PROPOSED RULE MAKING HEARING(S) SCHEDULED

Emission Standards for Motor Vehicles and Motor Vehicle Engines

I.D. No. ENV-20-05-00018-P

PURSUANT TO THE PROVISIONS OF THE State Administrative Procedure Act, NOTICE is hereby given of the following proposed rule:

Proposed action: Amendment of Parts 200 and 218 of Title 6 NYCRR.

Statutory authority: Environmental Conservation Law, sections 1-0101, 3-0301, 19-0103, 19-0105, 19-0107, 19-0301, 19-0303, 19-0305, 71-2103, 71-2105; and Federal Clean Air Act, section 177

Subject: Emission standards for motor vehicles and motor vehicle engines.

Purpose: To incorporate revisions California has made to its vehicle emission control program regarding the reduction of green house gas (GHG) emissions from motor vehicles, and otherwise update various incorporation by reference citations included in the LEV program.

Public hearing(s) will be held at: 1:00 p.m., July 5, 2005 at Department of Environmental Conservation, Region 8, Conference Rm., 6274 E. Avon-Lima Rd., Avon, NY; 9:00 a.m., July 6, 2005 at Department of Environmental Conservation Annex, Region 2, 11-15 47th Ave., Hearing Rm. 106, Long Island City, NY; 9:00 a.m., July 7, 2005 at Department of Environmental Conservation, Region 5, Conference Rm., 1115 Route 86, Ray Brook, NY; and 9:00 a.m., July 8, 2005 at Department of Environmental Conservation, 625 Broadway, Public Assembly Rm. 129B, Albany, NY.

Accessibility: All public hearings have been scheduled at places reasonably accessible to persons with a mobility impairment.

Interpreter Service: Interpreter services will be made available to deaf persons, at no charge, upon written request submitted within reasonable time prior to the scheduled public hearing. The written request must be addressed to the agency representative designated in the paragraph below.

Substance of proposed rule (Full text is posted at the following State website: www.dec.state.ny.us): The New York State Department of Environmental Conservation (Department) is proposing to amend 6 NYCRR Part 218 and Section 200.9. Section 200.9 is a list that cites Federal and California codes and regulations that have been referenced by the Department in the course of amending this Part. The purpose of the amendment is to revise the existing low emission vehicle (LEV) program to incorporate modifications California has made to its vehicle emission control program to reduce greenhouse gas (GHG) emissions. The Department is proposing to amend sections 218-1.2 Definitions, 218-2.1(b) Prohibitions, 218-8 GHG Exhaust Emission Standards, and 218-9 Severability. The remaining sections are unchanged.

Section 218-1.2 was amended to include revisions to definitions that govern the provisions of this Part. Section 218-2.1(b) was also amended to change Subpart to Part to clarify applicability.

Section 218-8.1 lists the definitions that govern the GHG provisions of this Part. Section 218-8.2 establishes the prohibitions that pertain to the GHG provisions. Specifically, these provisions apply to all 2009 and subsequent model year new vehicles delivered or sold in New York.

Section 218-8.3 has been revised to incorporate the proposed fleet average GHG exhaust emission standards established by California, as well as credit and debit trading provisions. The standards are in CO_2 equivalent grams per mile for passenger cars/light duty truck1 (PC/LDT1) and light duty truck2 (LDT2) vehicle categories. PC/LDT1 consists of vehicles up to 3,750 pounds loaded vehicle weight (LVW), and LDT2 consists of vehicles between 3,751 pounds LVW and 8,500 pounds gross vehicle weight (GVW). Medium duty passenger vehicles (MDPV) up to 10,000 pounds GVW are also included in LDT2.

CO_2 equivalent grams per mile standards are obtained by multiplying the emissions of carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and hydrofluorocarbons (HFC) by their global warming potentials and adding them together. Global warming potential (GWP) is an estimate of the climate changing ability of 1 kilogram of any GHG relative to the climate changing ability of 1 kilogram of CO_2. Over a 100 year period, CO_2 has a GWP of 1, CH_4 is 23, N_2O is 296, and HFC-134a is 1300. The Department will incorporate California standards identically, which includes a declining fleet average standard for model years 2009 through 2016. This is done similar to the existing LEV program. The standards are shown below.

CO_2 Equivalent Emission Standards for Model Years 2009 through 2016

Tier	Year	CO_2 Equivalent Emission Standard by Vehicle Category g/mile	
		PC/LDT1	LDT2
Near-Term	2009	323	439
	2010	301	420
	2011	267	390
	2012	233	361
Mid-term	2013	227	355
	2014	222	350
	2015	213	341
	2016	205	332

An alternative compliance option is also proposed in section 218-8.4, as in California. This proposal would provide vehicle manufacturers flexibility in meeting the GHG reduction requirements by allowing them to earn credits by utilizing 2009 and subsequent model year vehicles that operate on alternative fuel vehicles. The manufacturers would be required to demonstrate that the vehicles achieve equal or greater GHG reductions as compared to the regulations and meet strict eligibility criteria. The criteria include real or additional GHG emission reductions, reductions must be regulatory surplus, permanent, and enforceable. The Department proposes to adopt California criteria and crediting for determining acceptable alternative compliance programs.

