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FINAL DRAFT

The National Ambient Air Monitoring Strategy

Office of Air Quality Planning and Standards
Research Triangle Park, NC
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LIST OF ACRONYMS AND TERMS

AIRMON – Atmospheric Integrated Research Monitoring Network

ALAPCO – Association of Local Air Pollution Control Officials

AMTIC – Air Monitoring Technology Information Center

APTI – Air Pollution Training Institute

AQI – Air Quality Index

AQS – Air Quality (data) System

BAM – Beta Attenuation Monitor

CAA – (Federal) Clean Air Act

CAC – Correlating Acceptable Continuous (monitor)

CASAC – Clean Air Science Advisory Committee

CASTNET – Clean Air Status and Trends Network

CBSA – Core Based Statistical Area

CENR – Committee for Environment and Natural Resources

CEU – Continuing Education Unit

CFR – Code of Federal Regulations

CMAQ – Community Model Air Quality (system)

CO – Carbon Monoxide

CRPAQS – Central Valley (California) Regional Particulate Air Quality Study

CSI – Clear Skies Initiative

CV – Coefficient of Variance

CY – Calendar Year

DC – Direct Current

DMC – Data Management Center

DOE – Department of Energy

DQA – Data Quality Assessment

DQI – Data Quality Indicator

DQO – Data Quality Objective

EC – Elemental Carbon

EPA – Environmental Protection Agency

ESAT – Environmental Services Assistance Team

FEM – Federal Equivalent Method

FLM – Federal Land Managers

FRM – Federal Reference Method

FY – Fiscal Year

GAO – General Accounting Office

GC – Gas Chromatograph

GIS – Geographical Information System

HAPS – Hazardous Air Pollutants

HEI – Health Effects Institute

IACET – International Association for Continuing Education and Training

IADN – Interagency Deposition Network

IC – Ion Chromatography

IMPROVE – Interagency Monitoring of Protected Visual Environments

ITEP – Institute of Tribal Environmental Professionals

ITT – Information Transfer Technology

K – thousand

M – million

LIST OF ACRONYMS AND TERMS

MANE-VU – Mid-Atlantic/Northeast Visibility Union

MDN – Mercury Deposition Network

NAAQS – National Ambient Air Quality Standards

NAMS – National Air Monitoring Stations

NAPAP – National Acid Precipitation Assessment Program

NARSTO – North American Research Strategy for Tropospheric Ozone

NAS – National Academy of Science

NASA – National Aeronautics and Space Agency

NATTS – National Air Toxics Trends Sites

NAU – Northern Arizona University

NCore – The National Core Monitoring Network

NMHC – Non-Methane Hydrocarbons

NMSC – National Monitoring Strategy (or Steering) Committee

NO – Nitric Oxide

NO₂ – Nitrogen Dioxide

NOAA – National Oceanic and Atmospheric Administration

NO_x – Oxides of Nitrogen

NO_y – Reactive Nitrogen Compounds

NPEP – National Performance Evaluation Program

NPS – National Parks Service

NTN – National Trends Network

O₃ – Ozone

OAP – Office of Atmospheric Programs

OAQPS – Office of Air Quality Planning and Standards

OC – Organic Carbon

ORD – Office of Research and Development

ORIA – Office of Radiation and Indoor Air

PAMS – Photochemical Assessment Measurement Stations

Pb – Lead

PBMS – Performance Based Measurement System

PE – Performance Evaluation

PEP – Performance Evaluation Program

PM – Particulate Matter

PM₁₀ – Particulate Matter with aerodynamic diameter less than 10 micrometers

PM_{2.5} – Particulate Matter with aerodynamic diameter less than 2.5 micrometers

PM_c or PM_{coarse} – PM₁₀ minus PM_{2.5}

ppb – parts per billion

QA – Quality Assurance

QAPP – Quality Assurance Program Plan

QC – Quality Control

QMP – Quality Management Plan

RADM – Regional Acid Deposition Model

REM – Regional Equivalent Monitor

RO – EPA Regional Office

ROM – Regional Oxidant Model

RPO – Regional Planning Organization

RTP – Research Triangle Park (North Carolina)

S & T – Science and Technology

SAMWG – Standing Air Monitoring Working Group

LIST OF ACRONYMS AND TERMS

SIP – State Implementation Plan

SLAMS – State and Local Air Monitoring Stations

SLTs – State and Local Agencies and Tribes

SO₂ – Sulfur Dioxide

SOP – Standard Operating Procedure

SPM – Special Purpose Monitor

SRP – Standard Reference Photometer

SS – Supersite

STAG – State and Tribal Air Grant

STAPPA – State and Territorial Air Pollution
Program Administrators

Strategy – The National Air Monitoring Strategy

SVOC – Semi-Volatile Organic Compound

TAMS – Tribal Air Monitoring Support (Center)

TAR – Tribal Authority Rule

TBD – To Be Determined

TEOM – Tapered Element Oscillation Monitor

TNMOC – Total Non-Methane Organic Compound

TSA – Technical Systems Audits

TSP – Total Suspended Particulates

USB – Universal Serial Bus

VOC – Volatile Organic Compound

XML – Extensible Markup Language

Preface

This document is the final report for the National Ambient Air Monitoring Strategy (Strategy), and replaces the draft version, dated September 2002. (That version, available at <http://www.epa.gov/ttn/amtic> included a summary document and a more comprehensive document.) This final report is written largely as an extended summary, intended to address comments received from the Clean Air Scientific Advisory Committee (CASAC) review (December, 2003), and from state and local agencies, tribes, and the public. It is further intended to outline an implementation strategy for network change.

Although this document contains 12 sections, it can be considered as three different parts. The first part (Sections 1-3) contains background material and specifies the objectives for the Strategy. The second part (Sections 4-9) contains each of the six components of the Strategy: NCore, network assessments, needed technology, quality assurance, regulation changes, and communications and outreach. The third part (Sections 10-12) contains important follow-on considerations, including tribal participation, the all-important implementation plan, and some still-outstanding issues.

It is intended that this Final Strategy Document will serve as the guide for implementing the Strategy, beginning in 2004, and continuing over the next several years. It is envisioned that supplements to this document may be developed over time as conditions evolve through the implementation process.