
The Benefits and Costs of the Clean Air Act, 1970 to 1990

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*by
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Acronyms and Abbreviations

µeq/L	microequivalents per liter
µg/m ³	micrograms per cubic meter
µg	micrograms
µm	micrometers, also referred to as microns
ACCACAPERS	SAB Advisory Council on Clean Air Compliance Analysis Physical Effects Review Subcommittee
AGSIM	AGricultural SIMulation Model
AIRS	EPA Aerometric Information Retrieval System
Al ³⁺	aluminum
ANC	acid neutralizing capacity
ANL	Argonne National Laboratories
APPI	Argonne Power Plant Inventory
AQCR	Air Quality Control Region
ARGUS	Argonne Utility Simulation Model
ASI	Acid Stress Index
ATERIS	Air Toxic Exposure and Risk Information System
ATLAS	Aggregate Timberland Assessment System
AUSM	Advanced Utility Simulation Model
BEA	Bureau of Economic Analysis
b _{ext}	total light extinction
BG/ED	Block Group / Enumeration District
BI	atherothrombotic brain infarction
BID	Background Information Document
BP	blood pressure
BTU	British Thermal Unit
c.i.	confidence interval
CA	cerebrovascular accident
CAA	Clean Air Act
CAAA90	Clean Air Act Amendments of 1990
CAPMS	EPA's Criteria Air Pollutant Modeling System
CARB	California Air Resources Board
CASAC	SAB Clean Air Scientific Advisory Committee
CDC	Centers for Disease Control (now CDCP, Centers for Disease Control and Prevention)
CERL	EPA/ORD Corvallis Environmental Research Laboratory (old name; see NERL)
CEUM	ICF Coal and Electric Utility Model
CHD	coronary heart disease
CIPP	changes in production processes
CO	carbon monoxide
CO ₂	carbon dioxide
COH	coefficient of haze
COHb	blood level of carboxyhemoglobin
COPD	chronic obstructive pulmonary disease
Council	SAB Advisory Council on Clean Air Compliance Analysis
CPUE	catch per unit effort

CR	concentration-response
CRESS	Commercial and Residential Simulation System model
CSTM	Coal Supply and Transportation Model
CTG	Control Techniques Guidelines
CV	contingent valuation
CVM	contingent valuation method
D.C.	District of Columbia
DBP	diastolic blood pressure
DDE	dichlorodiphenyldichloroethylene
DDT	dichlorodiphenyltrichloroethane
DFEV ₁	decrement of forced expiratory volume (in one second)
dL	deciliter
DOC	Department of Commerce
DOE	Department of Energy
DOI	Department of Interior
DRI	Data Resources Incorporated
dV	DeciView Haze Index
DVSAM	Disaggregate Vehicle Stock Allocation Model
EC	extinction coefficient
EDB	ethylene dibromide
EDC	ethylene dichloride
EFI	Electronic Fuel Injection
EI	Electronic Ignition
EIA	Energy Information Administration
EKMA	Empirical Kinetics Modeling Approach
ELI	Environmental Law Institute
EOL	end-of-line
EPA	Environmental Protection Agency
EPRI	Electric Power Research Institute
ESEERCO	Empire State Electric Energy Research Corporation
ESP	electrostatic precipitator
FERC	Federal Energy Regulatory Commission
FEV ₁	forced expiratory volume (in one second)
FGD	flue gas desulfurization
FHWA	Federal Highway Administration
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FIP	Federal Information Processing System
FR	Federal Register
FRP	Forest Response Program
GDP	gross domestic product
GEMS	Graphical Exposure Modeling System
GM	geometric mean
GNP	Gross National Product
GSD	geometric standard deviation
H ₂ SO ₄	sulfuric acid
ha	hectares
HAP	Hazardous Air Pollutant
HAPEM-MS	Hazardous Air Pollutant Exposure Model - Mobile Source
HNO ₃	nitric acid
hp	horsepower
HTCM	Hedonic Travel-Cost Model
ICARUS	Investigation of Costs and Reliability in Utility Systems