The Department also proposes to include New York specific GHG exhaust emissions reporting requirements in section 218-8.5. Starting with the 2009 model year, each manufacturer must report the average GHG emissions of its fleet sold in New York to the Department. These reports will contain the same information and format as those submitted to California.

Existing section 218-8 was renumbered to create section 218-9. This section contains severability provisions.

Text of proposed rule and any required statements and analyses may be obtained from: Jeff Marshall, Department of Environmental Conservation, Division of Air Resources, 625 Broadway, Albany, NY 12233-3255, (518) 402-8292, e-mail: jtmarsha@gw.dec.state.ny.us

Data, views or arguments may be submitted to: Same as above.

Public comment will be received until: five days after the last scheduled public hearing required by statute.

Additional matter required by statute: Pursuant to art. 8 of the (State Environmental Quality Review Act), a short environmental assessment form, a negative declaration and a coastal assessment form have been prepared and are on file. This rule must be approved by the environmental board.

Summary of Regulatory Impact Statement

The New York State Department of Environmental Conservation (Department) is proposing to amend 6 NYCRR Part 218 and Part 200.9. This will be accomplished by revising the existing Part 218 to reflect changes to California's low emission vehicle (LEV) program that incorporated greenhouse gas (GHG) standards for light and medium duty vehicles, and to maintain identical standards with California for all vehicle weight classes as required under section 177 of the Clean Air Act. Subpart 200.9 will also be revised in order to reflect updates to the reference material incorporated in the Part 218 revisions.

By statutory authority of, and pursuant to, Environmental Conservation Law (ECL), the Commissioner of Environmental Conservation is responsible for protecting the air resources of New York State. The Commissioner is authorized to adopt rules and regulations to enforce the ECL. The Legislature bestowed on the Department the power to formulate, adopt, promulgate, amend and repeal regulations for preventing, controlling or prohibiting air pollution.

The main purpose of enacting this regulation is to address the adverse climate change impacts that GHG such as carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and hyrdrofluorocarbons (HFC) will cause in New York State, and globally, if left uncontrolled. The global warming effects of GHG can adversely affect human health and the environment.

Heat related illnesses and mortality can increase as a result of intensified and prolonged heat waves resulting from global warming induced temperature increases. Increased temperatures could also exacerbate respiratory illnesses by contributing to conditions favorable to the formation of ground-level ozone. Vector-borne illnesses such as West Nile Virus, Equine Encephalitis, and Lyme Disease could also increase as a result of increased temperature and precipitation resulting from global warming.

New York's shoreline could be adversely affected by sea level rise due to thermal expansion of the oceans caused by global warming. New York has approximately 2,625 miles of coastline including barrier islands, coastal wetlands, and bays. As sea level rises, erosion and flooding due to storm surge can increase. This can lead to loss of beaches, damage to coastal ecosystems, and flood damage to infrastructure.

New York's water supply may also be stressed by changes in temperature and precipitation caused by global warming. The majority of New York's population is served by surface water flow, which can be highly variable. Extended periods of drought could be expected to place additional stress on the water supply. Global warming is also likely to lower the water levels of the Great Lakes, which would impact drinking water supplies, hydroelectric power production, commercial shipping, and recreational activities.

Agriculture and forests may be adversely affected by global warming. Crop mix and growing seasons for cold weather crops could be shortened or lost due to changes in temperature and precipitation. Tree species such as sugar maples could be displaced from New York due to climate change. This would impact maple syrup production and regional tourism related to fall foliage. The existence of hardwood ecosystems such as the Adirondack Park would be threatened. Wildlife distribution and diversity are also likely to be affected by climate change. Species such as trout and migratory birds could be displaced by loss or changes in habitat resulting from increased temperatures or precipitation.

The GHG emission reduction regulation mandates lower new vehicle certification levels for all 2009-2016 model year passenger cars, light duty trucks, and medium duty passenger vehicles. The vehicle classes are combined into 2 vehicle classes: PC/LDT1 and LDT2. The PC/LDT1 category consists of all passenger cars, as well as minivans, sport utility vehicles (SUVs) and light trucks up to 3,750 pounds loaded vehicle weight (LVW). The LDT2 category consists of light duty trucks and SUVs between 3,751 pounds LVW and 8,500 pounds gross vehicle weight (GVW), as well as medium duty passenger vehicles (MDPV) between 8,500 and 10,000 pounds GVW.

Vehicle climate change emissions comprise four main elements: 1) CO_2 , CH_4 and N_2O emissions resulting directly from the operation of the vehicle; 2) CO_2 emissions resulting from the operation of the air conditioning (AC) system (indirect AC emissions); 3) refrigerant emissions from the AC system due to either leakage, losses during recharging, or release from scrapping of the vehicle at the end of life (direct AC emissions); and 4) upstream emissions associated with the production of the fuel used by the vehicle. All of these elements are incorporated into the GHG emissions reduction standard.

The California Air Resources Board (CARB) estimated the emissions from light duty vehicles for the years 2020 and 2030 in CO_2 equivalent tons per day. These estimates represent the light duty vehicle emissions that would be expected without the proposed regulation and serve as a baseline to estimate the benefits of the program. CO_2 equivalent tons per day are obtained by multiplying the emissions of each GHG (CO_2, CH_4, N_2O, HFC) by its global warming potential (GWP). The GWP is an estimate of the climate changing ability of 1 kilogram of any GHG relative to the climate changing ability of 1 kilogram of CO_2. Over a 100 year period, CO_2 has a GWP of 1, CH_4 is 23, N_2O is 296, and HFC-134a, the current vehicle air conditioner refrigerant, is 1300.

