6 NYCRR Part 218, Emission Standards for Motor Vehicles and Motor Vehicle Engines

Regulatory Impact Statement Summary

The New York State Department of Environmental Conservation (Department) is amending 6 NYCRR Subpart 200.9, and 6 NYCRR Part 218. The purpose of the rule amendment is to revise the existing Low Emission Vehicle (LEV) program to incorporate modifications that California has made to its vehicle emission control program relating to the Zero Emission Vehicle (ZEV) mandate. New York will also amend the Alternative Compliance Plan option in Part 218 to extend the expiration date of the option and to revise plan flexibilities. Adoption of these modifications is necessary to reduce emissions of air contaminants from new motor vehicles, and will also provide for continuing advancement of motor vehicle emissions control technology.

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 program is to protect the health of New York State residents and its visitors. The revised emissions standards, developed to reduce air pollution from mobile sources, will have a positive impact by decreasing emissions of ozone precursor compounds. Exposure to motor vehicle emissions has caused or has been associated with eye, throat and bronchial irritation, headaches, nausea and lightheadedness. Deterioration in the health condition of those individuals with respiratory ailments may also occur. The primary compounds emitted from vehicle exhaust, and the secondary compounds that may form, can be detrimental to

human health. Several studies have found evidence to support this.

The ZEV revisions: adopt regulations identical to California's; remove all references to fuel economy; modify the 15-year, 150,000-mile Partial ZEV (PZEV) warranty required for hybrid electric vehicles; modify the compliance requirements and options in response to the current state of ZEV technology; and define three fuel cell development stages which start in 2003.

The regulations are also modified to include revisions to the Zero Emission Vehicle (ZEV) mandate which would delay the ZEV percentage requirements until 2007, but allow full use of credits earned prior to that date. For the 2007-2011 transition period, the ZEV obligation is reduced to one-half of the current level, and the remaining half can be met with AT PZEVs or hydrogen infrastructure. In addition, five types of hybrid electric vehicles are defined qualifying for additional allowances or allowances that may be used in the AT PZEV category. The ZEV calculation method has also been amended and five ZEV types are created that are the basis for the ZEV credits. Type III ZEVs placed in any state that is administering the California ZEV program (for example, New York State) pursuant to section 177 of the federal Clean Air Act count towards California's ZEV requirement, with the effect that the ZEV requirements of any section 177 state allow the counting of Type III ZEVs placed in California or other section 177 states.

New York includes in the ZEV program an Alternative Compliance Plan (ACP). The ACP is a voluntary alternative by which the State seeks to ramp up to the full level of the ZEV mandate utilizing a broad range of extremely clean, durable, advanced technology vehicles. The warranty provisions associated with PZEVs will benefit consumers, and prevent emission control systems degradation. The flexibility of the ACP allows for manufacturers to design an alternative compliance plan 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. Under the ACP, manufacturers notify the Department of their intent to be governed by the ACP. The ACP requires manufacturers to meet a 10 percent ZEV level, based on a credit mechanism specified in the ACP. In addition, the ACP includes early introduction and phase in credit multipliers, which decline until the program fully matches up with the California program. The ACP requires that vehicles sold or leased in California must be available for purchase or lease in New York, and that manufacturers must identify in their proposed ACP how such vehicles will be marketed. The ACP allows manufacturers to generate up to 25 percent of their credits from infrastructure and transportation projects provided such projects are identified in their approved ACP. Credits can be applied to the vehicle category (PZEV, AT PZEV, or ZEV) which the project affects. The ACP includes specific reporting requirements, both in terms of forecasting as well as progress reports. The ACP commences with model year 2005, and ends with the end of the 2008 model year.

California has projected that the incremental cost of PZEVs relative to SULEVs is likely to be less than $100 as vehicles are optimized in the next few years. The additional cost would cover some improvement in components should manufacturers design for less than a 150,000 mile life currently, and an additional $10 for zero evaporative emission control system upgrades. Similarly, California projects that the incremental cost for an AT PZEV is $1,500 in 2007-2008, $1,200 in 2009-2011 and $700 in 2012 and beyond. For Battery EVs, it is estimated that the incremental cost for full function EVs is $17,000 from 2007-2012, and City EVs have an incremental cost of $8,000 from 2007-2012. Regarding Fuel Cell EVs, the incremental costs are estimated to be $300,000 in 2007-2008, $120,000 in 2009-2011 and $9,300 in 2012 to 2020. As manufacturing economies of scale and further technological developments are achieved, it is expected that the incremental costs will be reduced.

Businesses involved in manufacturing, selling, or purchasing passenger cars or trucks could be affected by

the regulations. However, these are not expected to impact automobile manufacturers significantly since manufacturers are already required to certify vehicles to standards appropriate for each state's requirements. The ZEV 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 PZEVs and AT PZEVs, since in some cases these are a technology that a dealership has not previously handled, and is thus required to train service personnel to service these vehicles.

The amendments may have a positive impact on New York employment since the new technologies associated with sale and service of PZEVs and AT PZEVs, 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.

The changes to the LEV regulations also result in no significant changes in paperwork requirements for dealers. While dealers must assure that the vehicles they sell are California certified, most manufacturers include provisions in their ordering mechanisms to ensure that only California certified vehicles are shipped to New York State dealers.

The flexibility of the changes to the ZEV mandate such as allowing manufacturers to bank credits, allowing the production of AT PZEVs or hydrogen infrastructure to meet part of the ZEV obligation, allowing the development of fuel cell stages, and increasing the AT PZEV allowances for advanced componentry gaseous fuel or hydrogen fuel storage systems, zero emission range and low fuel-cycle emissions will allow manufacturers to design an alternative compliance plan 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 long term air quality benefit, as well as a long term ZEV program compliance benefit.

Many aspects of New York LEV regulations are more stringent than their federal counterpart. Examples include the zero-emission vehicle program. Because of this, adoption of all the Tier 2 standards would provide fewer emission benefits. The federal programs do not include a specific ZEV program. Thus, acceptance of the federal program could deprive New York of some or all of the advanced technology and air quality benefits associated with the ZEV program.

This regulatory amendment will take effect immediately and the ZEV mandate is effective in model year 2007. The New York ACP is a voluntary element of this regulation, and includes required actions in model year 2005.