ICD-9	International Classification of Diseases, Ninth Version (1975 Revision)
ICE	Industrial Combustion Emissions model
IEc	Industrial Economics, Incorporated
IEUBK	EPA's Integrated Exposure Uptake Biokinetic model
IMS	Integrated Model Set
IPF	iterative proportional fitting
IQ	intelligence quotient
ISCLT	Industrial Source Complex Long Term air quality model
J/W	Jorgenson / Wilcoxon
kg	kilograms
km	kilometers
lbs	pounds
LRI	lower respiratory illness
m/s	meters per second
m	meters
m ³	cubic meters
Mm	megameters
MMBTU	million BTU
MOBILE5a	EPA's mobile source emission factor model
mpg	miles per gallon
MRAD	minor restricted activity day
MSCET	Month and State Current Emission Trends
MTD	metric tons per day
MVATS	EPA's Motor Vehicle-Related Air Toxics Study
MVMA	Motor Vehicle Manufacturers Association
Mwe	megawatt equivalent
N	nitrogen
NA	not available
NAAQS	National Ambient Air Quality Standard
NAPAP	National Acid Precipitation Assessment Program
NARSTO	North American Research Strategy for Tropospheric Ozone
NATICH	National Air Toxics Information Clearinghouse
NCLAN	National Crop Loss Assessment Network
NEA	National Energy Accounts
NERA	National Economic Research Associates
NERC	North American Electric Reliability Council
NERL	EPA/ORD National Exposure Research Laboratory (new name for CERL)
NESHAP	National Emission Standard for Hazardous Air Pollutants
NHANES	First National Health and Nutrition Examination Survey
NHANES II	Second National Health and Nutrition Examination Survey
NIPA	National Income and Product Accounts
NMOCs	nonmethane organic compounds
NO	nitric oxide
NO ₂	nitrogen dioxide
NO ₃ ⁻	nitrate ion
NO _x	nitrogen oxides
NPTS	Nationwide Personal Transportation Survey
NSPS	New Source Performance Standards
NSWS	National Surface Water Survey
O&M	operating and maintenance
O ₃	ozone

OAQPS	EPA/OAR Office of Air Quality Planning and Standards
OAR	EPA Office of Air and Radiation
OMS	EPA/OAR Office of Mobile Sources
OPAR	EPA/OAR Office of Policy Analysis and Review
OPPE	EPA Office of Policy Planning and Evaluation
ORD	EPA Office of Research and Development
OZIPM4	Ozone Isopleth Plotting with Optional Mechanism-IV
PACE	Pollution Abatement Costs and Expenditures survey
PAN	peroxyacetyl nitrate
PAPE	Pollution Abatement Plant and Equipment survey
Pb	lead
PbB	blood lead level
PCB	polychlorinated biphenyl
PES	Pacific Environmental Services
pH	the logarithm of the reciprocal of hydrogen ion concentration, a measure of acidity
PIC	product of incomplete combustion
PM ₁₀	particulates less than or equal to 10 microns in aerometric diameter
PM _{2.5}	particulates less than or equal to 2.5 microns in aerometric diameter
POP	population
Pop _{mild}	exposed population of exercising mild asthmatics
Pop _{mod}	exposed population of exercising moderate asthmatics
ppb	parts per billion
PPH	people per household
pphm	parts per hundred million
ppm	parts per million
PPRG	Pooling Project Research Group
PRYL	percentage relative yield loss
PURHAPS	PURchased Heat And Power
PVC	polyvinyl chloride
r ²	statistical correlation coefficient, squared
RAD	restricted activity day
RADM	Regional Acid Deposition Model
RADM/EM	RADM Engineering Model
RAMC	Resource Allocation and Mine Costing model
RfD	reference dose
RIA	Regulatory Impact Analysis
ROM	Regional Oxidant Model
RRAD	respiratory restricted activity day
RUM	Random Utility Model
s.e.	standard error
SAB	Science Advisory Board
SAI	Systems Applications International
SAQM	SARMAP Air Quality Model
SARA	Superfund Amendment Reauthorization Act
SARMAP	SJVAQS/AUSPEX Regional Modeling Adaptation Project
SCC	Source Classification Code
SEDS	State Energy Data System
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SJVAQS	San Joaquin Valley Air Quality Study
SMSA	Standard Metropolitan Statistical Area

SO ₂	sulfur dioxide
SO ₄ ²⁻	sulfate ion
SOS/T	State of Science and Technology (refers to a series of NAPAP reports)
SRaw	Specific Airway Resistance
STAR	Stability Array weather database
TAMM90	Timber Assessment Market Model (revised version)
TEEMS	Transportation Energy and Emissions Modeling System
TIUS	Truck Inventory and Use Surveys
TRI	Toxic Release Inventory
TSP	total suspended particulate
U.S.	United States
UAM	Urban Airshed Model
URI	upper respiratory illness
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
VC	vinyl chloride
VMT	vehicle miles traveled
VOC	volatile organic compounds
VOP	Vehicle Ownership Projection
VR	visual range
W126	index of peak weighted average of cumulative ozone concentrations
WLD	Work Loss Day
WTP	willingness to pay

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