engineering Durability Vehicle, in accordance with the requirements of 40 C.F.R. § 86.1834-01. Vehicles selected for all compliance testing, including all testing required for submission with a Proposed Emissions Modification, all in-use compliance testing, and any testing conducted by EPA and CARB, must be reasonably operated and maintained, and may not be rejected on the basis of such criteria as mileage accumulation beyond 75% Full Useful Life, lack of maintenance records, or repairs due to the Emissions Modification.

3.1.9 Require Settling Defendants to make available online a searchable database (the Emissions Modification Database) that includes all Subject 2.0 Liter Vehicles, by which users, including Eligible Owners, Eligible Lessees, and prospective purchasers, may conduct a free-of-charge search by vehicle VIN to determine if an Emissions Modification is available for such vehicle. The website must display the Approved Emissions Modification disclosure and Approved Extended Emissions Warranty applicable to a specific vehicle when a user inputs the vehicle VIN, as described in subparagraph 3.2.2 of Appendix A to this Consent Decree.

3.1.10 Require Settling Defendants to disseminate the approved Emissions Modification Disclosure (1) within 10 Days of approval of each Proposed Emissions Modification, by mailing the Disclosure to each Eligible Owner and each Eligible Lessee and (2) within 2 business days of approval of each Proposed Emissions Modification, by posting and maintaining the applicable Disclosure on the webpage for each 2.0 Liter Subject Vehicle within the Emissions Modification Database.

3.2 Additional Requirements for Generation 1 2.0 Liter Subject Vehicles: In addition to the requirements of Paragraph 3.1, each Proposed Emissions Modification for any Generation 1 2.0 Liter Subject Vehicle must also:

3.2.1 Require the installation of a new exhaust flap, EGR filter, and NOx Trap that meets the specifications of BASF TEX2064, as proposed by Settling Defendants to EPA and CARB on January 28, 2016, or, subject to EPA/CARB approval, such other functionally and effectively equivalent hardware or software, provided that Settling Defendants propose such other hardware or software in the applicable Proposed Emissions Modification.

3.2.2 Require that PM filter efficiency monitoring shall be accomplished using the pressure differential across the low pressure EGR filter and the pressure differential across the DPF as a secondary backstop monitor. The backstop monitor shall detect malfunctions before FTP PM emissions exceed 0.040 grams per mile and is not subject to the 0.035 gram/mile limitations specified in subparagraph 3.2.5. The backstop monitor demonstration must be completed no later than the respective time period allowed for the Final OBD Demonstration.

3.2.3 Require the installation of a NOx Trap with a functional monitor for the entire NOx reduction system for the Full Useful Life of the Modified Vehicle.

3.2.4 Describe any and all DeNOx strategies and DeSOx strategies to periodically remove NOx and sulfur from the NOx Trap for the purpose of ensuring proper functioning, including a description of the impacts of such strategies on emissions, infrequent emissions, and durability, and require the installation of such strategies.

3.2.5 Comply with the OBD requirements under Cal. Code Regs. tit. 13, § 1968.2 (2013), except that the emission threshold malfunction criteria set forth in this Appendix B, as described in this subparagraph and in Tables 4 and 5, for automatic and manual transmission vehicles, respectively, shall apply to all monitoring requirements in Cal. Code Regs. tit. 13, § 1968.2(f) (2013) that have emission threshold malfunction criteria.

i. Automatic transmission vehicles. Threshold monitors must detect a malfunction before NMOG + NOx emissions exceed 0.240 g/mile and before PM emissions exceed 0.0175 g/mile. Threshold monitors that fail to detect a malfunction before these limits are exceeded shall be considered OBD Emissions Threshold Noncompliances. Upon a Final OBD Demonstration, the Approved Emissions Modification may not show more than 12 OBD Emissions Threshold Noncompliances. Of these 12 OBD Emissions Threshold Noncompliances, no more than 2 monitors that fail to demonstrate malfunction detection before emissions exceed 0.480 g/mile NMOG + NOx will be approved; provided, however, no monitors that fail to demonstrate malfunction detection before emissions exceed 0.720 g/mile NMOG + NOx will be approved. In all cases, no monitors that fail to demonstrate malfunction detection before emissions exceed 0.035 g/mile PM will be approved. The OBD Emissions Threshold Noncompliances are summarized in Table 4 for Generation 1 automatic transmission vehicles.

TABLE 4. OBD EMISSION THRESHOLD NONCOMPLIANCES FOR GENERATION 1 AUTOMATIC TRANSMISSION VEHICLES.

EMISSIONS LEVELS	NUMBER OF APPROVABLE NONCOMPLIANCES
≤ 0.240 g/mile NMOG + NOx and ≤ 0.0175 g/mile PM	N/A; compliant
0.240 g/mile < x** ≤ 0.480 g/mile NMOG + NOx or 0.0175 g/mile < x**≤ 0.035 g/mile PM	12
0.480 g/mile < x** ≤ 0.720 g/mile NMOG + NOx	2 *
>0.720 g/mile NMOG + NOx	0
> 0.035 g/mile PM	0
Total Number of OBD Emissions Threshold Noncompliances	12

* This is a subset of the 12 total OBD threshold noncompliances, so if for example 12 noncompliances are used for the range 0.240 < x ≤ 0.480 NMOG + NOx, then 0 noncompliances will be approved for the range 0.480 < x ≤ 0.720 g/mile NMOG + NOx.

** "x" is the emission level when the malfunction is first detected.

ii. Manual Transmission Vehicles. Threshold monitors must detect a malfunction before NMOG + NOx emissions exceed 0.285 g/mile and before PM emissions exceed 0.0175 g/mile. Threshold monitors that fail to detect a malfunction before these limits are exceeded shall be considered OBD Emissions Threshold Noncompliances. Upon a Final OBD Demonstration, the Approved Emissions Modification may not show more than 12 OBD Emissions Threshold Noncompliances. Of these 12 OBD Emissions Threshold Noncompliances, no more than 2 monitors that fail to demonstrate malfunction detection before emissions exceed 0.570 g/mile NMOG + NOx will be approved; provided, however, no monitors that fail to demonstrate malfunction detection before emissions exceed 0.855 g/mile NMOG + NOx will be approved. In all cases, no monitors that fail to demonstrate malfunction detection before emissions exceed 0.035 g/mile PM will be approved. The OBD Emissions Threshold Noncompliances are summarized in Table 5 for Generation 1 manual transmission vehicles.

TABLE 5. OBD EMISSION THRESHOLD NONCOMPLIANCES FOR GENERATION 1 MANUAL TRANSMISSION VEHICLES.

EMISSIONS LEVELS	NUMBER OF APPROVABLE NONCOMPLIANCES
≤ 0.285 g/mile NMOG + NOx and ≤ 0.0175 g/mile PM	N/A; compliant
0.285 g/mile < x** ≤ 0.570 g/mile NMOG + NOx g/mile or 0.0175 < x** ≤ 0.035 g/mile PM	12
0.570 g/mile < x** ≤ 0.855 g/mile NMOG + NOx	2 *
> 0.855 g/mile NMOG + NOx	0
> 0.035 g/mile PM	0
Total Number of OBD Emissions Threshold Noncompliances	12

* This is a subset of the 12 total OBD threshold noncompliances, so if for example 12 noncompliances are used for the range 0.285 < x ≤ 0.570 NMOG + NOx, then 0 noncompliances will be approved for the range 0.570 < x ≤ 0.855 g/mile NMOG + NOx.

**"x" is the emission level when the malfunction is first detected.

iii. In the event of a discrepancy between the text herein and the tables, the tables shall govern. No more than 6 noncompliances, plus unused OBD Emissions Threshold Noncompliances, for issues other than OBD Emissions Threshold Noncompliances (e.g., failure to meet In-Use

Monitor Performance Ratio requirements, failure to track and report EI-AECDs, failure to report all required data to a scan tool) that would typically be issued during annual new vehicle OBD certification review will be approved.

3.2.6 Include all results from Critical OBD Demonstration testing for PM filter efficiency, NOx Trap, EGR low flow, and injection quantity minimum for automatic transmission vehicles. Critical OBD Demonstration test results must demonstrate compliance with the OBD requirements under subparagraph 3.2.5.

3.3 Additional Requirements for Generation 2 2.0 Liter Subject Vehicles: In addition to the requirements of Paragraph 3.1, each Proposed Emissions Modification for a Generation 2 2.0 Liter Subject Vehicle must also:

3.3.1 Require that the SCR system is capable of detecting the presence of mostly to entirely water (less than 1% DEF) in the DEF tank and initiating Inducements based on such detection. Settling Defendants must describe all Inducement strategies and such Inducement strategies must be consistent with the SCR Guidelines and the original certification applications submitted by Settling Defendants.

3.3.2 Comply with the OBD requirements under Cal. Code Regs. tit. 13, § 1968.2 (2013) except that the Emission Threshold Malfunction Criteria set forth in this Appendix B, as described in this subparagraph and in Table 6, shall apply to all monitoring requirements in Cal. Code Regs. tit. 13, § 1968.2(f) (2013) that have emission threshold malfunction criteria. Specifically, for automatic and manual transmission vehicles, threshold monitors must detect a malfunction before NMOG + NOx emissions exceed 0.240 g/mile and before PM emissions exceed 0.0175 g/mile. Threshold monitors that fail to detect a malfunction before these limits are exceeded shall be considered OBD Emissions Threshold Noncompliances. Upon a Final OBD Demonstration, the Approved Emissions Modification may not show more than 9 OBD Emissions Threshold Noncompliances. Of these 9 OBD Emissions Threshold Noncompliances, no more than 2 monitors that fail to demonstrate malfunction detection before emissions exceed 0.480 g/mile NMOG + NOx will be approved; provided, however, no monitors that fail to demonstrate malfunction detection before NMOG + NOx emissions exceed 0.720 g/mile and before PM emissions exceed 0.035 g/mile will be approved. The OBD Emissions Threshold Noncompliances are summarized in Table 6 for Generation 2 automatic and manual transmission vehicles.

TABLE 6. OBD EMISSIONS THRESHOLD NONCOMPLIANCES FOR GENERATION 2 AUTOMATIC AND MANUAL TRANSMISSION VEHICLES.

