

6 NYCRR Part 217, Motor Vehicle Emissions

6 NYCRR Section 200.9, Referenced Material

Express Terms Summary

The New York State Department of Environmental Conservation (Department) is proposing to amend 6 NYCRR Part 217 and Section 200.9. Section 200.9 is a list that references a test procedure published by the Society of Automotive Engineers that has been referenced by the Department while amending Part 217. The purpose of the amendment is to update Heavy-Duty Diesel Vehicle Inspection and Maintenance Program (HDDV I/M) requirements and be implemented through the next statewide New York Vehicle Inspection Program (NYVIP3). The Department is amending Sections 217-5.1, Definitions; 217-5.2, Applicability; 217-5.3, Heavy duty diesel emission standards; 217-5.4, Vehicle owner/operator requirements; 217-5.5, Emissions inspection procedures and test methods; 217-5.6, Test equipment specifications and test procedures; 217-5.7, Enforcement and penalties; 217-5.8 Hardship waiver. The remaining Sections in Part 217 are unchanged.

Section 217-5.1 is amended to include definitions of new equipment required for official diesel emissions inspection stations (ODEIS) through the statewide New York Vehicle Inspection Program (NYVIP3) to perform the updated Heavy-Duty Diesel Vehicle Inspection and Maintenance Program (HDDV I/M) requirements.

Section 217-5.2 is amended to define who is required to use and perform HDDV I/M on

the new NYVIP3 equipment.

Section 217-5.3 is amended to establish new, more stringent opacity cutpoints for diesel emissions inspections (smoke opacity) to go into effect after the implementation of NYVIP3.

Section 217-5.4 is amended to clarify vehicle owner and operator requirements in relation to emission control devices.

Section 217-5.5 is amended to clarify the emissions inspection procedure.

Section 217-5.6 is amended to clarify test equipment specifications and test procedure.

Section 217-5.7 is amended to clarify penalties and enforcement in relation to the new NYVIP3 equipment.

Section 217-5.8 is amended to clarify the hardship waiver process in relation to the new NYVIP3 equipment.

6 NYCRR Part 217, Motor Vehicle Emissions

Express Terms

Existing subparts 217-1 through 217-4 and 217-6 remain unchanged.

Existing subpart 217-5 is amended to read as follows:

SUBPART 217-5

HEAVY DUTY INSPECTION AND MAINTENANCE PROGRAM

Section 217-5.1 Definitions.

(a) 'Agricultural trucks' means those vehicles as defined in subparagraph 401.7(E)(2) of the New York State Vehicle and Traffic Law (VTL).

(b) 'Authorized emergency' vehicle means those vehicles defined in section 101 of the VTL.

(c) 'Bus' means a vehicle as defined in section 104 of the VTL, as well as vehicles covered by 17 NYCRR Part 720 or 721.

(d) 'CARB' means the California State Air Resources Board as defined in California's Health and Safety Code, section 39003.

(e) 'Certified configuration' means a heavy-duty diesel engine design or a light-duty diesel-powered motor vehicle-engine-chassis design certified as meeting the applicable CARB or EPA emission standards for heavy-duty diesel engines or light-duty diesel-powered motor vehicles manufactured in a given model year.

(f) 'Certified inspector' means any person authorized by the NYSDEC, NYSDMV or NYSDOT, after successfully completing the applicable training, to determine whether a HDDV complies with the requirements of this Subpart. NYSDOT fleet certified mechanics authorized to conduct HDDV emission inspections shall be considered certified inspectors for the purpose of conducting the required emissions inspections on a HDDV in the fleet of their employer. Diesel emissions inspections (smoke opacity) conducted at a NYSDMV official diesel emission inspection stations must be completed by a NYSDMV certified motor vehicle inspector pursuant to 15 NYCRR Part 79.

(g) Computerized vehicle inspection system (CVIS) is an inspection workstation as defined by 15 NYCRR Part 79, as tested and certified by NYSDEC and NYSDMV.

(h) 'Diesel engine' means a compression ignition type of internal combustion engine which operates on or is capable of operating on diesel fuel.

(i[h]) 'Diesel-fueled vehicle' means a diesel powered vehicle using or capable of using diesel fuel.

(j[i]) 'Element of design' means any part or system on a motor vehicle or a motor vehicle engine pertaining to the vehicle's or engine's certified configuration.

(k[j]) 'Emission control device [apparatus] means any device utilized by the vehicle manufacturer and/or the engine manufacturer to control the release of any regulated emission, including any associated component which monitors the function and maintenance of such a device.

(l[k]) 'Exhaust emissions' means the emissions (including any liquid or solid particles in the gaseous stream) released into the atmosphere from any opening downstream from the exhaust ports of a motor vehicle engine.

(m[l]) 'Fleet self inspection facility' means any corporation, business, or facility that employs certified inspectors and is authorized by NYSDEC, NYSDMV, or NYSDOT to perform emission testing to determine whether any HDDV owned or operated by such entity complies with the requirements of this Subpart.

(n[m]) 'Governor' means a mechanism installed on a diesel engine by the original equipment manufacturer for the purpose of limiting the maximum engine RPM.

(o[n]) 'Gross vehicle weight rating' or 'GVWR' means the value specified by the vehicle manufacturer as the maximum loaded weight of a single or combination vehicle.

(p[o]) 'Heavy duty diesel vehicle (HDDV)' means a heavy duty vehicle powered by a diesel engine.

(q[p]) 'Heavy duty vehicle' means a vehicle that has a GVWR exceeding 8,500 pounds and is designed primarily for transporting persons or properties.

(r[q]) 'High idle' means the highest engine speed obtainable when the engine is disengaged from the transmission.

(s[r]) 'Hybrid electric vehicle (HEV)' means those vehicles as defined in 40 CFR section 86.1702-99.

(s[s]) 'Low idle' means the minimum operating speed of an engine with the accelerator pedal released and the transmission disengaged, as specified by the engine manufacturer.

(t[u]) 'Marine vessel' means as defined in 1 U.S.C. section 3.

(u[v]) 'Maximum governed RPM' means for an:

(1) engine which has a functioning governor, the manufacturer's recommended maximum engine speed as restricted by the governor; and

(2) ungoverned engine this term means a value of 80 percent of the manufacturer's recommended maximum engine speed.

(v[w]) 'Model year' means the engine manufacturer's annual production period, as defined in 40 CFR part 85, subpart X.

(x[w]) 'Municipally owned vehicles' means those vehicles owned and/or operated by a county, town, city, or village of the State of New York.

(y[x]) 'New York City Metropolitan Area (NYCMA)' means the area as defined in section 200.1(au) of this Title.

(z[y]) 'NYSDEC' or 'department' means the New York State Department of Environmental Conservation.

(aa[z]) 'NYSDMV' means the New York State Department of Motor Vehicles.

(ab[a]) 'NYSDMV Official Diesel Emission Inspection Station' or 'ODEIS' means any person or association authorized by NYSDMV to conduct official diesel safety and emission [testing and](smoke opacity) inspections.

(ac[b]) 'NYSDOT' means the New York State Department of Transportation.

(ad[c]) 'Nominal stack size' means the exhaust pipe diameter to be used in conducting smoke opacity measurements to determine compliance with diesel smoke opacity standards, based on engine horsepower, as set forth in Table 3[2] of this Subpart.

(ae[d]) 'Oil temperature probe' means a device integral or auxiliary to certain smokemeters which measures the engine crankcase oil temperature.

(af[e]) 'Opacity' means the property of a substance whereby it partially or wholly obstructs the transmission of visible light expressed as the percentage to which light is attenuated.

(ag[f]) ‘Particles’ means any material, except uncombined water, which exists as liquid particles or solid particles at standard temperature and pressure ranges.

(ah[g]) ‘Regulated emission’ means any solid, liquid or gaseous substance which is emitted from a motor vehicle or motor vehicle engine and which is regulated by the EPA pursuant to 40 C.F.R. part 86.

(ai[h]) ‘Revolutions per minute (RPM) sensor’ means a mechanism integral or auxiliary to the smokemeter which senses the engine speed in revolutions per minute.

(aj[i]) ‘SAE J1667’ means the Surface Vehicle Recommended Practice incorporated in document number J1667 published by the Society of Automotive Engineers 2018-02[in February 1996], entitled “Snap-Acceleration Smoke Test Procedure for Heavy Duty Diesel Powered Vehicles,” as herein incorporated by reference (see Table 1, section 200.9 of this Title).

(ak[j]) ‘School bus’ means a vehicle as defined in section 142 of the VTL.

(al[k]) ‘Smokemeter’ means smoke measurement equipment designed and manufactured in accordance with specifications set forth in section 217-5.6 of this Subpart. Only[a model of a] smokemeter(s) certified by NYSDEC, including a CVIS when applicable, and operated in accordance with the manufacturer’s operating procedures shall be considered a smokemeter for purposes of this Subpart.

(am[1]) ‘Tailpipe’ means the final downstream section of pipe in the exhaust system of a motor vehicle.

(an[m]) ‘Ungoverned engine’ means a diesel engine designed to be devoid of any mechanical or electronic contrivances designed or intended to limit maximum engine speed.

Section 217-5.2 Applicability.

(a) ‘General’: This Subpart applies to all HDDV motor vehicles except for:

(1) authorized emergency vehicles;

(2) vehicles as defined in sections 401.7(E)(2), (F)(a) and 401.13 of the VTL;

(3) agricultural trucks;

(4) farm type tractors and all terrain type vehicles used exclusively for agriculture or mowing purposes, or for snow plowing, other than for hire, farm equipment, including self-propelled machines used exclusively in growing, harvesting or handling farm produce, and self-propelled caterpillar or crawler-type equipment while being operated on the contract site, and timber harvesting equipment such as harvesters, wood chippers, forwarders, log skidders, and other processing equipment used exclusively off highway for timber harvesting and logging purposes;

(5) marine vessels;

(6) hybrid electric vehicles using diesel engines as a power source; and

(7) military designated vehicles, meaning any motor vehicle owned by the U.S. Department of Defense and/or the U.S. military services and used in combat, combat support, combat service support, tactical or relief operations, or for training for such purposes.

(b) 'Annual NYCMA HDDV Emissions Inspection Program'.

Beginning June 1, 1999, all HDDVs registered or required to be registered in the NYCMA, except for buses, municipally owned vehicles, and those vehicles exempted in subdivision (a) of this section shall undergo and annually pass a diesel emissions (smoke opacity) inspection [test] performed by a certified inspector in accordance with this Subpart.

Beginning June 1, 2000 all HDDVs registered or required to be registered in the NYCMA, except those vehicles exempted in subdivision (a) of this section, shall undergo and annually pass a diesel emissions inspection (smoke opacity) [test] performed by a certified inspector in accordance with this Subpart and 15 NYCRR Part 79.

(1) Annual NYCMA NYSDOT HDDV Bus Inspection Program.

(i) a[A]ll HDDVs registered or required to be registered in the NYCMA [that are]subject to the requirements of 17 NYCRR Part 720 or 721 shall annually undergo and pass a diesel emissions

inspection (smoke opacity) [test] performed by a NYSDOT certified inspector in accordance with this Subpart using opacity smokemeter(s) certified by the Department at the time of a periodic NYSDOT bus safety inspection.

(ii) a[A]ll buses that are HDDVs registered or required to be registered in the NYCMA that are not included in subparagraph (i) of this paragraph, or are owned by the state or a municipality that is a fleet self inspection facility shall annually undergo and pass a diesel emissions inspection (smoke opacity)[test] performed by a certified inspector and such test shall follow the procedures and equipment set forth in this Subpart using opacity smokemeter(s) certified by the Department.

(2) Annual NYCMA [NYSDMV] HDDV Inspection[s]/Maintenance (I/M) Program. All HDDVs registered or required to be registered in the NYCMA that are subject to the requirements of section 301 of the VTL shall annually undergo and pass a diesel emissions inspection (smoke opacity)[test] performed at an ODEIS and by a NYSDMV certified inspector in accordance with this Subpart and 15 NYCRR Part 79 at the time of a periodic NYSDMV safety inspection on a HDDV.