New York proposes to incorporate California's GHG emissions standards as a declining fleet average requirement similar to the LEV program. Vehicle manufacturers would be required to comply with the emissions standards in New York for each year starting in 2009. The proposed standards, expressed in terms of CO_2 equivalent grams/ mile are as follows:

CO_2 Equivalent Emission Standards for Model Years 2009 through 2016

Tier	Year	CO_2 Equivalent Emission Standard by Vehicle Category g/mile	
		PC/LDT1	LDT2
Near-Term	2009	323	439
	2010	301	420
	2011	267	390
	2012	233	361
Mid-term	2013	227	355
	2014	222	350
	2015	213	341
	2016	205	332

New York estimates that adoption of the regulation will reduce New York's GHG emissions by an estimated 40,700 CO_2 equivalent tons per day in 2020 and by 72,000 CO_2 equivalent tons per day in 2030. New York estimated the reductions by comparing 2002 new vehicle registrations in California and New York. California had approximately 1,500,000 new vehicles registered compared to approximately 696,000 new vehicles registered in New York. This ratio was used as the basis for estimating the baseline emissions and emissions reductions in New York due to the regulation. New York's baseline emissions, emissions due to the regulation, and total emissions reductions are shown below.

New York Light Duty Fleet CO_2 Equivalent Emissions and Reductions

	2020 CO_2 Equivalent (tpd)	2030 CO_2 Equivalent (tpd)
Baseline Emissions (Total Light Duty)	230,800	267,000
Emissions with Regulation (Total Light Duty)	191,100	195,000
Emissions Reductions (Total Light Duty)	40,700	72,000

New York proposes to incorporate early reduction credit provisions that are identical to California's provisions. The credit trading provision in this rule offers flexibility for each manufacturer to over comply with one vehicle category's standard and trade those credits to compensate for a deficit, or undercompliance, within another category. Credit trading is also allowed among manufacturers. CARB shall utilize the 2000 model year as a baseline for calculating emission reduction credits. Under CARB's proposal, manufacturer fleet average emissions for model year 2000 through model year 2008 for PC/LDT1 will be compared with the 2012 fully phased-in near-term standard of 233 g/mile CO_2 equivalent. For LDT2, the baseline is 361 g/mile CO_2 equivalent. If a manufacturer has certified fleet average emissions in a specific model year lower than these standards, the manufacturer will earn early compliance credits. Any emission reduction early credits earned could be used during model year 2009 through 2015, or traded with another manufacturer. To ensure that the regulation ultimately achieves the greatest possible climate change emission reductions, CARB staff proposes that the credits generated by early compliance retain full value through the 2013 model year. These credits will then be worth 50 percent of their initial value in model year 2014, 25 percent of their initial value in model year 2015 and have no value thereafter.

New York proposes to incorporate an alternative compliance strategy that employs criteria identical to those put forth by California. The criteria are: real or additional emissions reductions; emissions reductions that can be reasonably measured; emissions reductions must be surplus of any reductions required by separate entities; reductions must be independently verified and legally binding; projects should be irreversible and permanent. CARB Staff will explore ways to evaluate that alternative compliance strategies do not increase GHG emissions outside the alternative compliance project. The exception would be that the proposed projects would be required to be in the state of New York to be eligible for consideration. These projects would also be required to be made available to inspection by New York State representatives upon request.

CARB estimates that the near-term standards will result in an average incremental cost in 2012 of $367 for PC/LDT1, and $277 for LDT2 compared to the 2009 baseline vehicle fleet. The fully phased-in mid-term standards will result in an incremental cost in 2016 of $1,064 for Passenger cars and LDT1, and $1,029 for LDT2. The CARB analysis concludes, however, that these increased costs will be more than offset by operating cost savings over the lifetime of the vehicle.

Operating cost savings are the basis for determining the cost effectiveness of the regulation. As gasoline prices increase, the operating cost savings will also increase. New York performed a benefit-cost analysis using VMT obtained from Mobile6 and gasoline price to estimate the cost effectiveness. The break-even year is the first year in which the overall return from gasoline savings exceeds the initial cost and interest payments of purchasing the new vehicle. New York also performed a sensitivity analysis utilizing different gasoline prices per gallon, ranging from $1.50 to $2.00, to estimate the cost effectiveness of the regulation. The Department's analysis indicates that the regulation is cost effective for even the low estimate of $1.50 per gallon of gasoline.

Currently, there is no automobile manufacturing in New York. However, when "automotive facilities" are taken into account, such as parts manufacturing and distribution, corporate offices, research and development, automobile dealerships, financial centers, and engineering and design facilities, the employment share of the automotive industry in the state is 3.2 percent, according to the Alliance of Automobile Manufacturers. These affiliated businesses in addition to gasoline service stations are local businesses. They compete within the state and generally are not subject to competition from out-of-state businesses. New York dealerships will be able to sell California certified vehicles to states bordering New York. New York residents will not be able to buy noncomplying vehicles out of state since vehicles must be California certified in order to be registered in New York. Therefore, the proposed regulation is not expected to impose a competitive disadvantage on affiliated businesses.