EMISSIONS LEVELS	NUMBER OF APPROVABLE NONCOMPLIANCES
≤ 0.240 g/mile NMOG + NOx and ≤ 0.0175 g/mile PM	N/A; compliant

0.240 g/mile < x** ≤ 0.480 g/mile NMOG + NOx or 0.0175 g/mile < x** ≤ 0.035 g/mile PM	9
0.480 g/mile < x** ≤ 0.720 g/mile NMOG + NOx	2 *
>0.720 g/mile NMOG + NOx	0
> 0.035 g/mile PM	0
Total Number of OBD Emissions Threshold Noncompliances	9

* This is a subset of the 9 total OBD emissions threshold noncompliances, so if for example 9 noncompliances are used for the range 240 < x ≤ 480 NMOG + NOx, then 0 noncompliances will be approved for the range 480 < x ≤ 720 g/mile NMOG + NOx.

"x" is the emission level when the malfunction is first detected.

i. In the event of a discrepancy between the text herein and the table, the table shall govern. In addition, no more than 7 noncompliances, plus unused emission threshold noncompliances, for issues other than OBD Emission Threshold Noncompliances (e.g., failure to meet In-Use Monitor Performance Ratio requirements, failure to track and report EI-AECDs, failure to report all required data to a scan tool) that would typically be issued during annual new vehicle OBD certification review will be approved.

3.3.3 Include the results from Critical OBD Demonstration testing for PM filter efficiency, SCR catalyst efficiency, EGR low flow, and injection quantity minimum for automatic transmission vehicles. Critical OBD Demonstration test results must demonstrate compliance with the OBD requirements in subparagraph 3.3.2.

3.4 Additional Requirements for Generation 3 2.0 Liter Subject Vehicles: In addition to the requirements of Paragraph 3.1, each Proposed Emissions Modification for a Generation 3 2.0 Liter Subject Vehicle must also:

3.4.1 Require the future installation of OBD hardware and software to achieve compliant SCR monitoring, including the addition of a Second NOx Sensor in a Subsequent Service Action according to the mileage intervals and schedule described in subparagraph 3.4.3 (i.e., full volume SCR system monitoring with a downstream NOx sensor).

3.4.2 Describe the NOx sensor or DEF system capable of detecting poor reductant quality, including emission and dilution detection levels, and how the vehicles

will detect poor quality DEF and initiate Inducements, and require the installation of such strategies.

3.4.3 Require the installation of the Second NOx Sensor and a new DOC or DOCs (if necessary to ensure compliant emissions performance for 150,000 miles) according to the following mileage intervals and schedule:

i. If, in the Proposed Emissions Modification, Settling Defendants demonstrate durability of the current DOC for 90,000 miles, then Settling Defendants must install the Second NOx Sensor and the new DOC at 90,000 miles or by January 1, 2020, whichever comes first, in a single Subsequent Service Action.

ii. If, in the Proposed Emissions Modification, Settling Defendants demonstrate durability of the current DOC for 120,000 miles, then Settling Defendants must install the Second NOx Sensor and the new DOC at 120,000 miles or by January 1, 2020 whichever comes first, in a single Subsequent Service Action.

iii. If, in the Proposed Emissions Modification, Settling Defendants demonstrate durability of the current DOC for 150,000 miles, then Settling Defendants are not required to replace the DOC and must install the Second NOx Sensor in a single Subsequent Service Action beginning in the 4th quarter of 2017, to be completed by January 1, 2020.

3.4.4 Comply with the OBD requirements under Cal. Code Regs. tit. 13, § 1968.2 (2013), except that the emission threshold malfunction criteria set forth in this Appendix B, as described in this subparagraph and in Tables 7 and 8, for Generation 3 automatic and manual transmission vehicles, respectively, shall apply to all monitoring requirements in Cal. Code Regs. tit. 13, § 1968.2(f) (2013) that have emission threshold malfunction criteria.

i. Automatic Transmission Vehicles. Threshold monitors must detect a malfunction before NMOG + NOx emissions exceed 0.240 g/mile and before PM emissions exceed 0.0175 g/mile. Threshold monitors that fail to detect a malfunction before these limits are exceeded shall be considered OBD Emissions Threshold Noncompliances. Upon Final OBD Demonstration, the Approved Emissions Modification for Generation 3 automatic vehicles may not show more than 3 OBD Emissions Threshold Noncompliances. Of these 3 OBD Emissions Threshold Noncompliances, no more than 1 monitor that fails to demonstrate malfunction detection before emissions exceed 0.480 g/mile NMOG + NOx will be approved; provided, however, that no monitors that fail to demonstrate malfunction detection before emissions exceed 0.720 NMOG + NOx will be approved.

In all cases, no monitors that fail to demonstrate malfunction detection before emissions exceed 0.035 g/mile PM will be approved. The OBD Emissions Threshold Noncompliances are summarized in Table 7 for Generation 3 automatic transmission vehicles. Notwithstanding the foregoing, SCR Catalyst efficiency monitoring devices installed during a Subsequent Service Action must detect a malfunction before NMOG + NOx emissions exceed 0.280 g/mile and before PM emissions exceed 0.0175 g/mile.

TABLE 7. OBD NONCOMPLIANCES FOR GENERATION 3 AUTOMATIC TRANSMISSION VEHICLES.

EMISSIONS LEVELS	NUMBER OF APPROVABLE NONCOMPLIANCES
≤ 0.240 g/mile NMOG + NOx and ≤ 0.0175 g/mile PM	N/A; compliant
0.240 g/mile < x** ≤ 0.480 g/mile NMOG + NOx or 0.0175 g/mile < x** ≤ 0.035 g/mile PM	3
0.480 g/mile < x ≤ 0.720 g/mile NMOG + NOx	1 *
>0.720 g/mile NMOG + NOx	0
> 0.035 g/mile PM	0
Total Number of OBD Emissions Threshold Noncompliances	3

* This is a subset of the 3 total OBD emissions threshold noncompliances, so if for example 3 noncompliances are used for the range 0.240 < x ≤ 0.480 NMOG + NOx or 0.0175 < x ≤ 0.035 g/mile PM, then 0 noncompliances will be approved for the range 0.480 < x ≤ 0.720 g/mile NMOG + NOx.

** "x" is the emission level when the malfunction is first detected.

ii. Manual Transmission Vehicles. For Generation 3 manual transmission vehicles, threshold monitors must detect a malfunction before NMOG + NOx emissions exceed 0.285 g/mile, and before PM emissions exceed 0.0175 g/mile. Threshold monitors that fail to detect a malfunction before these limits are exceeded shall be considered OBD Emissions Threshold Noncompliances. Upon a Final OBD Demonstration, the Proposed Emissions Modification for manual transmission vehicles may not show more than 7 OBD Emissions Threshold Noncompliances. Of these 7 OBD Emissions Threshold Noncompliances, for manual transmission vehicles, no more than 1 monitor that fails to demonstrate malfunction detection before emissions exceed 0.570 g/mile NMOG + NOx, will be approved; provided, however, no monitors that fail to demonstrate malfunction detection before emissions exceed 0.855 g/mile NMOG + NOx will be approved. In all cases, no monitors that fail to demonstrate malfunction detection before emissions exceed 0.035 g/mile PM will be approved. The

OBD Emissions Threshold Noncompliances are summarized in Table 8 for manual transmission vehicles.

TABLE 8. OBD EMISSION THRESHOLD NONCOMPLIANCES FOR GENERATION 3 MANUAL TRANSMISSION VEHICLES.

EMISSIONS LEVELS	APPROVABLE NUMBER OF NONCOMPLIANCES
≤ 0.285 g/mile NMOG + NOx and ≤ 0.0175 g/mile PM	N/A; compliant
0.285 g/mile < x** ≤ 0.570 g/mile NMOG + NOx or 0.0175 g/mile < x** ≤ 0.035 g/mile PM	7
0.570 g/mile < x** ≤ 0.855 g/mile NMOG + NOx	1 *
> 0.855 g/mile NMOG + NOx	0
> 0.035 g/mile PM	0
Total # OBD Emissions Threshold Noncompliances	7

* This is a subset of the 7 total OBD threshold noncompliances, so if for example 7 noncompliances are used for the range 0.285 < x ≤ 0.570 NMOG + NOx, then 0 noncompliances will be approved for the range 0.570 < x ≤ 0.855 g/mile NMOG + NOx.

** "x" is the emission level when the malfunction is first detected.

iii. In the event of a discrepancy between the text herein and the tables, the tables shall govern. No more than 8 noncompliances, plus unused OBD Emissions Threshold Noncompliances, for issues other than OBD Emissions Threshold Noncompliances (e.g., failure to meet In-Use Monitor Performance Ratio requirements, failure to track and report EI-AECDs, failure to report all required data to a scan tool) that would typically be issued during annual new vehicle OBD certification review will be approved.

3.4.5 Include the results from Critical OBD Demonstration testing for PM filter efficiency, SCR catalyst efficiency, EGR low flow, injection quantity minimum, injection quantity maximum, and DOC for automatic transmission vehicles. Critical OBD Demonstration tests must demonstrate compliance with the OBD requirements in subparagraph 3.4.4.

3.5 Alternate OBD Criteria: If Settling Defendants are unable to comply with any of the limitations concerning OBD noncompliances described in subparagraphs 3.2.5, 3.3.2, or 3.4.4, and no later than 5 Days after completing the Final OBD Demonstration testing, Settling Defendants must provide EPA/CARB with formal notice of such noncompliance. Subsequently, and no later than 30 Days after such formal notice, Settling Defendants may submit to EPA/CARB a proposal requesting approval of additional OBD noncompliances, as described below. Settling Defendants must certify any such proposal in accordance with the certification requirements of Paragraphs 33 and 34 of the Consent Decree.

3.5.1 If Settling Defendants elect to submit a proposal requesting additional OBD Emission Threshold Noncompliances, and if in such proposal Settling Defendants demonstrate the following, EPA/CARB will approve the requested additional OBD Emissions Threshold Noncompliances:

i. Settling Defendants have used good engineering judgment in determining the malfunction criteria;

ii. The malfunction criteria will result in a monitor that meets the in-use monitor performance ratio requirements specified in Cal. Code Regs. tit. 13, § 1968.2 (2013);

iii. The malfunction criteria are set as stringently as technologically feasible with respect to detecting a malfunction at the lowest possible tailpipe emission levels using the existing monitoring strategies and existing series production hardware on the vehicle, except for hardware changes that are the result of the Emissions Modification being demonstrated (i.e., for Generation 1, NOx Trap, exhaust flap and EGR filter; for Generation 3, DOC and Second NOx Sensor, in a Subsequent Service Action);

iv. The malfunction criteria will minimize false detection of a malfunction when the monitored component is within the performance specifications required under this Appendix B (i.e., vehicle emissions are less than the Maximum Emissions Modification Limits) for components aged to the end of the Full Useful Life;

v. Settling Defendants have provided all emission data concerning the emission levels at which the malfunctions are detected; and

vi. All malfunctions are detected before NMOG + NOx emissions exceed 0.720 g/mile and before PM emissions exceed 0.035 g/mile PM (for manual transmission vehicles, 0.855 g/mile NMOG + NOx, and 0.035 g/mile PM).