Following 30 days public notice by the Commissioner, but no sooner than December 1,2022, the annual NYCMA-HDDV I/M Program shall require diesel emissions inspections (smoke opacity) and safety inspections to be completed on CVIS certified by NYSDEC and NYSDMV.

(c) ‘Roadside HDDV E[e]missions I[i]nspection’.

(1) Beginning June 1, 1999, all HDDVs operating in New York State except for buses, municipally owned vehicles, and those vehicles exempted in subdivision (a) of this section along public highways and quasi-public locations are subject to roadside or random inspection.

(2) Beginning June 1, 2000 all HDDVs operating in New York State, except those vehicles exempted in subdivision (a) of this section, along public highways and quasi-public locations are subject to roadside or random inspection. Roadside emissions inspections shall follow the procedures and equipment set forth in this Subpart using opacity smokemeter(s) certified by the Department.

Section 217-5.3 Heavy duty diesel emission standards.

(a) All HDDVs subject to the requirements of this Subpart and that operate in New York State, except for those exempted in section 217-5.2(a) of this Subpart, shall be subject to the smoke opacity standards set forth in Table 1 as follows:

Table 1

Smoke Opacity Standards for Heavy Duty Diesel-Fueled Vehicles

<i>Engine model year</i>	<i>Maximum opacity (percent)</i>
1973 and older	70
1974 - 1990	55
1991 and newer	40

(b) Following 30 days public notice by the Commissioner, but no sooner than April 1, 2023, all ODEIS CVIS certified by NYSDEC and NYSDMV shall be subject to the revised smoke opacity standards set forth in Table 2.

Table 2

Revised Smoke Opacity Standards for Heavy Duty Diesel-Fueled Vehicles

<u><i>Engine model year</i></u>	<u><i>Maximum opacity (percent)</i></u>
<u>1990 and older</u>	<u>40</u>
<u>1991-1996</u>	<u>30</u>
<u>1997 and newer</u>	<u>20</u>

Opacity smokemeters certified by DEC, including fleet self inspection facilities that are not subject to ODEIS CVIS requirements, shall be subject to the revised smoke opacity standards set forth in Table 2, no later than the revised cutpoint revision schedule established for ODEIS CVIS.

Section 217-5.4 Vehicle O[o]wner/O[o]perator R[r]equirements.

(a) No person who owns, operates, registers, leases, or rents a HDDV subject to the requirements of this Subpart shall operate said vehicle, or allow or permit it to be operated in the State, if the vehicle:

- (1) emits smoke in the exhaust emissions with an opacity which exceeds the smoke opacity standards specified in Table 1 or 2 of this Subpart pursuant to the effective dates established in section 217-5.2 of this

Subpart, when tested in accordance with procedures set forth in section 217-5.5 of this Subpart;

(2) does not have functioning emission control devices[apparatus] as required by specifications of the manufacturer;

(3) has any component, element of design, or emission control device[apparatus], installed or required to be installed on the vehicle or diesel engine which:

(i) is not functioning and will result in the emission test set forth in section 217-5.5 of this Subpart to be discontinued; or

(ii) has been disconnected, detached, deactivated, tampered with or in any other way rendered inoperable or less effective than designed by the original equipment or vehicle or engine manufacturer, including any action which will result in the emission test set forth in section 217-5.5 of this Subpart to be discontinued.

(b) Except as provided in subdivision 217-5.2(a) of this Subpart, within 12 months of the effective dates listed in section 217-5.2 of this Subpart, and annually thereafter, no person who owns, operates, leases or rents a HDDV registered or required to be registered in the NYCMA shall permit the operation of that HDDV unless the HDDV has had its exhaust emissions tested by a certified inspector within the previous 12 months in accordance with the procedures set forth in section 217-5.5 of this Subpart and the exhaust emission opacity of

the vehicle does not exceed the applicable standards specified in Table 1 or 2 of this Subpart during the required emission test.

Section 217-5.5 Emissions inspection procedures and test methods.

(a) 'General instructions for HDDV emissions tests': (1) Equipment to be used in conducting a smoke opacity test on an HDDV in accordance with this subdivision shall satisfy all specifications and standards for a smokemeter as set forth in this Subpart, and be a model certified by NYSDEC pursuant to section 217-5.6 of this Subpart.

(2) Inspectors performing diesel emissions tests of exhaust emissions and inspections of diesel exhaust emission equipment shall be certified by NYSDMV, NYSDOT or NYSDEC to perform HDDV emission inspections and testing, after successfully completing a training program approved by such agencies. Such certified inspectors shall follow SAE J1667 test procedures and, when specified, other procedures included in this Subpart. No ODEIS or certified inspector may issue an emission certificate of inspection for a HDDV, unless that HDDV meets the requirements of this Subpart.

(3) The general procedures for a valid HDDV emissions inspection (smoke opacity) [test] conducted by a certified inspector pursuant to the provisions of this Subpart in accordance with SAE J1667 are as follows:

(i) p[P]rior to testing, verify that the certified smokemeter and associated and/or required auxiliary test equipment is calibrated in accordance with the requirements of the manufacturer.

(ii) d[D]etermine that the engine is at operating temperature as specified in SAE J1667.

(iii) e[E]xamine the vehicle exhaust system for integrity. If a detectable leak exists determine that the HDDV is in violation of paragraph 217-5.4(a)(3) of this Subpart. Discontinue the HDDV emissions inspection (smoke opacity) of any vehicle with a detectable leak. Do not resume testing until the leak(s) is repaired.

(iv) p[P]erform the smoke testing on at least one exhaust tailpipe in accordance with SAE J1667.

(v) e[E]nsure that the ambient temperature at the test location is within the conditions range specified in SAE J1667.

(vi) b[B]efore initiating the test, determine that all accessories and any engine braking devices are turned off.

(vii) d[D]etermine that the engine speed governor is in proper operating condition by:

(a) inquiring of the HDDV operator whether the governor is in proper operating condition; or

(b) if the determination cannot be made, instruct the operator that, with the transmission in either neutral (with the clutch disengaged if so equipped) or in park, gradually increase the engine speed. If the engine speed increases uncontrollably, instruct the operator to immediately release the accelerator pedal and the fuel supply to the engine. Discontinue emission testing of any vehicle with dysfunctional or out-of-specification engine speed governors. Do not resume testing unless and until

speed governor repairs are made. Determine that the HDDV is in violation of paragraph 217-5.4(a)(3) of this Subpart if the necessary corrective action to repair the engine speed governor is not taken.

(viii) i[If inspecting a vehicle which was either equipped by the vehicle or engine manufacturer or subsequently [was] retrofitted in accordance with State or Federal law or regulation with a [catalytic converter], diesel particulate filter[trap or trap oxidizer], diesel oxidation catalyst, selective catalytic reduction system, exhaust gas recirculation (EGR), or any other emission control[exhaust after-treatment] device, the certified inspector shall inspect the exhaust system for the presence of the device and for its physical integrity. Discontinue testing of any HDDV [motor vehicle] which has been tampered with, exhibits any missing exhaust after-treatment device or has perforating rust, crack, hole, tear, or other such physical defect in the device. Do not resume testing [unless and] until the defect(s) are repaired. Determine that the HDDV is in violation of section 217-5.4 of this Subpart if corrective action to repair the HDDV is not taken.

(ix) i[If at any time before or during the inspection of a HDDV, continuous blue smoke is observed in the exhaust emissions for more than three seconds, discontinue the testing and determine that the vehicle is in violation of section 217-5.4 of this Subpart.

(x) a[At the conclusion of the diesel emissions inspection (smoke opacity) [emissions inspection of a HDDV] by a certified inspector, print a copy of [the]a test report produced by the CVIS, if applicable, or the smokemeter certified in accordance with subdivision 217-5.6(a) of this Subpart and provide the report to the vehicle owner or operator.

(4) Vehicles found in violation of this Subpart are not subject to impoundment or otherwise prevented from engaging in commerce as a result of this Subpart.

(b) ‘Annual NYCMA HDDV Inspection/Maintenance emissions inspections’.

(1) NYSDMV c[C]ertified motor vehicle inspectors performing annual HDDV emissions inspections shall:

(i) only affix a valid emission certificate of inspection to a HDDV that has met the diesel emission inspection (smoke opacity) [and inspection] requirements set forth in this Subpart;

(ii) issue test result to the HDDV owner/operator for each test performed; and

(iii) only issue test result to the owner/operator for the specific vehicle that has been tested.

(2) Licensed[Certified] NYSDMV ODEIS and/or fleet self inspection facilities shall:

(i) be licensed/registered by the appropriate New York State agency to perform HDDV diesel emissions inspections [testing] (smoke opacity)[and inspection];

(ii) conspicuously display licenses required under subparagraph 217-5.5(b)(2)(i) of this Subpart;

(iii) maintain test equipment in accordance with this section, manufacturer's specification, and SAE J1667;

(iv) maintain a current copy of SAE J1667 at facility or be accessible through a CVIS, if applicable;

(v) not pass any HDDV which does not meet the requirements set forth in section 217-5.4 of this Subpart;

(vi) not test or allow to test the exhaust emission on any HDDV which has been disqualified from testing for any reason until the reason for disqualification has been corrected;

(vii) issue inspection [test] results to the HDDV owner/operator for each test performed;

(viii) not affix or allow anyone to affix a valid certificate of inspection to a HDDV unless it has met the emission and inspection requirements set forth in this section;

(ix) not issue or allow the issuance of test results to an owner/operator unless those results are measured from the vehicle tested; and

(x) maintain logs in accordance with a prescribed format.

(3) For the purpose of this subdivision the NYSDEC, [and] NYSDMV, or an authorized representative, has the right of entry to any premises owned, operated, used, leased, or rented by ODEIS or[and a] fleet self inspection facility to test and inspect HDDVs for the purpose of inspecting and auditing facilities, records, and test equipment.

(c) 'Roadside or random HDDV emissions inspections'. Certified inspectors performing roadside diesel emissions inspections shall:

(1) be specifically authorized to perform such inspections at a public or quasi-public location designated by the New York State Commissioner of Transportation with the concurrence of NYSDEC and, where appropriate, the New York State Thruway Authority in accordance with the requirements set forth in this section;

(2) direct the operator of the vehicles to be inspected to move the vehicle to a safe location, if appropriate;

(3) issue the inspection[test] result to the HDDV operator for each test performed; and

(4) only issue the inspection[test] result to the HDDV operator for the specific vehicle that has been tested.

(5) use an opacity smokemeter certified by NYSDEC

Section 217-5.6 Test equipment specifications and test procedures.

All test equipment and procedures shall, at minimum, comply with SAE J1667 test procedures unless

otherwise noted herein.

(a) A smokemeter used to measure smoke opacity in the exhaust emissions of a HDDV pursuant to this

Subpart shall:

(1) be a manufacturer's model certified by NYSDEC as having satisfactorily demonstrated an acceptable ability to comply with the recommended test standard contained in SAE J1667;

(2) at a minimum, have the ability to measure, where appropriate, and print [out] the following:

(i) the smoke opacity value for each snap idle test in sequence;

(ii) the final test result, in percent opacity;

(iii) the engine oil temperature;

(iv) the engine RPM at high idle for each snap;

(v) the inspection date, time and location;

(vi) the name and certification number of the certified inspector;

(vii) the exhaust pipe diameter or engine horsepower;

(viii) the applicable smoke opacity standard;

(ix) pass or fail of test results compared to [appropriate]applicable smoke opacity standard;

(x) [the HDDV registrant or operator name and] license plate number and state of issuance;

(xi) the vehicle identification number (VIN); and

(xii) the engine model year.

(3) The smokemeter shall be capable of:

(i) retaining data pertaining to the previous 40 tests [and outputting data via an RS-232 connector];

and

(ii) multiple printouts of parameters specified in paragraph (2) of this subdivision.

(b) The testing procedures for the snap acceleration smoke opacity test, required in accordance to this subdivision, shall be performed on applicable HDDVs as follows:

(1) Where applicable, d[D]etermine the engine horsepower from the engine identification plate or engine serial number. Refer to Table 2 of this Subpart and input the nominal stack size into the smokemeter. If the engine identification plate is missing, inaccessible or illegible, measure the outside diameter of the exhaust pipe extending from the exhaust manifold with a precision caliper or equivalent gauge, rounding to the nearest inch.