State and local governments who own or operate vehicles in New York State are subject to the same requirements as privately owned vehicles. In other words, they must purchase California certified vehicles. There should not be any additional costs for State and local governments to comply with this regulation.

The climate change emission regulations will not result in any significant paperwork requirements for New York vehicle suppliers, dealers or government. New York relies on materials submitted to California for certification while manufacturers must submit to New York annual sales, and corporate fleet average reports to show compliance with the fleet average requirements. This is the current arrangement in the LEV program. Also, the climate change emission regulations will not result in an increased amount of paperwork for dealers. While dealers must ensure that the vehicles they sell are California certified, most manufacturers will include provisions in their ordering mechanisms to ensure that only California certified vehicles are shipped to New York dealers. This has been the case since New York first adopted the California LEV program in 1992. The implementation of the climate change regulatory proposal is not expected to be burdensome in terms of paperwork to owners/ operators of vehicles.

California's GHG standards are the most stringent and most protective of public health and the environment in the absence of federal GHG emission standards. There are no equivalent federal vehicle GHG standards available as a regulatory alternative. The only regulatory alternative to the proposed climate change amendments to the LEV regulation is to revert back to less stringent federal new motor vehicle emission standards. This is because the Clean Air Act requires states adopting the California programs under section 177 to maintain identical standards and consistent programs for a given weight class. Since the GHG provisions affect light and medium duty vehicles, New York must adopt such standards in order to remain identical.

Another alternative available would be to require reductions of GHG emissions from stationary sources. New York has already begun to address stationary source GHG reductions through its RGGI and RPS initiatives discussed previously. These are being developed in conjunction with the vehicle GHG regulation in an attempt to establish a comprehensive program to reduce GHG emissions from both mobile and stationary sources in New York.

In addition, in the absence of the climate change emissions regulation New York would forfeit other emission benefits, NO_x, VOC and CO reductions for example, that are an important part of its state implementation plans (SIP) for ozone and CO. For example, New York estimates that the LEV program achieves VOC reductions in the year 2020 that are approximately 7.5 percent greater than corresponding reductions that would result from the federal standards. NO_x reductions were approximately equal when comparing LEV to the federal standards for the year 2020. It would be difficult, if not impossible, for New York to find additional reductions from other sources to offset the loss of mobile source reductions that would occur if the State were forced to revert back to federal standards. For the light-duty fleet, New York would be losing emission benefits by not requiring the climate change emission reductions adopted by California as part of the LEV program. The climate change regulation is also expected to result in additional reductions of criteria pollutants in addition to GHG as discussed previously.

This regulatory proposal will take effect for the 2009 model year for light-duty and medium duty passenger vehicles up to 10,000 pounds GVWR.

Regulatory Flexibility Analysis

1. Effect of rule:

The New York State Department of Environmental Conservation (Department) is proposing to amend 6 NYCRR Section 200.9, and 6 NYCRR Part 218 low emission vehicle (LEV) program. The changes to the regulations incorporate New York State's adoption of the motor vehicle greenhouse gas (GHG) emission reduction standards adopted by the California Air Resources Board (CARB). These changes apply to vehicles purchased by consumers, businesses, and government agencies in New York. The proposed changes to the regulations may impact businesses involved in manufacturing, selling, purchasing or repairing passenger cars or trucks.

There are about 202,233 state and local agency owned vehicles in New York State, or 2.0 percent of the total state fleet of about 10.2 million vehicles, according to data provided by the US Department of Energy, and the Alliance of Automobile Manufacturers. The Department operated a fleet consisting of a combined 1,850 PC/LDT1 and LDT2 vehicles during the State fiscal year from April 1, 2003 to March 31, 2004. PC/LDT1 consists of vehicles up to 3,750 pounds loaded vehicle weight (LVW), and LDT2 consists of vehicles between 3,751 pounds LVW and 8,500 pounds gross vehicle weight (GVW). Medium duty passenger vehicles (MDPV) up to 10,000 pounds GVW are also included in LDT2.

State and local governments are also consumers of vehicles that will be regulated under the proposed GHG amendments. Therefore, local governments who own or operate vehicles in New York State are subject to the same requirements as privately owned vehicles in New York State; i.e., they must purchase California certified vehicles.

The changes are an addition to the current LEV standards. The new motor vehicle emissions program has been in effect in New York State since model year 1993 for passenger cars and light-duty trucks, with the exception of the 1995 model year, and the Department is unaware of any adverse impact to small businesses or local governments as a result.

There are no equivalent federal vehicle GHG standards available as a regulatory alternative. The only regulatory alternative to the proposed climate change amendments to the LEV regulation is to revert back to less stringent federal new motor vehicle emission standards. This is because the Clean Air Act requires states adopting the California programs under section 177 to maintain identical standards and consistent programs. Since the GHG provisions affect light and medium duty vehicles, New York must adopt such standards in order to remain identical.

Another alternative available would be to require reductions of GHG emissions from stationary sources. New York has already begun to address stationary source GHG reductions through its regional greenhouse gas (RGGI) and renewable portfolio standards (RPS) initiatives. These are being developed in conjunction with the vehicle GHG regulation in an attempt to establish a comprehensive program to reduce GHG emissions from both mobile and stationary sources in New York.