3.5.2 Additional OBD Noncompliance Allowances: If Settling Defendants submit a proposal requesting additional OBD Emission Threshold Noncompliances, and EPA/CARB determine that Settling Defendants have failed to make the demonstration described above, no additional OBD Emission Threshold Noncompliances will be allowed. However, Settling Defendants may use any unused noncompliances in the following manner: 2 unused OBD Emission Threshold Noncompliances for monitors that fail to demonstrate malfunction detection before emissions exceed 0.240 g/mile of NMOG + NOx but demonstrate malfunction detection before emissions exceed 0.480 g/mile of NMOG + NOx (for manual transmission vehicles, between 0.285 and 0.570 g/mile, respectively) may be transferred within the same Generation to satisfy 1 OBD Emissions Threshold Noncompliance for monitors that fail to demonstrate malfunction detection before emissions exceed 0.480 g/mile of NMOG + NOx but demonstrate

malfunction detection before emissions exceed 0.720 of NMOG + NOx (for manual transmissions, between 0.570 and 0.855 g/mile, respectively). Alternatively, 1 unused OBD Emissions Threshold Noncompliance for monitors that fail to demonstrate malfunction detection before emissions exceed 0.480 of NMOG + NOx but demonstrate malfunction detection before emissions exceed 0.720 g/mile of NMOG + NOx may be transferred within the same Generation to satisfy 2 OBD noncompliances for monitors that fail to demonstrate malfunction detection before emissions exceed 0.240 of NMOG + NOx but demonstrate malfunction detection before emissions exceed 0.480 g/mile of NMOG + NOx (for manual transmissions, between 0.285 and 0.570 g/mile, respectively). No unused OBD Emissions Threshold Noncompliances may be transferred to other Generations or between automatic or manual transmission groups. No more than 2 OBD Emissions Threshold Noncompliances for monitors that fail to demonstrate malfunction detection before emissions exceed 0.480 but demonstrate malfunction detection before emissions exceed 0.720 g/mile of NMOG + NOx (for manual transmissions, between 0.570 and 0.855 g/mile, respectively) and no more than 4 OBD Emissions Threshold Noncompliances for monitors that fail to demonstrate malfunction detection before emissions exceed 0.240 g/mile of NMOG + NOx but demonstrate malfunction detection before emissions exceed 0.480 g/mile of NMOG + NOx (for manual transmissions, between 0.285 and 0.570 g/mile, respectively) may be transferred.

3.5.3 Notwithstanding the prohibition against additional OBD Emission Threshold Noncompliances described in subparagraph 3.5.2, if Settling Defendants are unable to comply with the limitations therein, Settling Defendants may obtain a further increase in the number of available OBD Emissions Threshold Noncompliances, provided that (1) no monitors that fail to demonstrate malfunction detection before NMOG + NOx emissions exceed 0.720 g/mile (0.855 g/mile for manual transmission vehicles) shall be permitted, and (2) Settling Defendants must provide the following additional increments to the Extended Emissions Warranty periods specified in subparagraphs 3.9.4 (i) – (ii) (Additional Warranty Extensions):

i. For each additional OBD Emissions Threshold Noncompliance concerning a monitor that fails to demonstrate malfunction detection before NMOG + NOx emissions exceed 0.240 g/mile but that demonstrate malfunction detection before NMOG + NOx emissions exceed 0.480 g/mile (for manual transmission vehicles, 0.285 g/mile and 0.570 g/mile, respectively), the Extended Emissions Warranty period must be extended by 3 months and 3,000 miles; and

ii. For each additional OBD Emissions Threshold Noncompliance concerning a monitor that fails to demonstrate malfunction detection before NMOG + NOx emissions exceed 0.480 g/mile (for manual transmission vehicles, 0.570 g/mile), the Extended Emissions Warranty period must be extended by 6 months and 6,000 miles.

3.5.4 If Settling Defendants seek to increase the OBD noncompliances pursuant to subparagraph 3.5.3, Settling Defendants must submit to EPA/CARB a proposal describing the additional OBD noncompliances and any corresponding Additional Warranty Extensions for EPA/CARB approval. If the proposal meets the requirements of subparagraphs 3.5.3 and 3.5.4, EPA/CARB will approve the proposal. Together with any such proposal, Settling Defendants must submit for EPA/CARB approval a draft Additional Warranty Extension Statement describing the additional OBD noncompliances and any Additional Warranty Extensions required by subparagraph 3.5.3. The Additional Warranty Extension Statement must state the warranty period as the sum of the warranty period for the Extended Emissions Warranty described in Paragraph 3.9 and any Additional Warranty Extensions under subparagraph 3.5.3.

3.5.5 Upon EPA and CARB approval, Settling Defendants must disseminate the Additional Warranty Extension Statement by (1) mailing the approved Additional Warranty Extension Statement to the relevant Eligible Owners and Eligible Lessees and (2) by posting and maintaining the approved notice on a VIN-searchable website, in the form and manner described in subparagraph 3.9.6.

3.6 OBD Demonstration Requirements applicable to automatic and manual transmission vehicles:

3.6.1 Settling Defendants shall not use Oven-aged Parts to represent parts aged to Full Useful Life over the official durability run on the SRC cycle.

3.6.2 For NOx Trap, DOC, and SCR, Settling Defendants shall use catalysts deteriorated to the malfunction criteria using methods established to represent real world catalyst deterioration under normal and malfunctioning engine operating conditions. Oven aging and Engine Bench aging using diesel and/or gasoline fuel may be used to age the threshold catalysts provided such aging is representative of real world deterioration.

3.6.3 Automatic Transmission Vehicles. For each generation, Settling Defendants shall use a complete FUL AT vehicle aged over the official durability run on the SRC cycle for the AT Final OBD Demonstration test vehicle. For each generation, Settling Defendants shall adhere to the following for the required Final OBD Demonstration:

i. Unless specified otherwise below, Settling Defendants shall use a complete FUL AT vehicle aged over the official durability run on the SRC cycle, except for the OBD threshold part being demonstrated. For DOC, DPF, and SCR demonstrations, Settling Defendants may deteriorate according to the requirements of subparagraph 3.6.3(ii), below. If Settling Defendants elect not to conduct aging according to the requirements of subparagraph 3.6.3 (ii), Settling Defendants must conduct FUL aging over the official durability run on the SRC cycle on the unmonitored components for each demonstration test.

ii. Settling Defendants shall deteriorate the OBD Threshold parts for DOC, DPF and SCR demonstrations and provide information as follows:

a. Generation 1

1. DOC: Engine Bench-aged DPF (using diesel fuel) equivalent to Full Useful Life over the official durability run on the SRC cycle with DOC deteriorated to malfunction threshold using procedures representative of real world catalyst system component deterioration under normal and malfunctioning engine operating conditions.

2. DPF: Engine Bench-aged DOC (using diesel fuel) equivalent to Full Useful Life over the official durability run on the SRC cycle with DPF deteriorated to malfunction threshold (e.g., drilled out, removed end caps).

3. Supply engineering data to demonstrate equivalence between engine bench aging (using diesel fuel) and aging over the official durability run on the SRC cycle.

b. Generation 2

1. DOC: Engine Bench-aged DPF (using diesel fuel) equivalent to Full Useful Life over the official durability run on the SRC cycle with DOC deteriorated to malfunction threshold using procedures representative of real world catalyst system component deterioration under normal and malfunctioning engine operating conditions.

2. DPF: Engine Bench-aged DOC (using diesel fuel) equivalent to Full Useful Life over the official durability run on the SRC cycle with DPF deteriorated to malfunction threshold (e.g., drilled out, removed end caps).

3. Supply engineering data to demonstrate equivalence between engine bench aging (using diesel fuel) and aging over the official durability run on the SRC cycle.

c. Generation 3

1. DOC: Engine Bench-aged DPF/SCR (using diesel fuel) equivalent to Full Useful Life over the official durability run on the SRC cycle with DOC deteriorated to

malfunction threshold using procedures representative of real world catalyst system component deterioration under normal and malfunctioning engine operating conditions. The underfloor SCR catalyst shall be the part from the FUL AT vehicle aged over the official durability run on the SRC cycle.

2. DPF: Engine Bench-aged DOC and DPF/SCR (using diesel fuel for both) equivalent to Full Useful Life over the official durability run on the SRC cycle with DPF/SCR deteriorated (e.g., drilled out, removed end caps) to DPF malfunction threshold. The underfloor SCR catalyst shall be the part from the FUL AT vehicle aged over the official durability run on the SRC cycle.

3. SCR: Engine Bench-aged DOC (using diesel fuel) equivalent to Full Useful Life over the official durability run on the SRC cycle with DPF/SCR and underfloor SCR simultaneously deteriorated to SCR malfunction threshold using procedures representative of real world catalyst system component deterioration under normal and malfunctioning engine operating conditions.

4. Supply engineering data to demonstrate equivalence between engine bench aging (using diesel fuel) and aging over the official durability run on the SRC cycle.

iii. For each generation, Settling Defendants shall complete Final OBD Demonstration testing.

3.6.4 Manual Transmission Vehicles. For each Generation for the MT Final OBD Demonstration test vehicle, Settling Defendants may use complete FUL aged engine from the AT vehicle, which was aged over the official durability run on the SRC cycle. If Settling Defendants elect not to use the FUL aged engine from the AT vehicle, Settling Defendants must age the MT vehicle to FUL over the official durability run on the SRC cycle. The FUL aged engine from the AT vehicle includes:

i. The complete FUL aged exhaust system from AT vehicle aged over the official durability run on the SRC cycle; and

ii. The complete FUL aged aftertreatment system from AT vehicle aged over the official durability run on the SRC cycle.

iii. For each Generation, Settling Defendants shall adhere to the following for the required Final OBD Demonstration:

iv. Unless specified otherwise below, Settling Defendants shall use complete FUL vehicle described in subparagraph 3.6.4 above, except for the OBD threshold part being demonstrated. For DOC, DPF, and SCR demonstrations, Settling Defendants may deteriorate according to subparagraph 3.6.4 (v), below. If Settling Defendants elect not to deteriorate according to the requirements of subparagraph 3.6.4 (v), Settling Defendants must conduct FUL vehicle aging over the official durability run on the SRC cycle on the unmonitored components for each demonstration test.

v. Settling Defendants shall deteriorate the OBD Threshold parts for DOC, DPF and SCR demonstrations and provide information as follows:

a. Generation 1:

1. DOC: Engine Bench-aged DPF (using diesel fuel) equivalent to Full Useful Life over the official durability run on the SRC cycle with DOC deteriorated to malfunction threshold using procedures representative of real world catalyst system component deterioration under normal and malfunctioning engine operating conditions.