(2) During an annual emissions inspection [only], performed at an ODEIS:

(i) determine RPM in accordance with procedures established by the CVIS, affix the RPM sensor to the engine of the vehicle according to the instructions of the smokemeter manufacturer;

(ii) determine oil temperature in accordance with procedures established by the CVIS or DEC certified opacity smokemeter; or insert the engine oil temperature sensor into the oil dipstick tube and into the crankcase oil according to the instructions of the smokemeter manufacturer; and

(iii) connect the engine RPM and oil temperature sensors to the smokemeter according to the instructions of the smokemeter manufacturer.

(3) Affix the smokemeter in accordance with procedures established by the CVIS; or according to the instructions of the manufacturer to the end of the exhaust pipe of the vehicle. For full-flow smokemeters, ensure that the final two feet and the exit of exhaust pipe is straight, with an internal diameter not to exceed five inches. Appropriate exhaust pipe adapters shall be used as necessary to comply with these specifications. Do not use full-flow smokemeters on vehicles with underbody exhaust pipes which direct the exhaust flow to the ground unless the exhaust gases are redirected away from the ground by the appropriate exhaust pipe adaptor mentioned above.

(4) Ensure that the vehicle is restrained to prevent the vehicle from moving during the test.

(5) The diesel emission inspection (smoke opacity) may not proceed until the [Ensure that the] smokemeter is warmed up and calibrated according to the CVIS or in accordance with the instructions of the manufacturer. Initiate the test sequence on the smokemeter.

(6) The CVIS or DEC certified smokemeter shall determine the appropriate smoke opacity pass/fail standards set forth in either Table 1 or 2 of the Subpart. Prior to the CVIS requirement, the certified inspector shall s[S]elect the appropriate smoke opacity pass/fail standards, set forth at Table 1 or 2 of this Subpart, based upon the engine model year. If using a full-flow smokemeter, [enter] the certified inspector may be requested to enter engine horsepower and stack diameter as measured from the vehicle exhaust stack.

(7) If using a smokemeter without horsepower input, the certified inspector will select the appropriate stack size from Table 3 [2] of this Subpart, based upon the engine horsepower of the vehicle.

(8) With each prompt from the CVIS or NYSDEC certified smokemeter to accelerate engine, ensure the accelerator pedal is rapidly depressed to the floor and held there until prompted by the CVIS or smokemeter to release the pedal. For those vehicles with electronic engine controls, engine diagnostic equipment should be used to allow acceleration to governed speed.

(9) Repeat procedures described in paragraph (8) of this subdivision at least four more times. This shall include, at a minimum, two preliminary snap accelerations to remove loose soot from the exhaust system for a stabilized reading, and a minimum of three snap accelerations for the official test, the average of which shall constitute the final test result.

(10) The CVIS or the NYSDEC certified smokemeter shall make the pass/fail determination which shall be based upon three valid smoke opacity test results averaged arithmetically and compared to the pass/fail standards appropriate for the engine model year.

(11) When applicable, i[I]ssue a printout including the items listed in paragraph (a)(2) of this section.

Table 3[2]

Engine Horsepower Rating vs. Nominal Stack Size	
<i>Manufacturer's rated horsepower</i>	<i>Nominal stack size in inches</i>
Less than 101	2
101-200	3

201-300	4
301 and over	5

(c) a[A] smokemeter used to measure smoke opacity in the exhaust emissions of a HDDV during a roadside emissions or NYSDOT bus inspection does not need to include the following[specifications]:

(1) an engine oil temperature sensor; and

(2) an engine RPM sensor.

Section 217-5.7 Enforcement and penalties.

(a) Enforcement of this Subpart may only be performed by authorized state or municipal law enforcement officials, and certified inspectors authorized by NYSDOT, NYSDMV, or NYSDEC to inspect and test HDDVs in accordance with this Subpart. Additionally, roadside or random HDDV emissions inspections will be performed at a public or quasi-public location designated by the New York State Commissioner of Transportation with the concurrence of NYSDEC and, where appropriate, the New York State Thruway Authority in accordance with the requirements set forth in this section.

(b) The following penalties will apply to the owner/operator of any HDDV found in violation of any provision of section 217-5.4(a) of the Subpart:

(1) first violation: \$700.00;

(2) second and subsequent violations: \$1,300.00;

(3) the penalties will be reduced to \$150.00 for the first violation and \$500.00 for the second and subsequent violations of section 217-5.4(a) of the Subpart provided:

(i) the violation is corrected and the HDDV[vehicle] is [retested and]reinspected and passes a diesel emissions inspection (opacity test) at a NYSDMV ODEIS no later than 30 days after the issuance of the summons or appearance ticket; and

(ii) acceptable proof of repair or adjustment is submitted to the court or administrative tribunal on or before the return date of the summons or appearance ticket in the following form:

(‘a’) [a] NYSDEC / NYSDMV form VS-1080R, [entitled “[] Proof of HDDV Repair, [”] certified with signatures by [both] the certified motor vehicle inspector completing the diesel emissions inspection (opacity test) and a representative of the repair facility and reinspection station; and

(‘b’) [an itemized bill of repairs from the repair facility.] copies of all repair invoices and part receipts for associated repairs occurring after the date of violation; and

(‘c’) a vehicle inspection receipt from a CVIS, or a DEC certified smokemeter printout, indicating a passing diesel emissions inspection (smoke opacity).

(c) The following penalties will apply to the owner/operator of any HDDV found in violation of any provision of subdivision 217-5.4(b) of the Subpart:

(1) first violation: \$700.00;.

(2) second and subsequent violations: \$1,300.00; and.

(3) the penalties will be reduced to \$350.00 for the first violation and \$750.00 for the second and subsequent violations of section 217-5.4(b) of this Subpart provided:

(i) the vehicle deemed to be in violation bears an annual diesel emissions inspection certificate which was issued by a certified motor vehicle inspector within 30 days after the issuance of the summons or appearance ticket; and

(ii) proof of inspection is provided to the court or administrative tribunal on or before the return date of the summons or appearance ticket.

(d) The penalties for a first violation described in subdivisions (b) and (c) of this section shall not apply to school buses and municipally owned vehicles, provided:

(1) the violation has been[is] corrected and the HDDV subsequently [vehicle] passes a[is retested and reinspected] diesel emissions inspection (smoke opacity) at a NYSDMV ODEIS no later than 30 days after the issuance of the summons or appearance ticket; and

(2) acceptable proof of repair or adjustment is submitted to the court or administrative tribunal on or before the return date of the summons or appearance ticket in the following form

(i) [a form (]NYSDEC/NYS DMV form[)] VS-1080R, [entitled “[Proof of HDDV Repair]”] certified with a signature by the certified motor vehicle inspector completing the diesel emissions inspection (opacity test) and a representative of the repair facility[both the repair facility and reinspection station];
[and]

(ii) [itemized bill of repairs from the repair facility.] copies of all repair invoices and part receipts for associated repairs occurring after the date of violation; and

(iii) a vehicle inspection receipt from a CVIS, or smokemeter printout, indicating a passing diesel emissions inspection (smoke opacity).

(e) For the purpose of enforcing or administering this section the department, or an authorized representative, has the right of entry to any premises owned, operated, used, leased or rented by a[the] ODEIS or[and] a fleet self inspection facility to test and inspect HDDV for the purpose of inspecting and auditing facilities records, test equipment and testing procedures pursuant to Environmental Conservation Law, article 71.[:] T[t]he following penalties shall apply to any certified inspector and/or ODEIS [licensed/registered HDDV emissions inspection facility] found in violation of the testing procedures and requirements mandated in this Subpart:

(1) first violation: \$500.00; and

(2) second and subsequent violations: not less than \$1,000.00 nor more than \$3,000.00, and shall be grounds to revoke the HDDV emission inspection and testing certification and/or license/registration issued by an authorized agency of New York State.

Section 217-5.8 HDDV Hardship W[w]aiver.

(a) If a HDDV has been repaired after initially failing a diesel emission inspection (smoke opacity) to meet the smoke opacity standards set forth in either Table 1 or 2 of this Subpart as required in section 217-5.3 of this Subpart and the HDDV continues to fail[s] to meet the standards set forth in either Table 1 or 2 of this Subpart upon [after] reinspection[retesting], a hardship waiver may be granted by NYSDEC or through a CVIS if all of the following conditions are met:

(1) the HDDV passed the applicable safety inspection.

(2) repairs must address the reason for the diesel emission inspection (smoke opacity) failure and follow acknowledged industry standards for diagnosis and repair.

(3[1]) all components or elements of design including, but not limited to, [all] emission control [apparatus] and speed governing devices required to be installed on the vehicle or diesel engine [in order] for that engine to meet its engine emission certificate of conformance are properly installed. [The c]Costs associated with the [for]replacement or repair of missing emission control devices[apparatus] or governing devices, safety items, emissions tampering, or warranty repairs may not be applied[does not count] towards the HDDV hardship waiver repair cost[; and].

(4) a NYSDMV official inspection station (fleet) may only apply the cost of parts towards a HDDV hardship waiver.

(5[2]) repairs and adjustments have been properly made and documented and the cost equals or exceeds the applicable value contained in Table 4[3] of this Subpart based on [for]the applicable[proper] GVWR category. The HDDV hardship waiver cost amounts contained in Table 4[3] of this Subpart may be adjusted by [the] NYSDEC to account for increases in the Consumer Price Index (CPI).

TABLE 4 [3]

Minimum <u>HDDV</u> Hardship Waiver Repair Costs by GVWR [of HDDV]	
<i>Gross <u>V</u>[v]ehicle <u>W</u>[w]eight <u>R</u>[r]ating (GVWR in lbs)</i>	<i>Minimum <u>R</u>[r]epair <u>C</u>[c]ost for <u>H</u>[h]ardship <u>W</u>[w]aiver</i>
8,501 to 18,000	\$1,000
18,001 to 26,000	\$2,000
Over 26,000	\$4,000

(6) a HDDV hardship waiver must be documented on a completed Diesel Emission Inspection Certification and Waiver form (NYSDEC/NYS DMV VS-1079DE) including signatures from the certified motor vehicle inspector completing the diesel emissions inspection (opacity test) and the customer’s representative. The station granting the waiver must maintain copies of all applicable invoices and repairs for diagnostic and repair work completed to qualify the HDDV for the emissions waiver for 2 years for review by NYSDEC or NYSDMV, regardless of who performed the work. The ODEIS must keep all vehicle inspection receipts applicable to the HDDV hardship waiver. All documents must be kept at the ODEIS.

(b)The commissioner or a commissioner’s representative reserves the right to inspect a vehicle and/or review proof of repair information prior to, [before] or after, a [the] HDDV hardship waiver is issued to verify that [the]qualifying repairs have been made and associated repair costs have been properly documented.

6 NYCRR Part 200, General Provisions

Express Terms

(Sections 200.1 through 200.8 and 200.10 remain unchanged)

Section 200.9, Table 1 is amended to read as follows:

217-5.1(aj[i])	SAE J1667 Surface Vehicle Recommended Practice (Snap-Acceleration Smoke Test Procedure for Heavy-Duty Diesel Powered Vehicles) (<u>2018-02</u> [February 1996])	*****
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6 NYCRR Part 217, Motor Vehicle Emissions

6 NYCRR Section 200, General Provisions

Revised Regulatory Impact Statement

Summary

I. INTRODUCTION

The New York State Department of Environmental Conservation (“DEC” or “the Department”) is proposing to amend Title 6 of the Codes, Rules and Regulations of the State of New York (“6 NYCRR”), Subpart 217-5, Heavy Duty Inspection and Maintenance Program, and Subsection 200.9, Referenced Material, to reflect revised Heavy-Duty Diesel Vehicle Inspection and Maintenance Program (“HDDV I/M”) requirements. The existing HDDV I/M has required annual smoke opacity emission testing for applicable HDDVs registered within the downstate New York Metropolitan Area (“NYMA”) since 1999. NYMA geographically includes Bronx, Kings, New York, Nassau, Queens, Richmond, Rockland, Suffolk, and Westchester counties. DMV regulation under 15 NYCRR Section 79.9(d)(4) requires that an official diesel emission inspection station (“ODEIS”) must use the appropriate diesel emission test equipment approved by DEC. DEC has certified various opacity smokemeters over time and maintains a list of approved smoke meters on the DEC website.¹

The proposed HDDV I/M requirements for ODEIS would be implemented through the next statewide New York Vehicle Inspection Program (“NYVIP3”) tentatively scheduled to begin later in 2023. The NYVIP3 start date for HDDV I/M testing is contingent upon the NYVIP3 contractor’s ability to develop, test, and install opacity testing equipment that is certified by DEC and the New York State Department of Motor Vehicles (“DMV”). NYVIP provides a communication network between licensed DMV inspection stations and a contractor procured by DMV. The NYVIP contractor also provides emissions testing equipment approved by DEC and DMV. NYVIP3 is replacing the previous iteration of I/M testing, NYVIP2. NYVIP3 will

¹ <https://www.dec.ny.gov/chemical/8391.html>

continue to provide statewide onboard diagnostic testing for light-duty vehicles but will also integrate smoke opacity testing for the downstate HDDV I/M program.