2. Compliance requirements:

There are no specific requirements in the regulation which apply exclusively to small businesses or local governments. Reporting, recordkeeping and compliance requirements are effective statewide. Automobile dealers (some of which may be small businesses) selling new cars are required to sell or offer for sale only California certified vehicles. These proposed amendments will not result in any additional reporting requirements to dealerships other than the current requirements to maintain records demonstrating that vehicles are California certified. This documentation is the same documentation already required by the New York State Department of Motor Vehicles for vehicle registration. If local governments are buying new fleet vehicles they should make sure that the vehicles are California certified.

3. Professional services:

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

4. Compliance costs:

California has estimated that in the year 2012 the incremental per vehicle cost for passenger cars/light duty truck1 (PC/LDT1) will be approximately $367, and light duty truck2/medium duty passenger vehicles (LDT2) will be approximately $277. In the year 2016 the incremental per vehicle cost for PC/LDT1 vehicles is estimated to be $1,064, and the incremental cost for LDT2 vehicles is expected to be $1,029. As manufacturing economies of scale and further technological developments are achieved, it is expected that the incremental costs will be reduced. PC/LDT1 consists of vehicles up to 3,750 pounds loaded vehicle weight (LVW), and LDT2 consists of vehicles between 3,751 pounds LVW and 8,500 pounds gross vehicle weight (GVW). Medium duty passenger vehicles (MDPV) up to 10,000 pounds GVW are also included in LDT2.

New York performed a benefit-cost analysis using gasoline price and vehicle miles traveled (VMT) obtained from Mobile6 to estimate the cost effectiveness. The break-even year is the first year in which the overall return from gasoline savings exceeds the initial cost and interest payments of purchasing the new vehicle. The table shown below assumes an average gasoline price of $1.74 per gallon, which is identical to CARB's analysis.

New York State Break-Even Years for Pavley Vehicles Using $1.74 Per Gallon Gasoline

Model Year	Vehicle Group	Break-Even Year	Control Cost ($)	Fuel Savings (%)	Gallons Saved in 10 years	$ Saved in 10 Years
2009	PC/LDT1	2	17	1.3	67	85
2010	PC/LDT1	2	58	4.4	222	277
2011	PC/LDT1	3	230	14.0	646	718
2012	PC/LDT1	2	367	24.9	1048	1174
2013	PC/LDT1	3	504	26.7	1108	1073
2014	PC/LDT1	4	609	28.5	1166	1015
2015	PC/LDT1	5	836	31.2	1250	822
2016	PC/LDT1	6	1064	33.9	1331	622
2009	LDT2	1	36	2.1	192	266
2010	LDT2	1	85	5.5	487	685
2011	LDT2	1	176	11.8	986	1380
2012	LDT2	1	277	18.3	1445	1995
2013	LDT2	2	434	19.6	1531	1909
2014	LDT2	2	581	20.9	1615	1835
2015	LDT2	3	804	22.9	1741	1720
2016	LDT2	4	1029	24.8	1857	1585

Note: Assumes: 1) 5 percent interest and discount rates, compounded annually
2) California control costs, baseline fuel economy, and percent fuel savings
3) Gasoline cost $1.74 per gallon

Uses: 1) New York State miles driven in each year of vehicle life
2) Baseline fuel economy calculated from CARB 2009 model year EMFAC data
3) Control costs from revised Table 6.2-8, Addendum to CARB ISOR, Sep. 2004
4) Percent CO_2 reduction from Table 6.2-2, CARB ISOR, Aug. 2004

The Department also performed a sensitivity analysis using gasoline prices of $2.00 and $1.50 per gallon to estimate cost effectiveness. An increase in the cost of gasoline would serve to increase the cost effectiveness due to reduced vehicle operating costs. The Department's analysis indicates that the regulation would be cost effective even if the average price of gasoline fell to $1.50, which would result in a slightly longer period to break-even as well as a corresponding reduction in overall savings.

New York State currently maintains personnel and equipment to administer the LEV program. It is expected that these personnel will be retained to administer the revisions to this program. Therefore, no additional costs will be incurred by the State of New York for the administration of this program.

5. Minimizing adverse impact:

The climate change regulation may impact several sectors of the economy. The steps that manufacturers need to take to comply with the new regulation are expected to lead to increases in the price of new vehicles. It is expected that the manufacturers will recoup these costs by passing them on to consumers in the form of increased vehicle prices, which occurred with the implementation of the LEV program. For example, it is expected that manufacturers may selectively increase vehicle prices on popular or high-end models to subsidize lower price increases on economy models. Manufacturers also have other options which include changing "standard" equipment packages, increasing prices across their entire product line, incentives, and financing. It is also possible that consumers could regard vehicles equipped with the new technology to be desirable, leading to increased sales despite higher prices.

The technological options that manufacturers choose to comply with the new regulation are also expected to reduce operating costs. These two responses have combined negative and positive impacts on businesses and consumers. The vehicle price increase may negatively affect businesses by possibly reducing demand for their vehicles, while the reduction in operating costs will have a positive impact on consumers and local businesses due to increased disposable income. This increased disposable income would allow consumers to make additional purchases of goods and services, including new vehicles, resulting in an expansion of businesses and employment.

