



# **DRAFT FOR PUBLIC HEARING**

## **Revision to Connecticut's State Implementation Plan**

### **Annual PM<sub>2.5</sub> Attainment Demonstration Technical Support Document**

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**CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION**

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## Acronyms and Abbreviations

AIM	Architectural and Industrial Maintenance
ASM 2525	Accelerated Simulation Mode Vehicle Emissions Test (25 mph/25% Load)
ATV	All Terrain Vehicle
BOTW	Beyond on the Way
BTU	British Thermal Unit
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CAIR	Clean Air Interstate Rule
CALEV2	California Low Emission Vehicle Program – Phase 2
CARB	California Air Resources Board
CEEF	Connecticut Energy Efficiency Fund
CFR	Code of Federal Regulations
CI	Compression Ignition
CMAQ	Congestion Mitigation and Air Quality
CMAQ	EPA's Models-3/Community Multi-scale Air Quality Modeling System
CNG	Compressed Natural Gas
COPD	Chronic Obstructive Pulmonary Disease
CT	Connecticut
CTDEP	Connecticut Department of Environmental Protection
CTDOT	Connecticut Department of Transportation
DOC	Diesel Oxidation Catalyst
DPF	Diesel Particulate Filter
DV	Design Value
DV <sub>B</sub>	Baseline Measured Concentration
DV <sub>F</sub>	Estimated Future Design Value
ECMB	Energy Conservation Management Board
EE	Energy Efficiency
EGU	Electric Generating Unit
EPA	Environmental Protection Agency
FCM	Forward Capacity Market
FHWA	Federal Highway Administration
FMVCP	Federal Motor Vehicle Control Program
FR	Federal Register
FRM	Federal Reference Method
FTA	Federal Transit Administration
FY	Fiscal Year
GVWR	Gross Vehicle Weight Rating
HAP	Hazardous Air Pollutant
HC	Hydrocarbon
HEDD	High Electrical Demand Day
HOV	High-Occupancy Vehicle
hp	Horsepower
ICAO	United Nations International Civil Aviation Organization
ICI	Industrial/Commercial/Institutional

## Acronyms and Abbreviations (continued)

I/M	Inspection and Maintenance
IMPROVE	Interagency Monitoring of Protected Visual Environments
ISO-NE	Independent Systems Operator – New England
lbs	Pounds
kg	Kilograms
KW	Kilowatt
LAER	Lowest Achievable Emission Rate
LEEDS	Leadership in Environmental Design Silver
LEV	Low Emission Vehicle
MACT	Maximum Available Control Technology
MANE-VU	Mid-Atlantic/Northeast Visibility Union
MARAMA	Mid-Atlantic Regional Air Management Association
MARPOL	International Convention for the Prevention of Pollution from Ships
MAT	Modeled Attainment Test
MD	Maryland
MFB	Mean Fractional Bias
MFGE	Mean Fractional Gross Error
MM5	Mesoscale Meteorological Model
MMBtu	Million British Thermal Units
MNGE	Mean Normalized Gross Error
MNB	Mean Normalized Bias
MOU	Memorandum of Understanding
MOBILE6 or MOBILE6.2	EPA's On-Road Mobile Source Emissions Estimation Model
MPO	Metropolitan Planning Organization
MVEB	Motor Vehicle Emission Budgets
MW	Megawatt
MWh	Megawatt Hour
MWC	Municipal Waste Combustor
NAAQS	National Ambient Air Quality Standards
NEI	National Emissions Inventory
NESCAUM	Northeast States for Coordinated Air Use Management
NH <sub>3</sub>	Ammonia
NJ	New Jersey
NJDEP	New Jersey Department of Environmental Protection
NLEV	National Low Emission Vehicle Program
NO	Nitrogen Oxide
NO <sub>2</sub>	Nitrogen Dioxide
NO <sub>x</sub>	Oxides of Nitrogen
NONROAD or NONROAD2005	EPA's Non-Road Emissions Estimation Model
NSR	New Source Review
NY	New York
NYC	New York City
NYSDEC	New York State Department of Environmental Conservation

## Acronyms and Abbreviations (continued)

OBD-II	On-Board Diagnostics – Phase 2
OC	Organic Carbon
OEM	Original Equipment Manufacturer
ORVR	Onboard Refueling Vapor Recovery
OTB	On The Books
OTC	Ozone Transport Commission
OTR	Ozone Transport Region
PEI	Periodic Emission Inventory
PFC	Portable Fuel Container
PL	Public Law
PM <sub>2.5</sub>	Fine Particulate Matter (particles with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers)
PM <sub>10</sub>	Particles with an aerodynamic diameter less than or equal to a nominal 10 micrometers
ppb	Parts per billion
ppm	Parts per million
PSU/NCAR	Pennsylvania State University/National Center for Atmospheric Research
PV	Pressure Vacuum
RACM	Reasonably Available Control Measure
RACT	Reasonably Available Control Technology
RCSA	Regulations of Connecticut State Agencies
RE	Rule Effectiveness
RFG	Reformulated Gasoline
RFP	Reasonable Further Progress
RMSE	Root Mean Square Error
ROP	Rate of Progress
RPO	Regional Planning Organization
RRF	Relative Response Factor
RRF	Resource Recovery Facility
RVP	Reid Vapor Pressure
SAFETEA	Safe, Accountable, Flexibility, Efficient Transportation Equity Act of 2003
SAFETEA- LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act, A Legacy for Users
SCAQMD	South Coast Air Management Quality District
SI	Spark Ignition
SIP	State Implementation Plan
SLAMS/	State & Local Air Monitoring System and
NAMS	National Air Monitoring System
SMOKE	Sparse Matrix Operator Kernel Emissions
SO <sub>2</sub>	Sulfur Dioxide
SO <sub>4</sub>	Sulfate
SOA	Secondary Organic Aerosol
STIP	Statewide Transportation Improvement Program
STN	Speciation Trends Network
SUV	Sport Utility Vehicle

## **Acronyms and Abbreviations (continued)**

TBD	To be determined
TCM	Transportation Control Measure
TEA-21	Transportation Equity Act for the 21 <sup>st</sup> Century
TIP	Transportation Improvement Program
TNMOG	Total Non-Methane Organic Carbon
tpd	Tons per day
tpy	Tons per year
TSD	Technical Support Document
ULSD	Ultra-Low Sulfur Diesel
UMD	University of Maryland at College Park
USCA	United States Code Annotated
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
VA	Virginia
VADEQ	Virginia Department of Environmental Quality
VISTAS	Visibility Improvement State and Tribal Association of the Southeast
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
WOE	Weight-of-Evidence