The NYVIP3 contractor, Opus Inspection, was chosen through a DMV Request for Proposal (“RFP”) procurement completed in April 2020. With the start of NYVIP3, the current DEC approved opacity meters² will become obsolete at ODEIS for I/M testing. ODEIS were informed of the NYVIP3 opacity equipment requirement prior to, and since, the NYVIP3 procurement.

New York State Environmental Conservation Law (“ECL”) §19-0320 requires the Department to coordinate smoke opacity limits with other states located within the ozone transport region (“OTR”). DEC, under section 217-5.3, will have the capacity to implement revised opacity cutpoints after the HDDV I/M program is fully transitioned into NYVIP3.

The proposed regulation would not require certain New York State governmental entities to purchase NYVIP3 equipment for HDDV I/M opacity testing. These entities are the Metropolitan Transportation Authority (“MTA”), which is exempt under 15 NYCRR Section 79.2(d)(4); the NYS Department of Transportation (“NYSDOT”) for school bus inspections completed under 217-5.2(b)(1)(i); and DEC for roadside inspections under 217-5.2(c). These government entities are not licensed by DMV as ODEIS, nor do they authorize NYS Heavy Duty Diesel safety/emission stickers. Any HDDV smoke opacity inspections completed by MTA, NYSDOT, and DEC after the start of NYVIP3 must be completed on DEC certified opacity meters and subject to same opacity cutpoints as ODEIS. The MTA and NYSDOT are also subject to DEC station and equipment audits.

The proposed revisions to Subpart 217-5 would update existing DEC heavy-duty vehicle inspection procedures for DMV-licensed ODEIS and would subsequently revise the structure and stringency of HDDV smoke opacity I/M pass/fail criteria (i.e., “cutpoints”). The proposal would update ODEIS equipment requirements and clarify emission control device visual tampering

² <https://www.dec.ny.gov/chemical/8391.html>

checks under section 217-5.5; complete minor revisions to test procedures under section 217-5.6; and update HDDV hardship waiver procedures under section 217-5.8.

II. STATUTORY AUTHORITY

DEC statutory authority to revise Subpart 217-5 includes: Environmental Conservation Law, Sections 1-0101, 1-0303, 3-0301, 19-0103, 19-0105, 19-0107, 19-0301, 19-0303, 19-0305, 19-0320, 71-2103, 71-2105; Vehicle and Traffic Law, Sections 301-b and 375.28.

III. NEEDS AND BENEFITS

The existing HDDV I/M program has not been revised since its implementation in 1999. The current program has significant limitations that will be improved upon with an integrated NYVIP3 opacity meter for DMV licensed ODEIS.

1. The current HDDV I/M certified opacity meters are not connected to a vehicle inspection database (“VID”). ODEIS are currently required to document completed HDDV I/M inspections using form, VS-1074D³. The official HDDV I/M inspection record is subject to inspection, but is not being transmitted to DMV or DEC. The Department cannot effectively audit, enforce, or complete meaningful program evaluation of the current HDDV I/M program. NYVIP3 will include the electronic reporting of NYS inspection results through a contractor run VID.
2. The Department completes HDDV audits at licensed ODEIS. These audits include a calibration check of the ODEIS opacity smokemeters. The current smoke opacity units do not provide an electronic calibration file. As such, DEC currently completes on-site ODEIS audits with no prior information available before the station visit. NYVIP3 will provide remote access to ODEIS calibration files which can be used by DEC to plan on-site audits.
3. The HDDV emission/safety sticker inventory cannot be actively monitored. The

³ <https://dmv.ny.gov/forms/vs1074sd.pdf>

Departments have encountered fraudulent testing practices, including the inappropriate use of NYS heavy-duty safety/emissions stickers. NYVIP3 will include NYS safety/emissions sticker inventory controls.

4. Most of the opacity smokemeters used by ODEIS are no longer covered by a manufacturer warranty and equipment maintenance and repair is the responsibility of the ODEIS. NYVIP3 provide equipment warranty and repair service during the term of the NYVIP3 contract.
5. The current opacity meters do not have the functionality for the Department to complete program-wide opacity cutpoint revisions. NYVIP3 will allow the Department to make cutpoint revisions to all ODEIS HDDV equipment remotely through the contractor's VID.

With an integrated NYVIP3 opacity meter, the Departments will have improved monitoring of HDDV I/M inspections as electronic inspection records will be provided in the same manner as the current light-duty NYVIP2 program. The NYVIP3 integrated opacity meter will also generate an electronic calibration file. The Departments will be capable of querying data allowing for more focused equipment auditing and potentially for regulatory compliance. The NYVIP3 integrated opacity meter will be capable of "locking-out" malfunctioning equipment to require warranty service, when necessary. The NYVIP3 contractor will be capable of completing the proposed cutpoint revisions through the VID. The Department could complete program evaluation efforts based on the availability of required reports.

ODEIS will have the benefit of having new smokemeter equipment with a contractor provided warranty and repair services during the term of NYVIP3. NYVIP3 also provides the State with the option for completing future medium and heavy-duty onboard diagnostic testing.

Diesel Exhaust

New York State has a need to reduce exhaust emissions from on-road heavy-duty diesel vehicles. Of note, diesel exhaust contains particulate matter ("PM") and oxides of nitrogen ("NOx"). NOx is a primary precursor to the formation of ground-level ozone and in the secondary formation of fine particulate matter. The New York-Northern New Jersey-Long Island

ozone nonattainment area, which includes NYMA, was proposed to be reclassified from a serious to a severe nonattainment status for the 2008 ozone standards on April 13, 2022.

With the implementation of NYVIP3 and the proposed revisions to Subpart 217-5, the Department anticipates a reduction in particulate matter emissions from HDDVs, and consequently anticipates an associated health benefit.

NYVIP3 also includes the option to potentially transition to statewide HDDV OBD I/M testing for applicable OBD-equipped HDDVs. While federal I/M regulation does require light-duty OBD I/M in certain areas of the country (including New York State), EPA does not require HDDV I/M. The Department is aware that the State of California is considering requiring HDDV OBD I/M⁴.

COSTS

ODEIS facilities were notified of the revised NYVIP3 equipment requirement prior to the NYVIP3 procurement. NYVIP2 stations were sent station messages noting the integrated opacity meter requirement in January 2020, March 2021, December 2021, and March 2022. The DEC website notes the proposed HDDV I/M transition to NYVIP3. DAR anticipates that some of the current ODEIS will make the business decision to discontinue completing HDDV I/M inspections with NYVIP3. The Department estimates that there are 800-1,000 smoke opacity meters currently in use, with 500-700 opacity meters at ODEIS. The remaining units are used by state government entities not regulated as ODEIS.

Pursuant to the NYVIP3 contract, the purchase cost of an integrated opacity smoke meter will range from \$4,700 to \$9,000. The higher unit costs represent instances where an additional (e.g., second or more) NYVIP3 integrated opacity meter is purchased at a given ODEIS location. DAR estimates that the majority of privately owned ODEIS will purchase a single NYVIP3 unit

⁴ https://ww2.arb.ca.gov/rulemaking/2021/hdim2021?utm_medium=email&utm_source=govdelivery

with integrated opacity meter with an optional cart for an estimated cost of approximately \$5,700. The Department estimates the initial capital cost for privately owned ODEIS facilities to be \$2.85 million (500 ODEIS times an average cost of \$5,700 per unit). Each completed HDDV inspection would be subject to an Opus transaction fee of \$0.436. DAR estimates the annual NYVIP3 transaction fees for ODEIS would cost \$75,537 (165,000 HDDVs registered in NYMA; estimated 5% opacity inspection failure rate; \$0.436/transaction). Considering the minimum seven-year duration of NYVIP3, the Department estimates ODEIS costs of \$3.4 million for NYVIP3 equipment purchase and associated transaction fees.

Opus Inspection is developing a more “rugged” tablet based HDDV I/M equipment option for another OTR state at an approximate cost of \$10,000. This equipment option would be more portable than the offered NYVIP3 HDDV workstation but is not part of the NYVIP3 contract. If developed by Opus and approved for use by the Department and DMV, it may be a purchase option for some ODEIS and for those NYS government entities not regulated as ODEIS. Any NYVIP3 equipment option would be subject to the Department’s and DMV’s acceptance testing. MTA, NYSDOT, and DEC would have the option of purchasing this unit. The tablet option would have an associated NYVIP3 equipment warranty and would provide enhanced data reporting compared to the existing smokemeters. Should all current government entities opt to replace their existing opacity smokemeters for the rugged NYVIP3 alternative, the Department estimates \$2.7 million in equipment costs and annual transaction fee costs of \$12,000.

IV. LOCAL GOVERNMENT MANDATES

The proposed regulations do not impose a local government mandate pursuant to Executive Order 17. No additional paperwork or staffing requirements are expected. Local governments have no additional compliance obligations as compared to other subject entities.

V. PAPERWORK

The proposed revisions will not increase paperwork requirements for HDDV owner/operators, opacity equipment manufacturers, or ODEIS stations. The Department anticipates that some paperwork associated with the existing HDDV I/M at ODEIS will be

reduced through NYVIP3 electronic reporting. Some existing NYS HDDV I/M forms will be revised.

VI. DUPLICATION

There are no relevant state or federal rules or other requirements that would duplicate, overlap, or conflict with the proposed Subpart 217-5 rulemaking.

VII. ALTERNATIVES

The NYVIP3 program was developed through a competitive RFP procurement. The Department proposes to update its regulations to reflect revised NYVIP3 program requirements. There are currently no other viable alternatives to the proposed regulation.

The NYVIP3 contract does include the option for a future transition to include medium- and heavy-duty OBD as the required I/M emissions test type for applicable OBD-equipped heavy-duty vehicles. NYVIP3 would still require smoke opacity testing for the older non-OBD equipped HDDVs. The Department estimates that currently less than 50% of the NYMA-registered heavy-duty vehicles are OBD equipped. The Department, in consultation with DMV, will evaluate the feasibility of future OBD I/M testing for medium- and heavy-duty vehicles after considering the test procedures and operational success of HDDV OBD I/M in other states and/or any new state of federal heavy-duty I/M requirements.

VIII. FEDERAL STANDARDS

There are no equivalent federal heavy-duty diesel I/M performance standards to the revisions proposed for Subpart 217-5.

IX. COMPLIANCE SCHEDULE

Revised HDDV I/M requirements for ODEIS through the NYVIP3 program are scheduled to go into effect later in 2023. Once a full transition to NYVIP3 is complete, DEC will have the

capacity to revise opacity cutpoints to be more stringent.