The flexibility of the GHG mandate allows manufacturers to earn early reduction credits, phase-in advanced technology, and utilize a vast array of existing and emerging advanced emission reduction technology. The proposed regulation also provides mechanisms for implementation flexibility which provides clean air benefits from the commercialization of advanced motor vehicle technology, while affording the manufacturer choices over what technology to develop and place into service. These options will provide general long term air quality benefits, as well as a long term GHG program compliance benefit.

Currently, there is no automobile manufacturing in New York. However, when "automotive facilities" are taken into account, such as parts manufacturing and distribution, corporate offices, research and development, automobile dealerships, financial centers, and engineering and design facilities, the employment share of the automotive industry in the state is 3.2 percent, according to the Alliance of Automobile Manufacturers.[1] These affiliated businesses in addition to gasoline service stations are local businesses. They compete within the state and generally are not subject to competition from out-of-state businesses. New York dealerships will be able to sell California certified vehicles to states bordering New York. New York residents will not be able to buy noncomplying vehicles out of state since vehicles must be California certified in order to be registered in New York. Therefore, the proposed regulation is not expected to impose a competitive disadvantage on affiliated businesses, and there would be no change from the current relationship with out-of-state businesses.

The GHG requirements are not expected to have a major cost impact on automobile dealers. Dealerships will experience some cost increases associated with sale and service of vehicles equipped with advanced GHG reduction technology. This is expected due to the fact that in some cases these are technologies that a dealership has not previously handled, and would thus be required to train service personnel to service these vehicles.

The proposed amendments may have a positive impact on New York employment since the new technologies associated with sale and service of vehicles equipped with advanced GHG technology may require hiring or training personnel who are familiar with the products and associated technologies. In some cases these are a technology that a dealership has not previously handled. New marketing strategies will also need to be developed to promote the advantages of driving these cleaner vehicles, including significant air quality benefits, and thus increase sales to consumers. It is also anticipated that the money saved due to reduced operating expenses will trickle into other sectors of the economy, thereby stimulating economic growth.

There will be no adverse impact on local governments who own or operate vehicles in the state because they are subject to the same requirements as those imposed upon privately owned vehicles. In other words, state and local governments will be required to purchase California certified vehicles. Individual consumers, businesses, and governments are likely to experience net savings since the initial cost is more than offset by decreased operating expenses over the life of the vehicle as a result of the regulation.

This regulation contains exemptions for emergency vehicles, and military tactical vehicles and equipment.

6. Small business and local government participation:

The Department plans on holding public hearings at various locations throughout New York State after the amendments are proposed. Small businesses and local governments will have the opportunity to attend these public hearings. Additionally, there will be a public comment period in which interested parties who are unable to attend a public hearing can submit written comments.

7. Economic and technological feasibility:

The proposed regulations are feasible for all vehicle manufacturers. California used 2002 vehicle emissions to establish the baseline emissions for the GHG regulation. The manufacturer with the heaviest average fleet was selected to set the GHG emissions standards. This manufacturer would require the most extensive use of advanced existing and emerging technology to meet the proposed standards. The remaining manufacturers would utilize these technologies to varying degrees to achieve compliance with the proposed standards.

Given the climate change emission program, manufacturers of 2009-2016 model year vehicles can choose the vehicle models to which they wish to apply technology packages, as long as the emissions of the entire product line meet the fleet average requirement. This average requirement declines from 2009 through 2016 model year. It is important to note that in the case of CO_2 tailpipe emissions, there are generally no aftertreatment devices that can be applied to reduce engine out CO_2 emissions. Therefore, there is greater reliance on engine modifications to achieve these reductions.

The proposed amendments may have a positive impact on New York employment since the new technologies associated with sale and service of vehicles equipped with advanced GHG technology may require hiring or training personnel who are familiar with the products and associated technologies. In some cases these are a technology that a dealership has not previously handled. New marketing strategies will also need to be developed to promote the advantages of driving these cleaner vehicles, including significant air quality benefits, and thus increase sales to consumers. It is also anticipated that the money saved due to reduced operating expenses will trickle into other sectors of the economy, thereby stimulating economic growth.

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[1] Alliance of Automobile Manufacturers: The Auto Industry in New York.

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 6 NYCRR Section 200.9, and 6 NYCRR Part 218 low emission vehicle (LEV) program. The changes to the regulations incorporate New York State's adoption of the motor vehicle greenhouse gas (GHG) emission reduction standards adopted by the California Air Resources Board (CARB). There are no requirements in the regulation which apply only to rural areas. These changes apply to vehicles purchased by consumers, businesses, and government agencies in New York. The changes to these regulations may impact businesses involved in manufacturing, selling or purchasing passenger cars or trucks, as well as businesses that distribute gasoline.

The changes are additions to the current LEV standards. The new motor vehicle emission program has been in effect in New York State since model year 1993 for passenger cars as well as light-duty trucks, with the exception of model year 1995, and the Department is unaware of any adverse impact to rural areas as a result. The beneficial GHG emission reductions from the program accrue to all areas of the state.

There are no equivalent federal vehicle GHG standards available as a regulatory alternative. The only regulatory alternative to the proposed climate change amendments to the LEV regulation is to revert back to less stringent federal new motor vehicle emission standards. This is because the Clean Air Act requires states adopting the California programs under section 177 to maintain identical standards and consistent programs. Since the GHG provisions affect light and medium duty vehicles, New York must adopt such standards in order to remain identical.