2. DPF: Engine Bench-aged DOC (using diesel fuel) equivalent to Full Useful Life over the official durability run on the SRC cycle with DPF deteriorated to malfunction threshold (e.g., drilled out, removed end caps).

3. Supply engineering data to demonstrate equivalence between engine bench aging (using diesel fuel) and aging over the official durability run on the SRC cycle.

b. Generation 2:

1. DOC: Engine Bench-aged DPF (using diesel fuel) equivalent to Full Useful Life over the official durability run on the SRC cycle with DOC deteriorated to malfunction threshold using procedures representative of real world catalyst system component deterioration under normal and malfunctioning engine operating conditions.

2. DPF: Engine Bench-aged DOC (using diesel fuel) equivalent to Full Useful Life over the official durability run on the SRC cycle with DPF deteriorated to malfunction threshold (e.g., drilled out, removed end caps).

3. Supply engineering data to demonstrate equivalence between engine bench aging (using diesel fuel) and aging over the official durability run on the SRC cycle.

c. Generation 3:

1. DOC: Engine Bench-aged DPF/SCR (using diesel fuel) equivalent to Full Useful Life over the official durability run on the SRC cycle with DOC deteriorated to malfunction threshold using procedures representative of real world catalyst system component deterioration under normal and malfunctioning engine operating conditions. The underfloor SCR catalyst shall be the part from the FUL AT vehicle aged over the official durability run on the SRC cycle.

2. DPF: Engine Bench-aged DOC and DPF/SCR (both using diesel fuel) equivalent to Full Useful Life over the official durability run on the SRC cycle with DPF/SCR deteriorated (e.g., drilled out, removed end caps) to DPF malfunction threshold. The underfloor SCR catalyst shall be the part from the FUL AT vehicle aged over the official durability run on the SRC cycle.

3. SCR: Engine Bench-aged DOC (using diesel fuel) equivalent to Full Useful Life over the official durability run on the SRC cycle with DPF/SCR and underfloor SCR simultaneously deteriorated to SCR malfunction threshold using procedures representative of real world catalyst system component deterioration under normal and malfunctioning engine operating conditions.

4. Supply engineering data to demonstrate equivalence between engine bench aging (using diesel fuel) and aging over the official durability run on the SRC cycle.

vi. For each Generation, Settling Defendants shall complete Final OBD demonstration testing.

3.7 Continued Compliance: Except as otherwise stated in this Appendix B, and as if the vehicles were originally certified to the Maximum Emissions Modification Limits required under any Approved Emissions Modification, during the regulatory useful life of the vehicles, Modified Vehicle test groups remain subject to, and Settling Defendants must comply with: (1) all EPA and CARB requirements for in-use testing under 40 C.F.R. Part 86, Subpart S, and Cal. Code Regs. tit. 13, § 2110-2140; (2) OBD enforcement pursuant to Cal. Code Regs. tit. 13, § 1968.5, provided that noncompliance determinations shall be based on the emissions threshold

malfunction criteria set forth in this Appendix B; (3) federal defect reporting requirements under 40 C.F.R. Part 85, Subpart T; and (4) California Emissions Warranty and Information Reporting requirements under Cal. Code Regs. tit. 13, §§ 2141-2146. As stated in Section VIII of this Appendix B (Stipulated Penalties and Other Stipulated Remedies for Noncompliance), EPA and CARB reserve all rights and authorities to impose consequences if Settling Defendants fail to comply with these testing and reporting requirements, including if such testing demonstrates that the Modified Vehicles exceed the Maximum Emissions Modification Limits or the OBD emission threshold malfunction criteria set forth in this Appendix B. For OBD in-use compliance measurements, no add-ons are granted; for OBD in-use testing, Settling Defendants may precondition the test vehicle through two HWFET cycles to allow DeSOx events to occur. For purposes of emissions compliance determinations subsequent to EPA/CARB's Notice of Approved Emissions Modification, the Maximum Emissions Modification Limits set forth in Tables 1 – 3 shall be adjusted as described in subparagraphs 3.7.1 – 3.7.3 below. Settling Defendants may not apply the following in-use add-ons to any of the demonstrations that must be included in an Emissions Modification Proposal, and such add-ons apply only to in-use vehicles that have been modified in accordance with the applicable Approved Emissions Modification.

3.7.1 The applicable in-use NOx + NMOG Maximum Emissions Modification Limits for Generation 1 shall be determined by adding 0.030 g/mile to the FTP levels and 0.050 g/mile to the SFTP levels specified in Table 1;

3.7.2 The applicable in-use high altitude NOx + NMOG Maximum Emissions Modification Limits for Generations 2 and 3 shall be determined by adding 0.050 g/mile to the FTP@1620m levels shown in Tables 2 and 3 respectively; and

3.7.3 The applicable in-use SFTP NOx + NMOG Maximum Emissions Modification Limits for Generation 2 shall be determined by adding to 0.050 g/mile to the levels shown in Table 2.

3.8 Costs: Settling Defendants must incur and satisfy costs associated with each Approved Emissions Modification, including any Subsequent Service Actions, as required under Appendix A.

3.9 Warranty: Settling Defendants must provide an Emission Control System and an Engine Long Block warranty (collectively, the "Extended Emissions Warranty"). The Extended Emissions Warranty shall cover all parts and labor, as well as the cost or provision of a loaner vehicle for warranty service lasting longer than 3 hours. Settling Defendants must not impose on consumers any fees or charges, and must pay any fees or charges imposed by its dealers related to the warranty service.

3.9.1 The Emissions Control System warranty must cover all components which are replaced as part of the Approved Emissions Modification and any component which can reasonably be impacted by effects of the Approved Emissions Modification, such as increased thermal load or cycling, increased soot load, increased use of EGR, increased DPF regeneration, and increased fuel injection pressure. The Emission Control System

Warranty shall cover the following parts, as further specified in the applicable Extended Emissions Warranty Parts Coverage List submitted by Settling Defendants with each Emissions Modification Proposal, as further described in subparagraph 4.3.10:

i. The entire exhaust after treatment system including the DOC, the SCR catalyst (if applicable), the dosing injector and other DEF system components (if applicable), the NOx Trap (if applicable), all sensors and actuators, and the exhaust flap;

ii. The entire fuel system, including the fuel pumps, high pressure common rail, fuel injectors, and all sensors and actuators;

iii. EGR system including the EGR valve, EGR cooler, EGR filter, all related hoses and pipes, and all sensors and actuators;

iv. The turbocharger;

v. The OBD System and any malfunctions detected by the OBD systems other than those related to the transmission; and

vi. The DPF.

3.9.2 The Extended Emissions Warranty shall cover each and every DPF that has failed as a result of implementing any Approved Emissions Modification. If Settling Defendants can demonstrate to the satisfaction of EPA/CARB in a Proposed Emissions Modification that Settling Defendants' dealers can adequately distinguish between a DPF that has reached the maximum ash load and needs to be replaced as part of normal maintenance and a DPF that has failed as a result of implementing such Approved Emissions Modification, then the Extended Emissions Warranty applicable to such Approved Emissions Modification does not need to cover DPFs that need replacement as part of normal maintenance. If Settling Defendants fail to make this demonstration then the Extended Emissions Warranty must cover each and every DPF.

3.9.3 The Engine Long Block warranty must cover the engine sub-assembly that consists of the assembled block, crankshaft, cylinder head, camshaft, and valve train.

3.9.4 The warranty period for the Extended Emissions Warranty shall be both:

i. For Generation 1 and 2, 10 years or 120,000 actual miles whichever comes first; for Generation 3, 10 years or 150,000 actual miles whichever comes first; and

ii. 4 years or 48,000 miles, whichever comes first, from date and mileage of implementing the Emissions Modification, except for vehicles offered for resale, in which case, from the date and mileage of the first resale

transaction after the modification to the first person who in good faith purchases the vehicle for purposes other than resale.

3.9.5 If Settling Defendants are required to provide Additional Warranty Extensions pursuant to subparagraph 3.5.3, the Additional Warranty Extensions shall extend the warranty periods specified in subparagraphs 3.9.4 (i) – (ii).

3.9.6 Settling Defendants must make available online a searchable database that includes all 2.0 Liter Subject Vehicles, by which users, including Eligible Owners, Eligible Lessees, and prospective purchasers, may conduct a free-of-charge search by vehicle VIN to determine whether the Extended Emissions Warranty and any Additional Warranty Extensions apply to a specific vehicle. To satisfy this requirement, Settling Defendants may include a webpage that meets these specifications on the Emissions Modification Database, pursuant to subparagraph 3.1.9. Upon the modification of each and every Modified Vehicle, Settling Defendants must identify within the database that such vehicle is covered by the Extended Emissions Warranty and Additional Warranty Extensions, as applicable, by displaying the applicable warranty disclosure statements when a user enters the VIN. Settling Defendants must provide the VINs for all such vehicles to EPA/CARB within 15 Days of EPA/CARB's request.

3.9.7 Settling Defendants must also maintain a database that includes all 2.0 Liter Subject Vehicles, by which Volkswagen and Audi authorized dealers and Volkswagen and Audi authorized service facilities (collectively, "Dealers") shall search by vehicle VIN to determine whether the Extended Emissions Warranty and any Additional Warranty Extensions apply to a specific 2.0 Liter Subject Vehicle. Settling Defendants shall establish procedures such that the vehicle VIN shall dictate component or system coverage described in the approved Extended Emissions Warranty Component List. Such procedures shall include a feature on the database by which Dealers shall enter the identification number for any part pertaining to a Modified Vehicle and the database shall inform all Dealers whether such part is covered by the Extended Emissions Warranty, in accordance with the approved Extended Emissions Warranty Component List. Settling Defendants must maintain the Extended Emissions Warranty Component List and the Dealer database to ensure current part identification numbers are listed. In no event shall warranty coverage be subject to service writers' discretion.