6 NYCRR Part 217, Motor Vehicle Emissions

6 NYCRR Section 200, General Provisions

Revised Regulatory Impact Statement

I. INTRODUCTION

The New York State Department of Environmental Conservation (“DEC” or “the Department”) is proposing to amend Title 6 of the Codes, Rules and Regulations of the State of New York (“6 NYCRR”), Subpart 217-5, Heavy Duty Inspection and Maintenance Program, and Section 200.9, Referenced Material, to reflect revised Heavy-Duty Diesel Vehicle Inspection and Maintenance Program (“HDDV I/M”) requirements. The existing HDDV I/M has required annual smoke opacity emission testing for applicable HDDVs registered within the downstate New York Metropolitan Area (“NYMA”) since 1999. NYMA geographically includes Bronx, Kings, New York, Nassau, Queens, Richmond, Rockland, Suffolk, and Westchester counties. DMV regulation under 15 NYCRR Section 79.9(d)(4) requires that an official diesel emission inspection station (“ODEIS”) must use the appropriate diesel emission test equipment approved by DEC. DEC has certified various opacity smoke meters over time and maintains a list of approved smoke meters on the DEC website.¹

The proposed HDDV I/M requirements for ODEIS would be implemented through the next statewide New York Vehicle Inspection Program (“NYVIP3”) tentatively scheduled to begin

¹ <https://www.dec.ny.gov/chemical/8391.html>

later in 2023. The NYVIP3 start date for HDDV I/M testing is contingent upon the NYVIP3 contractor's ability to develop, test, and install opacity testing equipment that is certified by DEC and the New York State Department of Motor Vehicles ("DMV").

New York State implemented the initial round of the New York State Vehicle Inspection Program² in 2004 to require statewide onboard diagnostic ("OBD") I/M emissions testing for applicable light-duty vehicles in accordance with federal I/M requirements and New York's State Implementation Plan. NYVIP provides a communication network between licensed DMV inspection stations and a contractor procured by DMV. The NYVIP contractor also provides emissions testing equipment approved by DEC and DMV. NYVIP3 is replacing the previous iteration of I/M testing, NYVIP2. NYVIP3 will continue to provide statewide onboard diagnostic testing for light-duty vehicles but will also integrate smoke opacity testing for the downstate HDDV I/M program.

The NYVIP3 contractor, Opus Inspection, was chosen through a DMV Request for Proposal ("RFP") procurement completed in April 2020. With the start of NYVIP3, the current DEC approved opacity meters³ will become obsolete at ODEIS for I/M testing. ODEIS were informed of the NYVIP3 opacity equipment requirement prior to, and since, the NYVIP3 procurement.

Heavy-duty on-board diagnostic requirements⁴(>14,000 lbs Gross Vehicle Weight Rating ("GVWR")) were phased-in by the United States Environmental Protection Agency ("EPA") and the California Air Resources Board ("CARB") regulations from model years ("MY") 2010 to 2013. OBD has the potential as an I/M alternative to smoke opacity testing. Under the NYVIP3 contract, New York State has the option of implementing HD OBD I/M testing for medium- and heavy-duty vehicles at a future date. Note that not all registered HDDVs are OBD equipped, so there would be a continued need for smoke opacity testing for "older" HDDVs.

² <https://www.epa.gov/sips-ny/epa-approved-statutes-and-regulations-new-york-sip> (Title 6, Part 217)

³ <https://www.dec.ny.gov/chemical/8391.html>

⁴ <https://www.transportpolicy.net/standard/us-on-board-diagnostics/>

New York State Environmental Conservation Law (“ECL”) §19-0320 requires the Department to coordinate smoke opacity limits with other states located within the ozone transport region (“OTR”). DEC, under section 217-5.3, will have the capacity to implement revised opacity cutpoints after the HDDV I/M program is fully transitioned into NYVIP3.

The proposed regulation would not require certain New York State governmental entities to purchase NYVIP3 equipment for HDDV I/M opacity testing. These entities are the Metropolitan Transportation Authority (“MTA”), which is exempt under 15 NYCRR Section 79.2(d)(4); the NYS Department of Transportation (“NYSDOT”) for school bus inspections completed under 217-5.2(b)(1)(i); and DEC for roadside inspections under 217-5.2(c). These government entities are not licensed by DMV as ODEIS, nor do they authorize NYS Heavy Duty Diesel safety/emission stickers. Any HDDV smoke opacity inspections completed by MTA, NYSDOT, and DEC after the start of NYVIP3 must be completed on DEC certified opacity meters and subject to same opacity cutpoints as ODEIS. The MTA and NYSDOT are also subject to DEC station and equipment audits.

The NYVIP3 contractor may offer, as an equipment option, a tablet-based integrated smoke opacity meter. If developed and approved for use, ODEIS and potentially the NYS governmental entities could use this option for smoke opacity testing.

The proposed revisions to Subpart 217-5 would update existing DEC heavy-duty vehicle inspection procedures for DMV-licensed ODEIS and would subsequently revise the structure and stringency of HDDV smoke opacity I/M pass/fail criteria (i.e., “cutpoints”). The proposal would update ODEIS equipment requirements and clarify emission control device visual tampering checks under section 217-5.5; complete minor revisions to test procedures under section 217-5.6; and update HDDV hardship waiver procedures under section 217-5.8.

The proposed revisions to Subpart 217-5 are necessary to reflect NYVIP3 program requirements, improve the enforcement of HDDV I/M, and revise smoke opacity cutpoints.

The proposed revisions would allow the Department to audit ODEIS more effectively and will complement the implementation of the statewide NYVIP3 program.

II. STATUTORY AUTHORITY

DEC statutory authority to revise Subpart 217-5 includes: Environmental Conservation Law, Sections 1-0101, 1-0303, 3-0301, 19-0103, 19-0105, 19-0107, 19-0301, 19-0303, 19-0305, 19-0320, 71-2103, 71-2105; Vehicle and Traffic Law, Sections 301-b and 375.28.

Section 1-0101(1) outlines the policy declaration for the Department regarding the protection of New York State's environment and natural resources including the control of "... air pollution, in order to enhance the health, safety and welfare of the people of the state and their overall economic and social well being." Section 1-0101(3)(e) states, "It shall ... be the policy of the state to foster, promote, create and maintain conditions under which man and nature can thrive in harmony with each other, and achieve social, economic and technological progress for present and future generations ... Providing that care is taken for the air ... and other resources that are shared with the other states of the United States and with Canada in the manner of a good neighbor."

Section 1-0303(19) defines pollution as "... the presence in the environment of conditions and or contaminants in quantities of characteristics which are or may be injurious to human, plant or animal life or to property or which unreasonably interfere with the comfortable enjoyment of life and property throughout such areas of the state as shall be affected thereby."

Section 3-0301(1)(a) provides the commissioner the authority to “Coordinate and develop policies, planning and programs related to the environment of the state and regions thereof.” Pursuant to Section 3-0301(1)(b), the commissioner is charged with promoting and coordinating the management of the air resources of New York including the prevention and abatement of air pollution. Section 3-0301(2)(a) authorizes the commissioner to adopt or amend rules and regulations to carry out the purposes and provisions of the ECL.

Section 19-0103 is a declaration of the State’s policy with specific reference to air pollution, as “It is declared to be the policy of the State of New York to maintain a reasonable degree of purity of the air resources of the State ... and to that end to require the use of all available practical and reasonable methods to prevent and control air pollution in the State of New York.”

Section 19-0105 establishes the purpose of Article 19 of the ECL to “... safeguard the air resources of the State from pollution ... consistent with the policy expressed in Section 19-0103 and in accordance with other provisions of Article 19.”

Section 19-0107(2) defines an air contaminant as “... a dust, fume, gas, mist, odor, smoke, vapor, pollen, noise or any combination thereof.” Section 19-0107(3) defines air pollution as “... the presence in the outdoor atmosphere of one or more air contaminants in quantities, of characteristics and of a duration which are injurious to human, plant or animal life or to property or which unreasonably interfere with the comfortable enjoyment of life and property throughout the state or throughout such areas of the state as shall be affected ...” Section 19-0107(4) defines air contamination as “... the presence in the

outdoor atmosphere of one or more air contaminants which contribute or which are likely to contribute to a condition of air pollution.” The definition of air contamination source found in Section 19-0107(5) specifically includes motor vehicles.

Sections 19-0301(1) states that, “Consistent with the policy of the state as it is declared in section 19-0103, the department shall have power to:

- a. Formulate, adopt and promulgate, amend and repeal codes and rules and regulations for preventing, controlling or prohibiting air pollution in such areas of the state as shall or may be affected by air pollution . . .
- b. Include in any such codes and rules and regulations provisions establishing areas of the state and prescribing for such areas (1) the degree of air pollution or air contamination that may be permitted therein, (2) the extent to which air contaminants may be emitted to the air by any air contamination source ...”

Section 19-0301(2) provides that, “It shall be the duty and responsibility of the department to [p]repare and develop a general comprehensive plan for the control or abatement of existing air pollution and for the control or prevention of any new air pollution recognizing various requirements for different areas of the state.”

Section 19-0303 provides that any air pollution control regulation promulgated by the department may differ in its terms and provisions as between particular types and conditions of air pollution or of air contamination.

Section 19-0305 provides the commissioner with general enforcement power including the

ability to enforce the codes, rules and regulations of the Department.

Section 19-0320(2) provides that the Department, jointly with the Departments of motor vehicles and transportation, develop a program for the inspection of emissions from heavy duty vehicles, which shall consist of an annual inspection program and a roadside program.

Section 19-0320(3) provides that the Department shall adopt rules and regulations establishing test standards, method, and equipment under this section. Sections 19-0320(4) and (5) sets forth penalties for violations of this Section.

Sections 71-2103 and 71-2105 establish the civil and criminal penalty structures for Article 19 violations.

Section 301-b of the NYS Vehicle & Traffic Law provides for concurrent authority between the Department and the DMV to assess penalties in conformance with Section 19-0320 of the NYS ECL. Section 375.28 of the NYS Vehicle & Traffic Law provides the Department with authority to regulate motor vehicle equipment and air pollution control systems.

III. LEGISLATIVE OBJECTIVES

Articles 1 and 3 of the ECL set out the overall State policy goal of reducing air pollution and providing clean, healthy air for the citizens of New York. They provide the Department and Commissioner the general authority to adopt and enforce measures to accomplish those goals, including the regulation of mobile sources of air pollution.

In addition to the general powers and duties of the Department and Commissioner to prevent

and control air pollution found in Articles 1 and 3 of the ECL, Article 19 of the ECL was specifically adopted for the purpose of safeguarding the air resources of New York from pollution. To facilitate this purpose, the Legislature bestowed specific powers and duties on the Department, including the power to formulate, adopt, promulgate, amend, repeal, and enforce regulations for preventing, controlling and prohibiting air pollution. The Department is “expressly authorized to promulgate extensive regulations limiting exhaust emissions from motor vehicles including adoption of California certification standards.” This authority also specifically includes promulgating rules and regulations for preventing, controlling or prohibiting air pollution in such areas of the State that shall or may be affected by air pollution, and provisions establishing areas of the State and prescribing for such areas (1) the degree of air pollution or air contamination that may be permitted therein, and (2) the extent to which air contaminants may be emitted to the air by any air contamination source. In addition, this authority also includes the preparation of a general comprehensive plan or the control or abatement of existing air pollution and for the control or prevention of any new air pollution recognizing various requirements for different areas of the State.

Additionally, ECL §19-0320, requires the Department to “coordinate with appropriate agencies in the states in the northeast ozone transport region and which have proposed or adopted heavy duty emission inspection programs to promote regional consistency in such programs.” The Department’s proposed opacity cutpoints would align with New Jersey’s current HDDV opacity standards/MY brackets, Rhode Island’s proposed HDDV opacity standards/MY brackets, and would closely align with Massachusetts’ current cutpoints, though the MY brackets differ. Table 1 below displays the opacity cutpoints and applicable model year brackets for New York’s current program, the Department’s proposed changes, and current opacity programs in the other OTR states.

Table 1
Opacity Cutpoints/Model Year Bracket Structure
NYS Current, NYS Proposed, and OTR States

State	Opacity (%)						
	1973 and older	1974-1990	1984-1990	1990 and older	1991 and newer	1991-1996	1997 and newer
Connecticut				55	40		

Delaware	n/a	n/a	n/a	n/a	n/a	n/a	n/a
New Hampshire (roadside only)	70	55			40		
Maine				55	40		
Maryland	70	55			40		
Massachusetts			40			30	20
New Jersey				40		30	20
New York PROPOSED				40		30	20
New York Current	70	55			40		
Pennsylvania	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Rhode Island (Under Consideration)				40		30	20
Rhode Island Current				55	40		
Vermont				55	40		

The Commissioner has broad authority to regulate air pollution, including emissions from motor vehicles. This proposed regulation will further the Department’s goal of reducing air pollution from motor vehicles by requiring stricter opacity I/M requirements and related emissions-related requirements for applicable medium- and heavy-duty diesel vehicles registered within NYMA.