Another alternative available would be to require reductions of GHG emissions from stationary sources. New York has already begun to address stationary source GHG reductions through its regional greenhouse gas (RGGI) and renewable portfolio standards (RPS) initiatives. These are being developed in conjunction with the vehicle GHG regulation in an attempt to establish a comprehensive program to reduce GHG emissions from both mobile and stationary sources in New York.

2. Reporting, recordkeeping and other compliance requirements; and professional services:

There are no specific requirements in the proposed regulations which apply exclusively to rural areas. Reporting, recordkeeping and compliance requirements apply primarily to vehicle manufacturers, and to a lesser degree to automobile dealerships. Manufacturers reporting requirements mirror the California requirements, and are thus not expected to be burdensome. Dealerships do not have reporting requirements, but must maintain records to demonstrate that vehicles and some engines are California certified. This documentation is the same as documentation already required by the New York State Department of Motor Vehicles for vehicle registration. Professional services are not anticipated to be necessary to comply with the rules.

3. Costs:

California has estimated that in the year 2012 the incremental per vehicle cost for passenger cars/light duty truck1 (PC/LDT1) will be approximately $367, and light duty truck2/medium duty passenger vehicles (LDT2) will be approximately $277. In the year 2016 the incremental per vehicle cost for PC/LDT1 vehicles is estimated to be $1,064, and the incremental cost for LDT2 vehicles is expected to be $1,029. As manufacturing economies of scale and further technological developments are achieved, it is expected that the incremental costs will be reduced. PC/LDT1 consists of vehicles up to 3,750 pounds loaded vehicle weight (LVW), and LDT2 consists of vehicles between 3,751 pounds LVW and 8,500 pounds gross vehicle weight (GVW). Medium duty passenger vehicles (MDPV) up to 10,000 pounds GVW are also included in LDT2.

New York performed a benefit-cost analysis using gasoline price and vehicle miles traveled (VMT) obtained from Mobile6 to estimate the cost effectiveness. The break-even year is the first year in which the overall return from gasoline savings exceeds the initial cost and interest payments of purchasing the new vehicle. The table shown below assumes an average gasoline price of $1.74 per gallon, which is identical to CARB's analysis.

New York State Break-Even Years for Pavley Vehicles Using $1.74 Per Gallon Gasoline

Model Year	Vehicle Group	Break-Even Year	Control Cost ($)	Fuel Savings (%)	Gallons Saved in 10 years	$ Saved in 10 Years
2009	PC/LDT1	2	17	1.3	67	85
2010	PC/LDT1	2	58	4.4	222	277
2011	PC/LDT1	3	230	14.0	646	718
2012	PC/LDT1	2	367	24.9	1048	1174
2013	PC/LDT1	3	504	26.7	1108	1073
2014	PC/LDT1	4	609	28.5	1166	1015
2015	PC/LDT1	5	836	31.2	1250	822
2016	PC/LDT1	6	1064	33.9	1331	622
2009	LDT2	1	36	2.1	192	266
2010	LDT2	1	85	5.5	487	685
2011	LDT2	1	176	11.8	986	1380
2012	LDT2	1	277	18.3	1445	1995
2013	LDT2	2	434	19.6	1531	1909
2014	LDT2	2	581	20.9	1615	1835
2015	LDT2	3	804	22.9	1741	1720
2016	LDT2	4	1029	24.8	1857	1585

Note: Assumes: 1) 5 percent interest and discount rates, compounded annually
2) California control costs, baseline fuel economy, and percent fuel savings
3) Gasoline cost $1.74 per gallon

Uses: 1) New York State miles driven in each year of vehicle life
2) Baseline fuel economy calculated from CARB 2009 model year EMFAC data
3) Control costs from revised Table 6.2-8, Addendum to CARB ISOR, Sept. 2004
4) Percent CO_2 reduction from Table 6.2-2, CARB ISOR, Aug. 2004

The Department also performed a sensitivity analysis using gasoline prices of $2.00 and $1.50 per gallon to estimate cost effectiveness. An increase in the cost of gasoline would serve to increase the cost effectiveness due to reduced vehicle operating costs. The Department's analysis indicates that the regulation would be cost effective even if the average price of gasoline fell to $1.50, which would result in a slightly longer period to break-even as well as a corresponding reduction in overall savings.

4. Minimizing adverse impact:

The changes will not adversely impact rural areas. As a result of the adoption of the GHG emission reduction requirements, rural areas may benefit by seeing an improvement in the air quality. Individual consumers, businesses, and governments are likely to experience net savings since the initial cost is more than offset by decreased operating expenses over the life of the vehicle as a result of the regulation.

5. Rural area participation:

The Department plans on holding public hearings at various locations throughout New York State once the regulation is proposed. Some of these locations will be convenient for persons from rural areas to participate. Additionally, there will be a public comment period in which interested parties who are unable to attend a public hearing can submit written comments.