3.9.8 The Extended Emissions Warranty is associated with the car, and remains available to any and all subsequent owners and operators.

3.9.9 The Extended Emissions Warranty shall not supersede or void any outstanding warranty. To the extent there is a conflict in any provision(s) of this warranty and any outstanding warranty, that conflict shall be resolved to the benefit of the consumer.

3.9.10 The Extended Emissions Warranty shall not modify, limit, or affect any state, local or federal legal rights available to the owners.

3.9.11 Any waiver of any provision of the Extended Emissions Warranty by an owner is null and void.

IV. EMISSIONS MODIFICATION PROPOSAL REQUIREMENTS

4.1 Settling Defendants may submit to EPA and CARB, for any test group or combination of test groups of the 2.0 Liter Subject Vehicles, an Emissions Modification Proposal according to the schedule and requirements specified in this Section IV. EPA/CARB will not approve an Emissions Modification Proposal unless and until Settling Defendants have provided in a Submission or Submissions all materials required under Section IV of this Appendix B to EPA/CARB.

4.2 Each Emissions Modification Proposal must be submitted by Settling Defendants to EPA and CARB on or before the dates and as specified in the chart below. EPA/CARB will use the agencies' best efforts to either approve or disapprove each complete proposal (as detailed herein) within 45 Days of the actual Submission. To facilitate an expeditious review and approval process, Settling Defendants may submit data and Emissions Modifications Proposals at any time before the deadlines below. Regardless of the time of Submission, no Approval can be made until after entry of the Consent Decree. If any of the Final Submittal Deadlines below expire prior to the Date of Entry, such deadlines will be extended to 14 Days beyond the Date of Entry.

Generation	Emissions Modification Proposal	Settling Defendants' Expected Submittal Date	Settling Defendants' Final Submittal Deadline
1	Parts A, B, & C	November 11, 2016	January 27, 2017
2	Parts A, B, & C	December 16, 2016	March 3, 2017
3	Parts A, B, & C	July 29, 2016	October 14, 2016
3	Part D	August 15, 2017	October 30, 2017

4.3 Emissions Modification Proposal, Part A: For any Emissions Modification Proposal, Settling Defendants must submit the following information in a submission clearly marked as "Proposed Emissions Modification, Part A: [corresponding test group or combination of test groups of 2.0 Liter Subject Vehicles]." Except as specified herein, the Emissions

Modification Proposal must contain all the elements of an Ordered Recall Plan/Remedial Plan, pursuant to 40 C.F.R. Part 85, Subpart S and Cal. Code Regs., tit. 13, § 2125.

4.3.1 Statement of the Emissions Levels demonstrated by the Required Emissions Test Procedure results concerning the corresponding vehicles, in accordance with Paragraph 3.1, above.

4.3.2 All emissions data from a vehicle that has been modified pursuant to the Proposed Emissions Modification that demonstrates each of the following:

i. Compliance to the Maximum Emissions Modification Limits, demonstrated with all data from emissions tests conducted according to the FTP, US06, SC03, and Hwy FE, 20° F FTP (no specific compliance limits), and 50° F FTP (no specific compliance limits) test procedures specified in 40 C.F.R. Parts 86 and 600, and the applicable California regulations (the "Required Emissions Test Procedures"), including the Emission Control System Data Parameters, set forth in Appendix B-2, for all tests, and including the preconditioning tests. The FTP test must be performed at Sea Level and at a high altitude of 1,620 meters. For automatic transmissions all tests are conducted in driving mode "D." Such demonstration must account for emissions deterioration described in subparagraph 4.3.4 and infrequent regeneration adjustment factors. The most recent available DFs from the Engineering or the Official Durability vehicles at the time of testing, and IRAFs from FTP75 measurement of a test vehicle at Sea Level, are to be used. For Generation 1, to ensure the determination of a valid IRAF for the infrequent desulfurization of the NOx Trap, the HWFET cycle may be used for measurement of DeSOx regeneration emissions and the Unified Drive Cycle (UDC or "LA-92") for sulfur and soot accumulation. For Generation 2 and 3, the Unified Drive Cycle (UDC or "LA-92") may be used for soot accumulation. Settling Defendants may conduct emissions demonstrations using only the official durability vehicle;

ii. Fuel economy measured by using the FTP, US06, SC03, HWFET, and 20°F FTP test procedures, based on A-to-B testing using the same basic testing conditions, including but not limited to fuel, on the same vehicle that compares (A) vehicles without the 2014 Reflash and with the Road Mode Calibration active and operative during the batch of test cycles and (B) vehicles to which Settling Defendants have applied the Proposed Emissions Modification; and

iii. All emissions results at 50 degrees Fahrenheit and 20 degrees Fahrenheit over the FTP test cycle.

4.3.3 For formaldehyde emissions, in lieu of test results, Settling Defendants may provide a statement in the Proposed Emissions Modification that the Modified

Vehicles comply with the Maximum Emissions Modification Limits for formaldehyde specified in Tables 1 – 3, in accordance with 40 C.F.R. § 86.1829-01(b)(iii)(E).

4.3.4 EPA/CARB may provide approval for Generations 1 and 2 based on Official Durability Data at 60,000 miles and Engineering Durability Data to 90,000 miles. EPA/CARB may provide approval for Generation 3 based on Official Durability Data obtained by testing a representative Generation 3 vehicle with mileage of at least 60,000 miles. Settling Defendants must continue testing through Full Useful Life and provide Official Durability Data within 3 weeks of reaching 90,000 miles, within 3 weeks of reaching each 30,000 mile interval, and within 3 weeks of completing Full Useful Life, to EPA and CARB (new IRAF calculations to be reported only at 4,000 miles and Full Useful Life; intermediate points will be based on original 4,000 mile projection). Settling Defendants must complete Official Durability Data testing for all Generations no later than July 31, 2017. Such data must include without limitation:

i. For Generation 1 and 2, Settling Defendants must provide all engineering durability testing that Settling Defendants conducted using preliminary software and Calibration data. Settling Defendants must also provide to EPA and CARB all software and Calibration data changes made during the course of durability testing.

ii. For Generation 3, Settling Defendants must provide the DOC replacement interval, if replacement is necessary, as soon as intermediate emission testing within durability shows exceedance of the Maximum Emissions Modification Limits.

iii. Settling Defendants must provide EPA and CARB with all Full Useful Life emissions durability testing results at a minimum of 75% of Full Useful Life mileage for each Generation, within 3 weeks of completing such testing, and include any adjustments to DFs observed concerning vehicles that have been modified pursuant to the Approved Emissions Modification. Subsequently, Settling Defendants must complete 100% Full Useful Life emissions durability testing and provide EPA and CARB with all testing results within 3 weeks of completing such testing, including such data demonstrating that the Modified Vehicles remain compliant as follows: 150,000 miles for Model Year 2015 vehicles, and 120,000 miles for Model Year 2014 and earlier vehicles.

4.3.5 A complete and extensively detailed list of each and every AECD and EI-AECD, including descriptions of SCR Inducements, that the Modified Vehicles will have after receiving the applicable Proposed Emissions Modification. For any AECD that results in a reduction in effectiveness of the Emission Control System, the list must include the rationale for why the AECD is not a Defeat Device. EPA/CARB will approve only those AECDs that are not Defeat Devices (and that are consistent with EPA and CARB policies and guidelines for approval of AECDs). Non-existent EI-AECD counters, as that term is defined in Cal. Code Regs. tit. 13, § 1968.2, will constitute only one

noncompliance. No further EI-AECD counters will be requested by EPA/CARB. Settling Defendants must provide a list of all EI-AECD counters existing at the time the Proposed Emissions Modification is submitted.

4.3.6 A description of any and all reasonably predictable changes, adverse or otherwise, on vehicle attributes which may reasonably be important to vehicle owners, including: fuel economy, reliability, durability, Noise Vibration and Harshness, vehicle performance (for example, 0-60 mph time, top speed, etc.), and drivability.

4.3.7 A description of any and all reasonably predictable changes, adverse or otherwise, on aspects of vehicle maintenance which may reasonably be important to vehicle owners, including but not limited to oil changes, EGR cleaning, DEF refill, and DPF replacement.

4.3.8 A draft Emissions Modification Disclosure for EPA/CARB Approval regarding the Proposed Emissions Modification, designed for dissemination to Eligible Owners, Eligible Lessees and, as applicable, prospective purchasers, as required under subparagraph 3.1.10, that describes in plain language:

i. The Proposed Emissions Modification generally, including but not limited to the increased emissions resulting from the Proposed Emissions Modification relative to the levels contained in the previously issued certificates of conformity for the vehicles;

ii. All software changes;

iii. All hardware changes, including but not limited to any and all future recalls associated with the Proposed Emissions Modification, such as any modifications of the OBD system;

iv. For Generation 3, a clear explanation of each Subsequent Service Action required under the applicable Proposed Emissions Modification, to include at least (1) a software Reflash and (2) installation of the Second NOx Sensor and a replacement DOC (if needed), and the expected schedule and/or maintenance intervals for such replacements;

v. Any and all reasonably predictable changes, resulting from the Proposed Emissions Modification, including the following:

a. Reliability, durability, fuel economy, Noise Vibration and Harshness, vehicle performance (for example, 0-60 mph time, top speed, etc.), drivability, and any other vehicle attributes that may reasonably be important to vehicle owners; and

b. Oil changes, EGR cleaning, DEF refill, DPF replacement, and any other aspects of vehicle maintenance that may reasonably be important to vehicle owners;

vi. A basic summary of how Eligible Owners and Eligible Lessees can obtain the Proposed Emissions Modification and the logistics involved in doing so;

vii. OBD system limitations that make identification and repair of any components difficult or even impossible, compromise warranty coverage, or may reduce the effectiveness of inspection and maintenance program vehicle inspections; and

viii. Any other disclosures required under Appendix A, including the Buyback option.

4.3.9 A draft Extended Emissions Warranty statement in plain language intended for dissemination to Eligible Owners, Eligible Lessees, and, as applicable, prospective purchasers. If Settling Defendants attempt to make the demonstration concerning DPF warranty-coverage described under subparagraph 3.9.2, Settling Defendants must also include a draft statement in plain language concerning conditions under which the DPF is, or is not, covered by the warranty.