IV. NEEDS AND BENEFITS

The existing HDDV I/M program has not been revised since its implementation in 1999. The current program has significant limitations that will be improved upon with an integrated NYVIP3 opacity meter for DMV licensed ODEIS.

1. The current HDDV I/M certified opacity meters are not connected to a vehicle inspection database (“VID”). ODEIS are currently required to document completed HDDV I/M

inspections using form, VS-1074D⁵. The official HDDV I/M inspection record is subject to inspection, but is not being transmitted to DMV or DEC. The Department cannot effectively audit, enforce, or complete meaningful program evaluation of the current HDDV I/M program. NYVIP3 will include the electronic reporting of NYS inspection results through a contractor run VID.

2. The Department completes HDDV audits at licensed ODEIS. These audits include a calibration check of the ODEIS opacity smokemeters. The current smoke opacity units do not provide an electronic calibration file. As such, DEC currently completes on-site ODEIS audits with no prior information available before the station visit. NYVIP3 will provide remote access to ODEIS calibration files which can be used by DEC to plan on-site audits.
3. The HDDV emission/safety sticker inventory cannot be actively monitored. The Departments have encountered fraudulent testing practices, including the inappropriate use of NYS heavy-duty safety/emissions stickers. NYVIP3 will include NYS safety/emissions sticker inventory controls.
4. Most of the opacity smokemeters used by ODEIS are no longer covered by a manufacturer warranty and equipment maintenance and repair is the responsibility of the ODEIS. NYVIP3 provide equipment warranty and repair service during the term of the NYVIP3 contract.
5. The current opacity meters do not have the functionality for the Department to complete program-wide opacity cutpoint revisions. NYVIP3 will allow the Department to make cutpoint revisions to all ODEIS HDDV equipment remotely through the contractor's VID.

The HDDV I/M program has been audited by the New York State Office of the State Comptroller. The final audit report in 2013, *Pollution Testing on Exhaust Emissions from Heavy-Duty Diesel Vehicles Report 2013-F-3*, indicated program deficiencies and efforts made at that time to resolve them.⁶ With an integrated NYVIP3 opacity meter, the Departments will have improved monitoring of HDDV I/M inspections as electronic inspection records will be provided

⁵ <https://dmv.ny.gov/forms/vs1074sd.pdf>

⁶ <https://www.osc.state.ny.us/files/state-agencies/audits/pdf/sga-2013-13f3.pdf>

in the same manner as the current light-duty NYVIP2 program. The NYVIP3 integrated opacity meter will also generate an electronic calibration file. The Departments will be capable of querying data allowing for more focused equipment auditing and potentially for regulatory compliance. The NYVIP3 integrated opacity meter will be capable of “locking-out” malfunctioning equipment to require warranty service, when necessary. The NYVIP3 contractor will be capable of completing the proposed cutpoint revisions through the VID. The Department could complete program evaluation efforts based on the availability of required reports.

ODEIS will have the benefit of having new smokemeter equipment with a contractor provided warranty and repair services during the term of NYVIP3. NYVIP3 also provides the State with the option for completing future medium and heavy-duty onboard diagnostic testing.

Diesel Exhaust

New York State has a need to reduce exhaust emissions from on-road heavy-duty diesel vehicles. Of note, diesel exhaust contains particulate matter (“PM”) and oxides of nitrogen (“NOx”). NOx is a primary precursor to the formation of ground-level ozone and in the secondary formation of fine particulate matter. The New York-Northern New Jersey-Long Island ozone nonattainment area, which includes NYMA, was proposed to be reclassified from a serious to a severe nonattainment status for the 2008 ozone standards on April 13, 2022.

MJ Bradley reports that, “in New York, M/HD vehicles [all fuel types] are responsible for 52 percent of the NOx and 45 percent of the PM emitted by on-road vehicles, both of which contribute to poor air quality and resulting negative health impacts in many urban areas, including low-income and disadvantaged communities that are often disproportionately affected by emissions from freight movement due to their proximity to transportation infrastructure.”⁷ Based on New York State registration data, the Department estimates that approximately 40% of New York State’s registered diesel-powered M/HD vehicles are registered within the 9-county NYMA⁸.

⁷ MJB&A, *New York Clean Trucks Program*, 2021, p.4.

⁸ https://www.dec.ny.gov/docs/air_pdf/eim2020report.pdf, Appendix A, Table A-1

EPA developed guidance for states to consider when developing HDDV smoke opacity testing in 1999, and noted that, "... Although the Clean Air Act Amendments of 1990 do not require States to implement in-use testing programs for highway HDDVs, many States today are doing so to address public concerns about in-use emissions from these vehicles. Excessive emission of black smoke from highway HDDVs is one of the most common complaints received from the public by state and local air quality agencies. Since the excessive emission of black smoke is often an indicator that an engine needs maintenance and/or repair, States are focusing on smoke opacity measurements as part of their in-use testing programs. EPA is aware of several States that have adopted or are considering adopting some form of in-use smoke emission test related to smoke opacity testing for highway HDDVs. Because many highway HDDVs move across State boundaries, EPA believes that uniformity among state-operated smoke testing programs is desirable and appropriate.⁹" The EPA guidance included recommended cutpoints which are now dated as they do not reflect more current diesel emission control technology (e.g., OBD, diesel particulate filters). The Department's proposal addresses this concern by restructuring the model year brackets associated with more stringent cutpoints.

A recent discussion of the health impacts associated with diesel emission exhaust can be found in EPA's March 28, 2022, Notice of Proposed Rulemaking¹⁰:

"Diesel exhaust is a complex mixture composed of particulate matter, carbon dioxide, oxygen, nitrogen, water vapor, carbon monoxide, nitrogen compounds, sulfur compounds and numerous low molecular-weight hydrocarbons. A number of these gaseous hydrocarbon components are individually known to be toxic, including aldehydes, benzene and 1,3 butadiene. The diesel particulate matter present in diesel exhaust consists mostly of fine particles (<2.5 mm), of which a significant fraction is ultrafine particles (<0.1 mm). These particles have a large surface area which makes them an excellent medium for adsorbing organics and their small size makes them highly respirable. Many of the organic compounds present in the gases and on the

⁹ <https://nepis.epa.gov/Exe/ZyPDF.cgi/P10006H4.PDF?Dockey=P10006H4.PDF>

¹⁰ USEPA, Notice of Proposed Rule Making, March 28, 2022, <https://www.govinfo.gov/content/pkg/FR-2022-03-28/pdf/2022-04934.pdf>

particles, such as polycyclic organic matter, are individually known to have mutagenic and carcinogenic properties.

Diesel exhaust varies significantly in chemical composition and particle sizes between different engine types (heavy-duty, light-duty), engine operating conditions (idle, acceleration, deceleration), and fuel formulations (high/low sulfur fuel). Also, there are emissions differences between on-road and nonroad engines because the nonroad engines are generally of older technology. After being emitted in the engine exhaust, diesel exhaust undergoes dilution as well as chemical and physical changes in the atmosphere. The lifetime of the components present in diesel exhaust ranges from seconds to days.

Areas with high concentrations [of diesel particulate matter] are clustered in the Northeast, Great Lake States, California, and the Gulf Coast States, with the highest impacts occurring in major urban cores, and are also distributed throughout the rest of the U.S. Approximately half of average ambient DPM in the U.S. can be attributed to heavy-duty diesel engines, with the remainder attributable to nonroad engines ... In EPA's 2002 Diesel Health Assessment Document ("Diesel HAD"), exposure to diesel exhaust was classified as likely to be carcinogenic to humans by inhalation from environmental exposures, in accordance with the revised draft 1996/1999 EPA cancer guidelines.^{11,12} A number of other agencies (National Institute for Occupational Safety and Health, the International Agency for Research on Cancer, the World Health Organization, California EPA, and the U.S. Department of Health and Human Services) made similar hazard classifications prior to 2002. Noncancer health effects of acute and chronic exposure to diesel exhaust emissions are also of concern to EPA. EPA derived a diesel exhaust reference concentration ("RfC") from consideration of four well-conducted chronic rat inhalation studies showing adverse pulmonary effects. There is a large and extensive body of human data showing a wide spectrum of adverse health effects associated with exposure to ambient PM, of which diesel exhaust is an important component.

The contribution of diesel PM to total ambient PM varies in different regions of the country

¹¹ U.S. EPA. (1999). Guidelines for Carcinogen Risk Assessment. Review Draft. NCEA-F-0644, July. Washington, DC: U.S. EPA. Retrieved on March 19, 2009 from <http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=54932>.

¹² U.S. EPA (2002). Health Assessment Document for Diesel Engine Exhaust. EPA/600/8-90/057F Office of research and Development, Washington, DC. Retrieved on March 17, 2009 from <http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=29060>. pp. 1-1 1-2.

and also, within a region, from one area to another. The contribution can be high in near roadway environments, for example, or in other locations where diesel engine use is concentrated. Since 2002, several new studies have been published which continue to report increased lung cancer risk associated with occupational exposure to diesel exhaust from older engines. Of particular note since 2011 are three new epidemiology studies which have examined lung cancer in occupational populations, for example, truck drivers, underground nonmetal miners and other diesel motor-related occupations. These studies reported increased risk of lung cancer with exposure to diesel exhaust with evidence of positive exposure-response relationships to varying degrees.^{13,14, 15}

In light of the growing body of scientific literature evaluating the health effects of exposure to diesel exhaust, in June 2012 the World Health Organization's International Agency for Research on Cancer (IARC), a recognized international authority on the carcinogenic potential of chemicals and other agents, evaluated the full range of cancer-related health effects data for diesel engine exhaust. IARC concluded that diesel exhaust should be regarded as "carcinogenic to humans."¹⁶ This designation was an update from its 1988 evaluation that considered the evidence to be indicative of a "probable human carcinogen."

With the implementation of NYVIP3 and the proposed revisions to Subpart 217-5, the Department anticipates a reduction in particulate matter emissions from HDDVs, and consequently anticipates associated health benefit.

NYVIP3 also includes the option to potentially transition to statewide HDDV OBD I/M testing for applicable OBD-equipped HDDVs. While federal I/M regulation does require light-duty OBD

¹³ Garshick, Eric, Francine Laden, Jaime E. Hart, Mary E. Davis, Ellen A. Eisen, and Thomas J. Smith. 2012. Lung cancer and elemental carbon exposure in trucking industry workers. *Environmental Health Perspectives* 120(9): 1301–1306.

¹⁴ Silverman, D.T., Samanic, C.M., Lubin, J.H., Blair, A.E., Stewart, P.A., Vermeulen, R., & Attfield, M.D. (2012). The diesel exhaust in miners study: A nested case-control study of lung cancer and diesel exhaust. *Journal of the National Cancer Institute*.

¹⁵ Olsson, Ann C., et al. "Exposure to diesel motor exhaust and lung cancer risk in a pooled analysis from case-control studies in Europe and Canada." *American journal of respiratory and critical care medicine* 183.7 (2011): 941–948.

¹⁶ IARC [International Agency for Research on Cancer]. (2013). Diesel and gasoline engine exhausts and some nitroarenes. IARC Monographs Volume 105. [Online at <http://monographs.iarc.fr/ENG/Monographs/vol105/index.php>].

I/M in certain areas of the country (including New York State), EPA does not require HDDV I/M. The Department is aware that the State of California is considering requiring HDDV OBD I/M¹⁷.

EPA's Motor Vehicle Emission Simulator ("MOVES") model does not currently provide the functionality to quantify emission reductions from heavy-duty opacity or OBD I/M testing.