Job Impact Statement

1. Nature of Impact:

The New York State Department of Environmental Conservation (Department) is proposing to amend 6 NYCRR Section 200.9, and 6 NYCRR Part 218 low emission vehicle (LEV) program. Part 218 is being amended to incorporate vehicle greenhouse gas (GHG) emission reduction standards that are being adopted by the California Air Resources Board (CARB). The amendments to the regulations are not expected to negatively impact jobs and employment opportunities in New York State. New York State has had a new motor vehicle emission standards program in effect since model year 1993 for passenger cars and light-duty trucks, with the exception of model year 1995, and the Department is unaware of any adverse impact to jobs and employment opportunities as a result.

There are no equivalent federal vehicle GHG standards available as a regulatory alternative. The only regulatory alternative to the proposed climate change amendments to the LEV regulation is to revert back to less stringent federal new motor vehicle emission standards. This is because the Clean Air Act requires states adopting the California programs under section 177 to maintain identical standards and consistent programs. Since the GHG provisions affect light and medium duty vehicles, New York must adopt such standards in order to remain identical.

Another alternative available would be to require reductions of GHG emissions from stationary sources. New York has already begun to address stationary source GHG reductions through its regional greenhouse gas (RGGI) and renewable portfolio standards (RPS) initiatives. These are being developed in conjunction with the vehicle GHG regulation in an attempt to establish a comprehensive program to reduce GHG emissions from both mobile and stationary sources in New York.

2. Categories and numbers affected:

The changes to this regulation may impact businesses involved in manufacturing, selling or purchasing passenger cars or trucks. Automobile manufacturers are likely to incur significant costs in order to comply with the regulation. These increased compliance costs are expected to be passed on to consumers in the form of higher vehicle prices. Dealerships may see decreased sales as a result of new vehicle prices. Dealerships will be able to sell California certified vehicles to buyers from states bordering New York. Since vehicles must be California certified in order to be registered in New York, New York residents will not be able to buy non-complying vehicles out of state, but may be able to buy complying vehicles out of state. These businesses compete within the state and generally are not subject to competition from out-of-state businesses. Therefore, the proposed regulation is not expected to impose a competitive disadvantage on affiliated businesses, and there would be no change from the current relationship with out-of-state businesses.

3. Regions of adverse impact:

None.

4. Minimizing adverse impact:

The climate change regulation may impact several sectors of the economy. The steps that manufacturers need to take to comply with the new regulation are expected to lead to increases in the cost of new vehicles. It is expected that the manufacturers will recoup these costs by passing them on to consumers in the form of increased vehicle prices, which occurred with the implementation of other regulatory programs. For example, it is expected that manufacturers may selectively increase vehicle prices on popular or high-end models to subsidize lower price increases on economy models. Manufacturers also have other options which include changing "standard" equipment packages, incentives, and financing. It is also possible that consumers could regard vehicles equipped with the new technology to be desirable, leading to increased sales despite higher prices.

The technological options that manufacturers choose to comply with the new regulation are also expected to reduce operating costs. These two responses have combined negative and positive impacts on businesses and consumers. The vehicle price increase may negatively affect businesses by possibly reducing demand for their vehicles, while the reduction in operating costs will have a positive impact on consumers and local businesses due to increased disposable income. This increased disposable income would allow consumers to make additional purchases of goods and services, including new vehicles, resulting in an expansion of businesses and employment.

The flexibility of the GHG mandate allows manufacturers to earn early reduction credits, phase-in advanced technology, and utilize a vast array of existing and emerging advanced emission reduction technology. The proposed regulation also provides mechanisms for implementation flexibility which provides clean air benefits from the commercialization of advanced motor vehicle technology, while affording the manufacturer choices over what technology to develop and place into service. These options will provide a general long term air quality benefit, as well as a long term GHG program compliance benefit.

Currently, there is no automobile manufacturing in New York. However, when "automotive facilities" are taken into account, such as parts manufacturing and distribution, corporate offices, research and development, automobile dealerships, financial centers, and engineering and design facilities, the employment share of the automotive industry in the state is 3.2 percent, according to the Alliance of Automobile Manufacturers.[1] These affiliated businesses in addition to gasoline service stations are local businesses. They compete within the state and generally are not subject to competition from out-of-state businesses. New York dealerships will be able to sell California certified vehicles to states bordering New York. New York residents will not be able to buy noncomplying vehicles out of state since vehicles must be California certified in order to be registered in

New York. Therefore, the proposed regulation is not expected to impose a competitive disadvantage on affiliated businesses. As stated previously, there would be no change in the competitive relationship with out-of-state businesses.

The GHG requirements are not expected to have a major cost impact on automobile dealers. Dealerships will experience some cost increases associated with sale and service of vehicles equipped with advanced GHG reduction technology. This is expected due to the fact that in some cases these are technologies that a dealership has not previously handled, and would thus be required to train service personnel to service these vehicles.

The proposed amendments may have a positive impact on New York employment since the new technologies associated with sale and service of vehicles equipped with advanced GHG technology may require hiring or training personnel who are familiar with the products and associated technologies. In some cases these are a technology that a dealership has not previously handled. New marketing strategies will also need to be developed to promote the advantages of driving these cleaner vehicles, including significant air quality benefits, and thus increase sales to consumers. It is also anticipated that the money saved due to reduced operating expenses will trickle into other sectors of the economy, thereby stimulating economic growth.

5. Self-employment opportunities:

None that the Department is aware of at this time.

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[1] Alliance of Automobile Manufacturers: The Auto Industry in New York.