4.3.10 A proposal for the list of parts, including part identification numbers, covered by the Extended Emissions Warranty (the "Extended Emissions Warranty Parts Coverage List"). Settling Defendants must include in this proposal:

i. A complete list of any and all parts included in and related to the Emissions Control System, including any parts or components which can reasonably be impacted by effects of the Approved Emissions Modification;

ii. A complete list of any parts Settling Defendants propose to exclude from coverage by the Extended Emissions Warranty; and

iii. Settling Defendants' justification for excluding such parts from the Extended Emissions Warranty.

4.3.11 Draft labels for EPA/CARB approval, with correct label values for each model type corresponding to the Emissions Modification Proposal, designed to be permanently affixed to each and every Modified Vehicle, as required under subparagraph 3.1.6 of this Appendix B.

4.3.12 The complete software functional description document in the German language, and the table of contents of the functional description document in the English language, the compiled software files (i.e., .HEX Files), and the complete memory map

(i.e., .A2L File), including all such data applicable to the vehicles eligible for modification under the Proposed Emissions Modification before and after application of the Proposed Emissions Modification, as well as a description of any changes to the ECU code functionality, including a description of all Defeat Devices in the original software and how such Defeat Devices were removed and any calibration changes resulting from the Proposed Emissions Modification. Settling Defendants must provide English language translations of excerpts of the functional description document in response to reasonable requests by EPA/CARB.

4.3.13 Repair instructions concerning the Modified Vehicles that Settling Defendants must, upon receiving EPA/CARB's Notice of Approved Emissions Modification, distribute to Dealers, in accordance with Cal. Code Regs. tit. 13, § 1969. Settling Defendants must also provide contemporaneously to EPA and CARB a copy of each communication concerning the Approved Emissions Modification directed at Dealers.

4.3.14 An affidavit from a United States Volkswagen Group of America corporate official and from a German Volkswagen AG corporate official certifying, in accordance with Paragraphs 33 and 34 of this Consent Decree, that once the Emissions Modification is applied, the resulting Modified Vehicle contains no Defeat Devices.

4.3.15 Certification, in accordance with Paragraphs 33 and 34 of this Consent Decree, with respect to all information contained in the Emissions Modification Proposal.

4.4 Emissions Modification Proposal, Part B: For any Emissions Modification Proposal, Settling Defendants must submit the following information in a submission clearly marked as "Proposed Emissions Modification, Part B: [corresponding test group or combination of test groups of 2.0 Liter Subject Vehicles]."

4.4.1 Statement of OBD Compliance: A statement, based on the OBD demonstrations to date, that Settling Defendants believe the OBD system fully complies with the OBD requirements set forth in Paragraphs 3.1 – 3.6. The requirements of Cal. Code Regs. tit. 13, § 1968.2 apply in full, provided, however, that for monitoring requirements that specify threshold-based emissions malfunction criteria, Settling Defendants must use the malfunction criteria set out in Paragraphs 3.1 – 3.4 of this Appendix B.

4.4.2 Statement of OBD Noncompliances Pursuant to Paragraphs 3.1 – 3.6: If the OBD system does not fully comply with Paragraphs 3.1 – 3.6, Settling Defendants must specify, and provide a description of, all known and expected OBD Emission Threshold Noncompliances and all other OBD noncompliances, and all requested OBD noncompliance allowances, pursuant to the Alternate OBD Criteria under Paragraph 3.5.

4.4.3 For Critical OBD Demonstrations defined in this Appendix B, all data necessary for EPA and CARB to evaluate Settling Defendants' demonstrations of the

OBD levels as provided in Paragraphs 3.1 – 3.6 of this Appendix, using the protocols and processes required under Cal. Code Regs. tit. 13, § 1968.2(h).

4.4.4 A summary table for the Proposed Emissions Modification Calibration, monitoring checklist, descriptions of monitoring strategies that were changed between the original Calibration and the Proposed Emissions Modification Calibration, and testing and reporting as required by Cal. Code Regs. tit. 13, § 1968.2(j)(1) (i.e., verification of standardized requirements on production vehicles). The summary table for automatic and manual transmission vehicles for each Generation may utilize automatic transmission data and must note where manual transmission data are different.

4.5 Emissions Modification Proposal, Part C: For any Emissions Modification Proposal, Settling Defendants must submit the following information in a submission clearly marked as "Proposed Emissions Modification, Part C: [corresponding test group or combination of test groups of 2.0 Liter Subject Vehicles]."

4.5.1 All emission data from PEMS testing on two vehicles that have received the Proposed Emissions Modification. Settling Defendants must generate these data by testing over the ICCT Urban/Downtown Los Angeles Route and the Combined Uphill/Downhill and Highway Route, each attached hereto as Appendix B-3. Both vehicles must be tested at the same time and "chase" each other to experience the same driving ambient conditions. Settling Defendants must submit all raw data generated by the PEMS testing, including speed, load, and second-by-second emissions data, etc., in a CSV format that can be imported into a spreadsheet or database. From these data, Settling Defendants must calculate average emissions results for NOx, THC, CO, and CO2.

4.5.2 All emissions data from in-use vehicles that have received the applicable Proposed Emissions Modification, including data demonstrating compliance to the Maximum Emissions Modification Limits, over the Required Emissions Test Procedures (FTP, US06, SC03, and HWFET), accounting for infrequent regeneration adjustment factors as measured in the durability runs. For each Generation, two in-use vehicles with automatic transmission and one in-use vehicle with manual transmission are required (i.e., a total of nine vehicles). For all Proposed Emissions Modifications for Model Year 2012 and prior years, each in-use vehicle must have between 80,000 – 100,000 miles, accumulated before the vehicle received the applicable Approved Emissions Modification. At a minimum, one of the three in-use vehicles must have accumulated at least 90,000 miles. For all Proposed Emissions Modifications for Model Year 2013 and newer, each Model Year must have accumulated at least 15,000 miles on average per year in use.

4.6 Emissions Modification Proposal, Part D: For any Generation 3 Proposed Emissions Modification that requires a Subsequent Service Action, Settling Defendants must submit a proposal clearly marked as "Proposed Emissions Modification, Part D: [corresponding test group or combination of test groups of 2.0 Liter Subject Vehicles]." Settling Defendants

must not implement any such Proposed Emissions Modification, Part D unless and until EPA/CARB Approve such proposal. Any such Proposed Emissions Modification, Part D must:

4.6.1 Provided that Settling Defendants are not proposing any change to the emissions and OBD Calibrations in the Modified Vehicles, make an OBD demonstration for the SCR system monitor and DOC monitor. If Settling Defendants are proposing any changes to the emissions or OBD Calibrations other than the SCR system monitor and the DOC monitor, Settling Defendants must conduct new OBD demonstrations for any OBD monitors corresponding to, or affected by, any such changes.

4.6.2 Require the installation of a Second NOx Sensor and associated monitors, a compliant SCR system monitor, and a new DOC, if necessary.

4.6.3 Describe any updates to Parts A, B, and C that the installation of a new DOC, Second NOx Sensor and associated monitors, and compliant SCR system monitors may require, including but not limited to, emissions, durability, and OBD demonstrations for the affected monitors.

4.6.4 Require the installation of any updates identified in the description required under subparagraph 4.6.3.

V. APPROVAL OR DISAPPROVAL OF PROPOSED EMISSIONS MODIFICATIONS

5.1 EPA/CARB will approve or disapprove each Proposed Emissions Modification according to the schedule and criteria in this Appendix B.

5.1.1 Approve: If EPA/CARB determine that a Proposed Emissions Modification satisfies all requirements herein, then EPA/CARB will timely notify Settling Defendants by letter clearly titled: "Approved Emissions Modification: [corresponding test group or combination of test groups of 2.0 Liter Subject Vehicles]," after which Settling Defendants must implement the Approved Emissions Modification in accordance with the schedules and procedures set forth in Appendices A and B to this Consent Decree.

5.1.2 Disapprove:

i. If EPA/CARB determine that a Proposed Emissions Modification fails to satisfy any requirement herein, then EPA/CARB will timely notify Settling Defendants by letter clearly titled: "Notice of Disapproval of Proposed Emissions Modification: [corresponding test group or combination of test groups of 2.0 Liter Subject Vehicles]" that identifies the bases for the disapproval. Within 30 Days of EPA/CARB's letter(s), Settling Defendants may provide a proposed remedy, and within 90 Days of EPA/CARB's letter(s), Settling Defendants may submit one revised Proposed Emissions Modification that must resolve all of EPA/CARB's

bases for disapproval. EPA/CARB will then issue either a "Final Notice(s) of Disapproval of Proposed Emissions Modification: [corresponding test group or combination of test groups of 2.0 Liter Subject Vehicles]" or an "Approved Emissions Modification: [corresponding test group or combination of test groups of 2.0 Liter Subject Vehicles]"

ii. Settling Defendants may dispute EPA/CARB's Final Notice(s) of Disapproval of a Proposed Emissions Modification in accordance with the dispute resolution procedures set forth in the Consent Decree.

5.1.3 If, in their review, EPA/CARB identify any off-cycle increase or increases in emissions that could potentially be the result of a Defeat Device, then, within 30 Days of notice of the increase or increases by EPA/CARB, Settling Defendants must supplement its Proposed Emissions Modification with a detailed technical explanation of the cause of the increase or increases. EPA/CARB will provide available information to Settling Defendants concerning the increase or increases in emissions. EPA/CARB's response time to approve or disapprove the Proposed Emissions Modification shall be extended to no less than 20 Days from its receipt of Settling Defendants' supplement.

5.1.4 As stated in Section VIII (Stipulated Penalties and Other Stipulated Remedies for Noncompliance), EPA/CARB reserve all rights and authorities to impose consequences in the event the agencies discover a Defeat Device in any Modified Vehicle after either agency approved the corresponding Emissions Modification for that Modified Vehicle.

VI. IN-USE COMPLIANCE ASSURANCE FOR MODIFIED VEHICLES

6.1 In each of the five calendar years following lodging of the Consent Decree, for two vehicles from each Generation of the 2.0 Liter Subject Vehicles for which Settling Defendants have performed an Approved Emissions Modification, Settling Defendants must, no later than October 1 of each year (except as otherwise provided herein):

6.1.1. Notify EPA and CARB 30 Days prior to conducting all in-use testing so that the agencies can arrange to observe the testing.