COSTS

ODEIS facilities were notified of the revised NYVIP3 equipment requirement prior to the NYVIP3 procurement. NYVIP2 stations were sent station messages noting the integrated opacity meter requirement in January 2020, March 2021, December 2021, and March 2022. The DEC website notes the proposed HDDV I/M transition to NYVIP3. DAR anticipates that some of the current ODEIS will make the business decision to discontinue completing HDDV I/M inspections with NYVIP3. The Department estimates that there are 800-1,000 smoke opacity meters currently in use, with 500-700 opacity meters at ODEIS. The remaining units are used by state government entities not regulated as ODEIS.

Pursuant to the NYVIP3 contract, the purchase cost of an integrated opacity smoke meter will range from \$4,700 to \$9,000. The higher unit costs represent instances where an additional (e.g., second or more) NYVIP3 integrated opacity meter is purchased at a given ODEIS location. DAR estimates that the majority of privately owned ODEIS will purchase a single NYVIP3 unit with integrated opacity meter with an optional cart for an estimated cost of approximately \$5,700. The Department estimates the initial capital cost for privately owned ODEIS facilities to be \$2.85 million (500 ODEIS times an average cost of \$5,700 per unit). Each completed HDDV inspection would be subject to an Opus transaction fee of \$0.436. DAR estimates the annual NYVIP3 transaction fees for ODEIS would cost \$75,537 (165,000 HDDVs registered in NYMA; estimated 5% opacity inspection failure rate; \$0.436/transaction). Considering the minimum seven-year duration of NYVIP3, the Department estimates ODEIS costs of \$3.4 million for NYVIP3 equipment purchase and associated transaction fees.

¹⁷ https://ww2.arb.ca.gov/rulemaking/2021/hdim2021?utm_medium=email&utm_source=govdelivery

Opus Inspection is developing a more “rugged” tablet based HDDV I/M equipment option for another OTR state. This equipment option would be more portable than the offered NYVIP3 HDDV workstation but is not part of the NYVIP3 contract. If developed by Opus and approved for use by the Department and DMV, the rugged HDDV I/M option could potentially become a purchase option for some ODEIS and for those NYS government entities not regulated as ODEIS. Any NYVIP3 equipment option would be subject to the Department’s and DMV’s acceptance testing. The cost of a rugged tablet-based option is not available, but the Department anticipates it would be approximately \$10,000. MTA, NYSDOT, and DEC may consider (but would not be required to purchase) this purchase option. The tablet option would have an associated NYVIP3 equipment warranty and would provide enhanced data reporting compared to the existing smokemeters. Should all current government entities opt to replace their existing opacity smokemeters for the rugged NYVIP3 alternative, the Department estimates \$2.7 million in equipment costs and annual transaction fee costs of \$12,000.

There would be limited cost to the State and local governments at fleet locations which are licensed ODEIS stations. Applicable state and local government locations could choose to not purchase the NYVIP3 equipment and have their fleets inspected by privately-owned ODEIS that comply instead. For DEC there is no additional cost as there is no change in oversight costs. The potential future use of tablets would present additional cost, but this is currently a concept and not a requirement at this time.

LOCAL GOVERNMENT MANDATES

The proposed regulations do not impose a local government mandate pursuant to Executive Order 17. No additional paperwork or staffing requirements are expected. Local governments have no additional compliance obligations as compared to other subject entities.

V. PAPERWORK

The proposed revisions will not increase paperwork requirements for HDDV owner/operators, opacity equipment manufacturers, or ODEIS stations. The Department anticipates that some paperwork associated with the existing HDDV I/M at ODEIS will be

reduced through NYVIP3 electronic reporting. Some existing NYS HDDV I/M forms will be revised.

VI. DUPLICATION

There are no relevant state or federal rules or other requirements that would duplicate, overlap, or conflict with the proposed Subpart 217-5 rulemaking.

VII. ALTERNATIVES

The NYVIP3 program was developed through a competitive RFP procurement. The Department proposes to update its regulations to reflect revised NYVIP3 program requirements. There are currently no other viable alternatives to the proposed regulation.

The NYVIP3 contract does include the option for a future transition to include medium- and heavy-duty OBD as the required I/M emissions test type for applicable OBD-equipped heavy-duty vehicles. NYVIP3 would still require smoke opacity testing for the older non-OBD equipped HDDVs. The Department estimates that currently less than 50% of the NYMA-registered heavy-duty vehicles are OBD equipped. The Department, in consultation with DMV, will evaluate the feasibility of future OBD I/M testing for medium- and heavy-duty vehicles after considering the test procedures and operational success of HDDV OBD I/M in other states and/or any new state of federal heavy-duty I/M requirements.

VIII. FEDERAL STANDARDS

There are no equivalent federal heavy-duty diesel I/M performance standards to the revisions proposed for Subpart 217-5.

IX. COMPLIANCE SCHEDULE

Revised HDDV I/M requirements for ODEIS through the NYVIP3 program are scheduled to go into effect later in 2023. Once a full transition to NYVIP3 is complete, DEC will have the capacity to revise opacity cutpoints to be more stringent.

6 NYCRR Part 217, Motor Vehicle Emissions

6 NYCRR Section 200.9, Referenced Material

Rural Area Flexibility Analysis

1. Types and estimated numbers of rural areas:

The New York State Department of Environmental Conservation (Department) is proposing to amend Subpart 217-5, Heavy Duty Inspection and Maintenance Program, and Section 200.9, Referenced Material, to reflect revised Heavy-Duty Diesel Vehicle Inspection and Maintenance Program (HDDV I/M) requirements. The proposed amendments would implement the revised HDDV I/M requirements through the statewide New York Vehicle Inspection Program (NYVIP3) tentatively scheduled to begin on December 1, 2022. The proposed amendments would require official diesel emission inspection stations (ODEIS), the vast majority are located in the New York Metropolitan Area (NYMA), to purchase new integrated diesel emission inspection equipment through NYVIP3. Additionally, once a full transition to NYVIP3 is complete, the proposed amendments would revise opacity cutpoints to be more stringent. DEC will make this determination anticipated around April 2023.

There are no requirements in the adopted regulation which apply only to rural areas.

2. Reporting, record keeping, other compliance requirements, and professional services:

There are no specific requirements in the adopted regulation which apply exclusively to rural areas.

3. Costs:

The proposed amendments are expected to result in additional costs for ODEIS. Pursuant to the NYVIP3 contract, the purchase cost of an integrated opacity smoke meter will range from \$4,700 to \$9,000. The higher unit costs represent instances where an additional (e.g., second or more) NYVIP3 integrated opacity meter is purchased at a given ODEIS location. DAR estimates that the majority of privately owned ODEIS will purchase

a single NYVIP3 unit with integrated opacity meter with an optional cart for an estimated cost of approximately \$5,700. Each completed HDDV inspection would be subject to an Opus transaction fee of \$0.436.

Opus Inspection is developing a more “rugged” tablet based HDDV I/M equipment option for another OTR state. This equipment option would be more portable than the offered NYVIP3 HDDV workstation but is not part of the NYVIP3 contract. If developed by Opus and approved for use by the Department and New York State Department of Motor Vehicles (DMV), the rugged HDDV I/M option could potentially become a purchase option for some ODEIS and for those NYS government entities not regulated as ODEIS. Any NYVIP3 equipment option would be subject to the Department’s and DMV’s acceptance testing. The cost of a rugged tablet-based option is not available, but the Department anticipates it would be approximately \$10,000. MTA, NYSDOT, and DEC may consider (but would not be required) this purchase option. The tablet option would have an associated NYVIP3 equipment warranty and would provide enhanced data reporting compared to the existing smokemeters.

The large majority of costs associated with the proposed amendments impact ODEIS in NYMA. The minimal cost to rural areas would be isolated to some governmental entities not regulated as ODEIS.

As noted above, several NYS government entities (DEC, MTA, DOT) are not regulated as ODEIS, and they will not be subject to the NYVIP3 equipment requirements. These government entities will be subject to the proposed revised opacity cutpoints when applicable to ODEIS.

Overall, the Department does not anticipate any significant costs to rural areas.

4. Minimizing adverse impact:

The large majority of impacts associated with the proposed amendments affect ODEIS in NYMA. The minimal impacts to rural areas would be isolated to some governmental entities not regulated as ODEIS. The

Department informed impacted governmental entities not regulated as ODEIS, such as DEC, MTA, and NYSDOT about the possible impacts of the proposed amendments throughout the development of the proposed amendments. Overall, the Department does not anticipate any significant adverse impacts to rural areas.

The Department will assess public comments regarding rural impacts received in the public commenting period of the proposed amendments.

5. Rural area participation:

The Department will hold public commenting periods for the proposed amendments as a part of the rule making process which will allow for stakeholders in rural areas to participate in the rulemaking process. Additionally, the Department consulted impacted governmental entities not regulated as ODEIS, such as DEC, MTA, and NYSDOT that may operate in rural areas throughout the development of the proposed amendments.

6 NYCRR Part 217, Motor Vehicle Emissions

6 NYCRR Section 200.9, Referenced Material

Regulatory Flexibility Analysis for Small Businesses and Local Governments

1. Effect of rule:

The New York State Department of Environmental Conservation (Department) is proposing to amend Subpart 217-5, Heavy Duty Inspection and Maintenance Program, and Section 200.9, Referenced Material, to reflect revised Heavy-Duty Diesel Vehicle Inspection and Maintenance Program (“HDDV I/M”) requirements. The proposed amendments would implement the revised HDDV I/M requirements through the statewide New York Vehicle Inspection Program (NYVIP3) tentatively scheduled to begin on December 1, 2022. The proposed amendments require official diesel emission inspection stations (ODEIS) located in the New York Metropolitan Area (NYMA) to purchase new integrated diesel emission inspection equipment through NYVIP3. Additionally, once a full transition to NYVIP3 is complete, the proposed amendments will revise opacity cutpoints to be more stringent. DEC will make this determination anticipated around April 2023.

ODEIS facilities were notified of the revised NYVIP3 equipment requirement prior to the NYVIP3 procurement. NYVIP2 stations were sent station messages noting the integrated opacity meter requirement in January 2020, March 2021, December 2021, and March 2022. The DEC website notes the proposed HDDV I/M transition to NYVIP3. DAR anticipates that some of the current ODEIS will make the business decision to discontinue completing HDDV I/M inspections with NYVIP3. The Department estimates that there are 800-1,000 smoke opacity meters currently in use, with 500-700 opacity meters at ODEIS. The Department estimates that there are 500-700 ODEIS, generally small businesses, that will be subject to this regulation. The remaining units are used by state government entities not regulated as ODEIS.

2. Compliance requirements:

The proposed amendments require official diesel emission inspection stations (ODEIS) located in the New York Metropolitan Area (NYMA) to purchase new integrated diesel emission inspection equipment through NYVIP3. The integrated NYVIP3 equipment will most likely require an internet connection.

The Department does not anticipate any compliance requirements for local governments.

3. Professional services:

There are no professional services needed by small business or local government to comply with the proposed amendments.

4. Compliance costs:

Pursuant to the NYVIP3 contract, the purchase cost of an integrated opacity smoke meter will range from \$4,700 to \$9,000. The higher unit costs represent instances where an additional (e.g., second or more) NYVIP3 integrated opacity meter is purchased at a given ODEIS location. DAR estimates that the majority of privately owned ODEIS will purchase a single NYVIP3 unit with integrated opacity meter with an optional cart for an estimated cost of approximately \$5,700. Additionally, each completed HDDV inspection would be subject to an Opus transaction fee of \$0.436.

Opus Inspection is developing a more “rugged” tablet based HDDV I/M equipment option for another OTR state. This equipment option would be more portable than the offered NYVIP3 HDDV workstation but is not part of the NYVIP3 contract. If developed by Opus and approved for use by the Department and New York State Department of Motor Vehicles (DMV), the rugged HDDV I/M option could potentially become a purchase option for some ODEIS and for those NYS government entities not regulated as ODEIS. Any NYVIP3 equipment

option would be subject to the Department's and DMV's acceptance testing. The cost of a rugged tablet-based option is not available, but the Department anticipates it would be approximately \$10,000.

The cost of internet access is variable and dependent on several factors if needed at a location to use the integrated NYVIP3 equipment.

5. Economic and technological feasibility:

New York State implemented the initial round of the New York State Vehicle Inspection Program in 2004 to require statewide onboard diagnostic (OBD) I/M emissions testing for applicable light-duty vehicles in accordance with federal I/M requirements and New York's State Implementation Plan. NYVIP provides a communication network between licensed DMV inspection stations and a contractor procured by DMV. The NYVIP contractor also provides emissions testing equipment approved by DEC and DMV. The current iteration, NYVIP2, will end on November 30, 2022. NYVIP3 will continue to provide statewide onboard diagnostic testing for light-duty vehicles but will also integrate smoke opacity testing for the downstate HDDV I/M program.

The NYVIP3 contractor, Opus Inspection, was chosen through a DMV Request for Proposal procurement completed in April 2020. With the start of NYVIP3, the current DEC approved opacity meters will become obsolete at ODEIS for I/M testing. ODEIS were informed of the NYVIP3 opacity equipment requirement prior to, and since, the NYVIP3 procurement.

ODEIS will have the benefit of having new smokemeter equipment with a contractor provided warranty and repair services during the term of NYVIP3. NYVIP3 also provides the State with the option for completing future medium and heavy-duty onboard diagnostic testing.

In terms of economic feasibility, ODEIS must make their own business decision to buy the new equipment or not. The Department believes the costs are reasonable and that there is an added value in having the contractor provided warranty and repair services with the new equipment.

As far as technological feasibility, the selected NYVIP3 contractor found that internet connectivity issues will apply to a very limited number of inspection stations. The NYVIP3 contractor will research specific options for every station without broadband and provide recommendations for each one to acquire broadband access.

6. Minimizing adverse impact:

The proposed amendments will impact ODEIS, the vast majority of which are located within the downstate 9-county NYMA, and several governmental entities not regulated as ODEIS (e.g., DEC, MTA, and NYSDOT). ODEIS facilities were notified of the revised NYVIP3 equipment requirement prior to the NYVIP3 procurement. NYVIP2 stations were sent station messages noting the integrated opacity meter requirement in January 2020, March 2021, December 2021, and March 2022. The DEC website notes the proposed HDDV I/M transition to NYVIP3. The Department informed impacted governmental entities not regulated as ODEIS about the possible impacts of the proposed amendments throughout the development of the proposed amendments.

The Department anticipated that there will be no adverse impact on local governments.

7. Small business and local government participation:

The Department will hold public commenting periods for the proposed amendments as a part of the rule making process which will allow for small businesses and local government to participate in the rulemaking process. The Department has scheduled a stakeholder outreach meeting for this regulation update on September

29, 2022. Past outreach has included: station messages sent as noted in the document, discussion with appropriate association leadership, listing on our website, and a past mailing.

8. For rules that either establish or modify a violation or penalties associated with a violation:

The proposed amendments do not modify any existing violations or penalties associated with a violation under 217-5.7.

6 NYCRR Part 217, Motor Vehicle Emissions

6 NYCRR Section 200.9, Referenced Material
Job Impact Statement

1. Nature of Impact:

The New York State Department of Environmental Conservation (Department) is proposing to amend Subpart 217-5, Heavy Duty Inspection and Maintenance Program, and Section 200.9, Referenced Material, to reflect revised Heavy-Duty Diesel Vehicle Inspection and Maintenance Program (“HDDV I/M”) requirements. The proposed amendments would implement the revised HDDV I/M requirements through the statewide New York Vehicle Inspection Program (NYVIP3) tentatively scheduled to begin on December 1, 2022. The proposed amendments require official diesel emission inspection stations (ODEIS) located in the New York Metropolitan Area (NYMA) to purchase new integrated diesel emission inspection equipment through NYVIP3. Additionally, once a full transition to NYVIP3 is complete, the proposed amendments will revise opacity cutpoints to be more stringent. DEC will make this determination anticipated around April 2023.

The adopted amendments to the regulations may adversely impact jobs and employment opportunities in New York State, specifically in NYMA. The existing HDDV I/M has required annual smoke opacity emission testing for applicable HDDVs registered within the downstate New York Metropolitan Area (NYMA) since 1999. New York State implemented the initial round of the New York State Vehicle Inspection Program in 2004 to require statewide onboard diagnostic (OBD) I/M emissions testing for applicable light-duty vehicles in accordance with federal I/M requirements and New York’s State Implementation Plan. The Department is unaware of any significant adverse impact to jobs and employment opportunities as a result of previous revisions.

2. Categories and numbers affected:

The proposed revisions may have an adverse impact on ODEIS in NYMA. The Department anticipates that some of the current ODEIS will make the business decision to discontinue completing HDDV I/M inspections

with NYVIP3. The Department estimates that there are 800-1,000 smoke opacity meters currently in use, with 500-700 opacity meters at ODEIS. The remaining units are used by state government entities not regulated as ODEIS. For the regulated ODEIS stations that choose to continue participating in the HDDV I/M, there will be a cost associated with purchasing the new integrated NYVIP3 equipment to perform the HDDV I/M, as well as a transaction fee for each inspection performed on the integrated NYVIP3 equipment.

The proposed revisions may have an adverse impact on government entities not regulated as ODEIS. The department estimates that 300 smoke opacity meters are in use by government entities not regulated as ODEIS. While not required to purchase new integrated NYVIP3 equipment, these entities in the future could choose to purchase new integrated NYVIP3 equipment. In such a case, there will be a cost associated with purchasing the new integrated NYVIP3 equipment to perform the HDDV I/M, as well as a transaction fee for each inspection performed on the integrated NYVIP3 equipment.

Additionally, the proposed revisions may have an adverse impact on ODEIS in NYMA and government entities not regulated as ODEIS due to the more stringent opacity standards to be implemented after the full implementation of NYVIP3. The more stringent opacity standards are anticipated to cause higher failure rates of vehicles tested in the HDDV I/M, incurring a cost of repairing these failing vehicles.

3. Regions of adverse impact:

The New York Metropolitan Area (NYMA). NYMA geographically includes Bronx, Kings, New York, Nassau, Queens, Richmond, Rockland, Suffolk, and Westchester counties.

4. Minimizing adverse impact:

ODEIS facilities were notified of the revised NYVIP3 equipment requirement prior to the NYVIP3 procurement. NYVIP2 stations were sent station message reminders in January 2020, March 2021, December 2021, and March 2022. The DEC website notes the proposed HDDV I/M transition to NYVIP3.

The proposed regulation would not require certain New York State governmental entities to purchase

NYVIP3 equipment for HDDV I/M opacity testing. These entities are the Metropolitan Transportation Authority (MTA), which is exempt under 15 NYCRR Part 79.2(d)(4); the NYS Department of Transportation (NYSDOT) as limited to school bus inspections completed under 217-5.2(b)(1)(i); and DEC for roadside inspections under 217-5.2(c). These government entities are not licensed by DMV as ODEIS, nor do they authorize NYS Heavy Duty Diesel safety/emission stickers.

5. Self-employment opportunities:

None that the Department is aware of at this time.

6 NYCRR Part 217, Motor Vehicle Emissions

6 NYCRR Section 200.9, Referenced Material

Assessment of Public Comments

Comments Received from November 23, 2022, through 5:00 P.M., January 30, 2023

Comments in General Support of Subpart 217-5 Revision

Comment 1: The commenters fully support the Department's effort to reduce emissions from medium and heavy-duty vehicles. Each company has undertaken initiatives to reduce such emissions. Combined, the companies routinely conduct New York State vehicle inspections over 5,000 times during the average year. Both companies expect that all their medium and heavy-duty fleet vehicles will be able to meet the new opacity requirements set forth in revised section 217-5.3. Commenter 1.

Response to Comment 1: The New York State Department of Environmental Conservation (DEC or the Department) thanks you for your comment.

Unresolved Logistical Issues with NYVIP3 Inspection Equipment

Comment 2: These comments are focused on the unresolved logistical issues with the inspection equipment as specified by the New York State Department of Motor Vehicles (DMV) which are to be used by official diesel emission inspection stations (ODEIS) for purposes of conducting the

new inspection requirements under revised Subpart 217-5. The commenters request that the Department extend the implementation period for the New York Vehicle Inspection Program (NYVIP3) based on its experience to date with DMV's designated implementation contractor, Opus Inspection Inc. (Opus). In keeping with the recommendations distributed by the DMV in March 2022, the commenters acquired fifteen NYVIP3 computerized vehicle inspection systems (CVIS) from Opus. Until issues with CVIS (summarized below) are resolved, members of the regulated community will not be able conduct inspections as required under the DEC's proposed revisions. Commenter 1.

Response to Comment 2: Although the commenter received the NYVIP3 CVIS equipment earlier than most stations, the equipment has not been authorized for official testing as it continues to undergo acceptance testing by DEC and DMV (the Departments). The equipment is expected to be certified by the Departments in Q4 2023. -ODEIS will not be subject to the applicable inspection requirements under revised Subpart 217-5 until the issues are satisfactorily resolved. All stations will be notified by DMV and Opus when the NYVIP3 CVIS is ready for use.

Comment 3: The source and availability of printable inspection stickers is still unknown and, despite contacting DMV and Opus, the commenters have been unable to secure a supply of these stickers. Commenter 1.

Response to Comment 3: The comment is outside of the scope of the Department's rulemaking. The Department notes, however, that the proposed NYVIP3 CVIS equipment is currently undergoing acceptance testing by the Departments and has not yet been approved for general release. The equipment is expected to be certified by the Departments in Q4 2023.

Comment 4: Despite initial assurances that the new devices would be able to be activated upon receipt, commenters have been unable to activate the devices following the instructions provided. Calls to the Opus help line have been met with directions to cease efforts to activate the machines and to wait for further contact from an Opus representative. The time line for this support task has not been provided. Commenter 1.

Response to Comment 4: The comment is outside of the scope of the Department's rulemaking. The Department notes, however, that the proposed NYVIP3 CVIS equipment is currently undergoing acceptance testing by the Departments and has not yet been approved for general release. The equipment is expected to be certified by the Departments in Q4 2023.

Comment 5: Training videos provided by Opus suggested that transitioning the NYVIP3 devices from light duty vehicle inspections to heavy and medium duty vehicle inspection may result in voiding up to 4 inspection stickers. It is not clear from the instructional videos if this is a one-time event or is likely to occur each time such a transition takes place. The companies' technicians may transition between vehicle types several times a month and tracking the disposition of the "lost" stickers, if it occurs each time the transition is made, could be

logistically complex. A possible solution to this conundrum would be to install two printers, one for light duty vehicles and one for medium/heavy duty vehicles. However, it is not clear from the documentation provided by the NYVIP3 devices that it is possible to install two printers.

Commenter 1.

Response to Comment 5: The comment is outside of the scope of the Department's rulemaking. The Department notes, however, that the proposed NYVIP3 CVIS equipment is currently undergoing acceptance testing by the Departments and has not yet been approved for general release. The equipment is expected to be certified by the Departments in Q4 2023. For program consistency and to minimize equipment costs, the Departments intend to have only one sticker printer.

NYVIP3 Implementation Schedule

Comment 6: Due to the logistical issues with the vehicle inspection equipment described above, commenters request that the Department extend the implementation schedule for the NYVIP3 portions of Subpart 217-5 and provide clarification regarding potential issues with vehicle inspection equipment testing. The commenters suggest that section 217-5.2(b)(2) be revised to allow 90-days, rather than 30-days, public notice prior to requiring diesel emission inspections be completed on certified CVIS. Commenter 1.

Response to Comment 6: As stated above, the NYVIP3 CVIS must be certified and approved prior to use in New York which includes, among other things, the assurance that the certified NYVIP3 CVIS will be capable of fulfilling the requirements of Subpart 217-5. Once certified by both Departments, the DEC will provide adequate public notice that the approved NYVIP3 CVIS with an integrated opacity meter will be required for heavy-duty diesel emission inspections (smoke opacity) and safety inspections. The equipment is expected to be certified by the Departments in Q4 2023. The 30-day notice, as proposed within the rulemaking, will provide currently licensed ODEIS sufficient time to have an approved NYVIP3 CVIS with an integrated opacity meter present at their testing locations.

List of Commenters

1. Consolidated Edison Company of New York, Inc. and Orange and Rockland Utilities, Inc.