6.1.2. Use the regulatory in-use compliance vehicle selection process to select vehicles to be tested, as required under 40 C.F.R. § 86.1845-04 and Cal. Code Regs. tit. 13, §2137, except that vehicles tested may include those that are up to the Full Useful Life in terms of mileage and age, shall be reasonably maintained and may not be excluded solely for lack of maintenance records, multiple owners and/or repairs due to the Emissions Modification. EPA/CARB reserve the right to specify to Settling Defendants the test group, model, and mileage targets for the two vehicles to be tested, provided that EPA/CARB provide such specifications to Settling Defendants by December 1 of the year preceding the year in which testing will be conducted. Settling Defendants must then randomly select the vehicles within such specifications. Vehicles

used for the Final OBD demonstration may not be used to satisfy the requirements of this Section VI (In-Use Compliance Assurance for Modified Vehicles).

6.1.3. Provide EPA and CARB all downloads of all standardized OBD data, in accordance with Cal. Code Regs. tit. 13, § 1968.2, of the tested vehicles. This data shall be collected both pre- and post-testing, on the as-received vehicles.

6.1.4. Generate all emissions data from two in-use Modified Vehicles in each Generation within the regulatory useful life mileage (i.e., Generation 1 and Generation 2 = 120,000 miles; Generation 3 = 150,000 miles) over all required test cycles (FTP, US06, SC03, and HWFET) accounting for Infrequent Regeneration Adjustment Factors, and provide all these data to EPA and CARB. Settling Defendants must complete the tests and provide to EPA and CARB the results, no later than October 1 of each year.

6.1.5. If the test results of any one in-use Modified Vehicle fails the Maximum Emissions Modification Limits for Full Useful Life (after accounting for any applicable in-use factors as described in Paragraph 3.7), Settling Defendants must formally notify the agencies within 72 hours of the failure. In the event of such failure, Settling Defendants must conduct an In-Use Confirmatory Program. Prior to conducting the In-Use Confirmatory Program, the Settling Defendants must submit a test plan for EPA/CARB review and approval. The criteria used for such additional in-use vehicle testing and any additional reporting requirements must be identical to the official regulatory in-use testing and reporting program under 40 C.F.R. 86.1846-01, except that vehicles selected for additional testing may include vehicles up to the applicable Full Useful Life in terms of mileage and age, shall be reasonably maintained and shall not be excluded solely for such things as lack of maintenance records, multiple owners and/or repairs as a result of the Emissions Modification. As stated in Section VIII (Stipulated Penalties and Other Stipulated Remedies for Noncompliance), EPA and CARB reserve all rights and authorities to impose consequences if a Modified Vehicle fails an applicable Maximum Emissions Modification Limit during the Full Useful Life period.

6.1.6. For each Approved Emission Modification, Settling Defendants must perform OBD testing and reporting as required by Cal. Code Regs. tit. 13, §§ 1968.2 (j)(2) and (3) (i.e., verification of monitoring requirements on production vehicles, and verification and reporting of in-use monitoring performance on production vehicles, respectively). Pursuant to these regulations, Settling Defendants must complete reporting under Cal. Code Regs. tit. 13, § 1968.2(j)(2) within 180 calendar Days after the first 2.0 Liter Subject Vehicle is modified in accordance with an Approved Emissions Modification, and must complete data collection and reporting required under Cal. Code Regs. tit. 13, § 1968.2(j)(3) within 360 calendar Days after the first 2.0 Liter Subject Vehicle is modified in accordance with the applicable Approved Emissions Modification. In the event this testing demonstrates that any Modified Vehicles do not comply with the applicable OBD requirements, Settling Defendants must submit a remedial plan to EPA and CARB for any such noncompliant Modified Vehicles.

6.1.7. Starting on April 30, 2018, and annually for the following 5 years, Settling Defendants must provide EPA and CARB with a "Report on In-Use Compliance Assurance for Modified Vehicles" that summarizes the testing performed pursuant to this Section in the preceding year. The two vehicles tested under this section shall be two of the vehicles procured by the Settling Defendants during the Settling Defendants compliance with the in-use reporting and compliance requirements in 40 C.F.R. § 86.1845-04 04 and Cal. Code Regs. tit. 13, § 2137.

6.1.8. Settling Defendants must certify all In-Use Compliance test results required under this Section VI, and submitted to EPA and CARB, in accordance with the certification requirements of Paragraphs 33 and 34 of this Consent Decree.

VII. ADDITIONAL REQUIREMENTS

7.1 In implementing any Approved Emissions Modification, Settling Defendants must comply with the following additional requirements.

7.2 For all Generations, Settling Defendants may not sell or cause to be sold, resell or cause to be resold, or lease or cause to be leased, any 2.0 Liter Subject Vehicle in Settling Defendants' possession, or obtained by Settling Defendants as a trade-in or through the Buyback or Lease Termination Program under Appendix A until:

7.2.1. Settling Defendants complete at least 75% Full Useful Life durability testing on an official emissions durability vehicle aged on the SRC cycle (a representative vehicle, as approved by EPA/CARB, is acceptable for this purpose) and Settling Defendants provide all data to EPA and CARB.

7.2.2. Settling Defendants complete the Critical OBD Demonstration Testing on a vehicle aged to at least 75% Full Useful Life on the SRC cycle executed with an Engineering Durability Vehicle and Settling Defendants provide all data to EPA/CARB;

7.2.3. Settling Defendants remedy any and all OBD noncompliances that are not provided for under this Appendix B and that are known at the time the OBD demonstration required under subparagraph 7.2.2 is completed;

7.2.4. Settling Defendants perform an applicable Approved Emissions Modification on any such vehicle and comply with all other requirements applicable to such vehicle under Appendix B;

7.2.5. Settling Defendants execute all emission-related service actions and repairs required to bring the vehicle into compliance with Appendix B, apply any and all other recalls concerning the vehicle, and execute any other required service actions, provided that, to fulfill this requirement for Generation 3 vehicles, Settling Defendants need not execute the Subsequent Service Action described in subparagraph 3.4.3;

7.2.6. Settling Defendants submit a Proposed Plan for Sale and Lease of Modified Vehicles, including the materials set forth below.

i. A statement that the Modified Vehicles comply with the requirements in Appendix B;

ii. If the Modified Vehicles do not comply with Appendix B, a statement of all actions to be undertaken to alter the Emissions Modification to ensure compliance with Appendix B;

iii. As necessary, an updated list of OBD noncompliances that were identified during the testing required under subparagraph 7.2.2; and

iv. Settling Defendants certify the Proposed Plan for Sale and Lease of Modified Vehicles in accordance with the certification requirements set forth in Paragraphs 33 and 34 of this Consent Decree.

7.2.7. EPA/CARB approve the Proposed Plan for Sale and Lease of Modified Vehicles. EPA/CARB will respond to the proposal within 14 Days of submittal.

7.2.8. For five years following entry of this Consent Decree, Settling Defendants must submit quarterly reports, certified in accordance with the certification requirements under Paragraphs 33 and 34 of this Consent Decree, to EPA/CARB to include the following information:

i. Each vehicle, by VIN, that has been acquired by Settling Defendants, modified with an Approved Emissions Modification (including Modified Vehicles that have been returned to Eligible Owners and Lessors), sold, exported, or destroyed, including the dates of each occurrence;

ii. By VIN, the repairs and alterations to each 2.0 Liter Subject Vehicle conducted to remedy OBD noncompliances and other defects in the relevant Approved Emissions Modification.

7.3 If the Final OBD Demonstration or the Full Useful Life Durability testing show that Modified Vehicles do not meet the OBD System or durability requirements of this Appendix B, or if a substantial number of Modified Vehicles exceed the Maximum Emissions Modification Limits in-use, the Approved Emissions Modification shall be suspended, during which time no relevant Emissions Modifications may be applied, and no sales, leases, or exports, of relevant Modified Vehicles will be permitted, until such time Settling Defendants correct the defects in the Approved Emissions Modification.

7.4 Settling Defendants must make all disclosures to vehicle owners as required by the Consent Decree and the FTC Order, and consistent with Appendix A. These requirements are meant to ensure owners are able to make an informed decision about participation in the Emissions Modification and the availability of the Extended Emissions Warranty.

7.5 Settling Defendants must also comply with any additional labeling, disclosure, and warranty requirements set forth in Appendix A.

7.6 As more fully described in Appendix A, Settling Defendants may not terminate the Emissions Modification Program.

VIII. STIPULATED PENALTIES AND OTHER STIPULATED REMEDIES FOR NONCOMPLIANCE

8.1 With respect to Settling Defendants' noncompliance with the provisions of this Appendix B, EPA and CARB reserve all rights to address such noncompliance under applicable laws and regulations, including without limitation, civil, criminal, and administrative enforcement authorities, such as the imposition of penalties and equitable remedies.

8.2 Settling Defendants must pay stipulated penalties to the United States and CARB, and be liable for the following remedies, for each violation of Appendix B, in accordance with the following paragraphs. Except as otherwise provided herein, 75% of any stipulated penalties due under these subparagraphs shall be paid to the United States, and 25% shall be paid to CARB.

8.2.1. Failure to Disclose AECDs. If, after issuing a Notice of Approved Emissions Modification, EPA/CARB determine that Settling Defendants failed to provide a complete list of each AECD and EI-AECD in the Emissions Modification Proposal that EPA/CARB approved, Settling Defendants must pay to the United States and CARB a stipulated penalty of $150,000 for each AECD and $2,000,000 for each EI-AECD not included in the list.

8.2.2. Failure to Comply with Labeling Requirements. If Settling Defendants fail to permanently affix a label to any 2.0 Liter Subject Vehicle, as required under subparagraph 3.1.6 before such vehicle is sold, leased, offered for sale or lease, otherwise introduced into commerce, or returned to the Eligible Owner or Eligible Lessee, or if the information included in any label is incorrect, Settling Defendants must pay to the United States and CARB a stipulated penalty of $15 per label, per vehicle, and for each Day that Settling Defendants fail to apply the required label, provided that if Settling Defendants affix the label within 30 Days of selling or leasing the vehicle or returning the vehicle to the Eligible Owner or Lessee, no stipulated penalty shall be required for that vehicle.

8.2.3. Failure to Perform Emissions Modification. If Settling Defendants sell or lease, offer for sale or lease, or otherwise introduce into commerce, or return to an Eligible Owner or Lessee who requested an Emissions Modification, any 2.0 Liter Subject Vehicle that has not received the applicable Approved Emissions Modification, Settling Defendants must (1) make a Mitigation Trust Payment to the Trust Account in accordance with the Consent Decree in the amount of $50,000 per vehicle; and (2) offer to buy back and terminate the leases for each and every such vehicle, in accordance with the terms and requirements of Appendix A. For each such vehicle that Settling Defendants fail to buy back or execute a lease termination, as applicable, within 18

months following EPA/CARB's demand for the stipulated remedy under this subparagraph, Settling Defendants must pay a Mitigation Trust Payment to the Trust Account in accordance with the Consent Decree in the amount of $25,000 per vehicle. In no event shall Settling Defendants be required to pay stipulated penalties under subparagraph 8.2.8 of Appendix A of this Consent Decree if a stipulated penalty under this subparagraph 8.2.3 of this Appendix B is demanded for the same conduct.

8.2.4. Failure to Comply with the Maximum Emissions Modification Limits. If any test required under this Appendix B, or such other compliance test, as specified in this Appendix B and conducted by EPA/CARB, demonstrates that any Modified Vehicle Test Group exceeds the applicable Maximum Emissions Modification Limit, the following stipulated remedies apply.

i. Settling Defendants must pay a Mitigation Trust Payment to the Trust Account in accordance with the Consent Decree, an amount based on Formula 1. The Mitigation Trust Payment amount shall be calculated based on the emissions exceedance demonstrated by testing conducted during the 1 year period preceding the EPA/CARB demand for payment. EPA/CARB may issue a separate demand for an additional Mitigation Trust Payment for each year in which the Modified Vehicle exceeds the applicable emissions limit. For Modified Vehicles that exceed more than one emission limit, the amount of exceedance will be based on the greatest amount by which any emissions limit is exceeded.

Formula 1

[Vehicles not removed from service (number of vehicles in the applicable Generation less the number of vehicles Settling Defendants demonstrate are bought back and destroyed)] x [g/mile (amount of exceedance)] x [15,000 miles] x [grams to tons conversion factor] x [70,000] = [Mitigation Trust Payment in dollars]

8.2.5. Failure to Provide EPA or CARB with Test Vehicles. If Settling Defendants fail to provide any test vehicle within 45 Days of a request by EPA/CARB, as provided in subparagraph 3.1.1, and as otherwise provided in the Consent Decree and Appendices, Settling Defendants must pay to the United States and CARB the following stipulated penalties for each test vehicle and for each Day the vehicles are not provided:

$5,000	1st through 14th Day
$20,000	15th through 30th Day
$50,000	31st Day and beyond

8.2.6. Failure to Remove Defeat Devices. If, after EPA/CARB approve the applicable Emissions Modification, Settling Defendants install software, or a Dealer installs software provided by Settling Defendants, for purposes of modifying the vehicle

as provided under this Appendix B, and subsequent to such installation, the vehicle contains a Defeat Device, Settling Defendants must offer to buy back, and terminate the leases for, each and every such vehicle that has been purchased or leased, or that has been returned to an Eligible Owner or Lessee who requested an Emissions Modification, in accordance with the terms and requirements of Appendix A, and Settling Defendants must also pay to the United States and CARB a stipulated penalty of $25,000,000 for each Defeat Device (but not for each vehicle that contains such Defeat Device).

8.2.7. Failure to Complete Final OBD Demonstration Testing. If Settling Defendants fail to complete the Final OBD Demonstration testing by the dates required under subparagraph 3.1.4, Settling Defendants must pay to the United States and CARB (at a 50/50 split) the following stipulated penalty for each Day that Settling Defendants fail to complete such testing:

$5,000	1st through 14th Day
$20,000	15th through 30st Day
$75,000	31st and beyond

8.2.8. Failure to Comply with OBD System Requirements. If the Final OBD Demonstration testing, or such other test, as described herein, conducted by EPA/CARB, demonstrate that the Modified Vehicles do not meet the OBD System Requirements set forth in this Appendix B (other than those allowed by the Alternate OBD Criteria), Settling Defendants must pay to the United States and CARB (at a 50/50 split) a stipulated penalty of $15,000,000 for each monitor (but not for each vehicle that contains such monitor) that the test(s) demonstrate is noncompliant, and Settling Defendants must also continue to conduct the in-use compliance testing required under Section VI of this Appendix B for an additional 3 year period. If such additional in-use compliance testing demonstrates that the Modified Vehicles exceed any of the Maximum Emissions Modification Limits, then the stipulated remedies under subparagraph 8.2.4 apply.

8.2.9. Failure to Install Hardware Required for Generation 1 Vehicles. If Settling Defendants fail to install on any Generation 1 2.0 Liter Subject Vehicle the exhaust flap, EGR filter, or the NOx Trap that meets the specifications of BASF TEX2064, as required under subparagraph 3.2.1, Settling Defendants must recall each and every such vehicle and install the required hardware, and must pay to the United States and CARB a stipulated penalty of $500 per vehicle per device that Settling Defendants fail to install.

8.2.10. Failure to Install DOC as Required for Generation 3 Vehicles. If Settling Defendants fail to install on any Generation 3 2.0 Liter Subject Vehicle the DOC necessary to maintain emissions compliance to at least 150,000 miles, as required under subparagraph 3.4.3, Settling Defendants must recall each and every such vehicle and install the required hardware and must pay to the United States and CARB a stipulated penalty of $500 per vehicle per device that Settling Defendants fail to install.

8.2.11. Failure to Install Other Hardware Required for Generation 3 Vehicles. If Settling Defendants fail to install on any Generation 3 2.0 Liter Subject Vehicle the

Second NOx Sensor or associated monitors, or compliant SCR monitor, required under subparagraph 3.4.1, Settling Defendants must recall each and every such vehicle and install the required hardware and must pay to the United States and CARB (at a 50/50 split) a stipulated penalty of $500 per vehicle per device that Settling Defendants fail to install.

8.2.12. Failure to Honor Warranty. If Settling Defendants fail to honor the Extended Emissions Warranty or the additional warranty extension provisions under Paragraph 3.9 and subparagraph 3.5.3, respectively, including by failing to cover all costs of parts and labor, or by failing to pay for or provide a loaner car for repairs of more than 3 hours, Settling Defendants must pay to the United States and CARB (at a 50/50 split) a stipulated penalty of $40,000, except for failing to pay for or provide a loaner car, for which Settling Defendants must pay a stipulated penalty of $1,000.

8.2.13. Failure to Disseminate the Emissions Modification Disclosure and the Additional Emissions Warranty Extensions. If Settling Defendants fail to timely execute the disclosures required under subparagraphs 3.1.10 or 3.9.6, or the notice requirements for any Additional Emissions Warranty Extensions required under 3.5.5, Settling Defendants must pay to the United States and CARB (at a 50/50 split) the following stipulated penalties for each Day such notice is not provided:

$2,000	1st through 14th Day
$10,000	15th through 30th Day
$50,000	31st and beyond

8.2.14. Failure to Maintain a VIN-Searchable Database with the required Emissions Modifications Disclosures and Specifying Warranty Coverage. If Settling Defendants fail to maintain an accurate and complete database specifying the warranty coverage for each 2.0 Liter Subject Vehicle, the Settling Defendants must pay to the United States and CARB (at a 50/50 split) the following stipulated penalties for each Day the database is not maintained, and for each covered part omitted:

$2,000	1st through 14th Day
$10,000	15th through 30th Day
$50,000	31st and beyond

8.2.15. Failure to Comply with In-Use Compliance Testing, Notice, or Reporting Requirements. If Settling Defendants fail to conduct the tests or fail to comply with the reporting or notice requirements under Section VI of this Appendix B (In-Use Compliance Assurance), Settling Defendants must make Mitigation Trust Payments to the Trust Account in accordance with the Consent Decree in the following amounts for each requirement Settling Defendants fail to meet, and for each Day of such failure:

$50,000	1st through 14th Day
$100,000	15th through 30th Day
$500,000	31st Day and beyond

8.2.16. Failure to Comply with Other Testing Requirements. If Settling Defendants fail to conduct any other test or timely submit the results as required under this Appendix B, including any test Settling Defendants are required to conduct after EPA and CARB issue a Notice of Approved Emissions Modification, but excluding tests required under Section VI of this Appendix B, Settling Defendants must pay to the United States and CARB (in a 50/50 split) the following stipulated penalties for each requirement Settling Defendants failed to meet, and for each Day of such failure:

$5,000	1st through 14th Day
$20,000	15th through 30st Day
$50,000	31st Day and beyond

8.2.17. Failure to Comply with Other Notice or Reporting Requirements. If Settling Defendants fail to meet any of the other notice or reporting requirements under Appendix B, Settling Defendants must pay to the United States and CARB (at a 50/50 split) the following stipulated penalty for each requirement and for each Day Settling Defendants fail to meet such requirements:

$2,000	1st through 14th Day
$5,000	15th through 30th Day
$25,000	31st Day and beyond

8.2.18. Failure to Comply with an Approved Emissions Modification. Except as otherwise provided herein, if an Emissions Modification performed by or on behalf of Settling Defendants fails to conform to any of the requirements of the applicable Approved Emissions Modification, Settling Defendants must pay to the United States and CARB (at a 50/50 split) a stipulated penalty of $5,000 for each nonconformance with the Approved Emissions Modification and for each Modified Vehicle that contains a nonconformance.

8.3 These stipulated penalties in Appendix B shall not apply if, at any time prior to instituting an Emission Modification Program, the Settling Defendants decide not to pursue an Emission Modification Program.

IX. DISPUTE RESOLUTION

9.1 Disputes under this Appendix B shall be governed by the dispute resolution procedures set forth in the Consent Decree.

9.2 With respect to any dispute under this Appendix B, in any judicial proceeding conducted pursuant to the dispute resolution procedures set forth in the Consent Decree, Settling Defendants shall have the burden of demonstrating that EPA/CARB's determination or action was arbitrary and capricious or otherwise not in accordance with law based on the administrative record.

X. SUBMISSIONS

10.1 Except as otherwise provided herein, Settling Defendants must provide EPA and CARB with all correspondence required hereunder concurrently, by the method and in the form specified in Section XIII (Notices) of the Consent Decree.

10.2 EPA and CARB will provide Settling Defendants with all correspondence required hereunder by the method and in the form specified in Section XIII (Notices) of the Consent Decree.

XI. CONFIDENTIAL BUSINESS INFORMATION.

11.1 Settling Defendants may assert claims that their Submissions contain Confidential Business Information, as specified in the Consent Decree.