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INHALABLE PARTICULATE NETWORK REPORT:
OPERATION AND DATA SUMMARY (MASS CONCENTRATIONS ONLY)

Vol. I

APRIL 1979 - DECEMBER 1982

by

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FOREWORD

Measurement and monitoring research efforts are designed to anticipate potential environmental problems, to support regulatory actions by developing an in-depth understanding of the processes that impact health and the ecology, to provide innovative means of monitoring compliance with regulations, and to evaluate the effectiveness of health and environmental protection efforts through the monitoring of long-term trends. In support of these objectives, the Environmental Monitoring Systems Laboratory (EMSL), Research Triangle Park, North Carolina, has the responsibility for: assessment of environmental monitoring technology and systems; implementation of agency-wide quality assurance programs for air pollution measurement systems; and supplying technical support to other groups in the Agency including the Office of Air, Noise and Radiation, the Office of Toxic Substances and the Office of Enforcement.

In order to meet the 1977 Clean Air Act requirement for a reappraisal of the National Ambient Air Quality Standard for particulate matter, EMSL, RTP in conjunction with the U.S. Environmental Protection Agency's Office of Air Quality Planning and Standards, designed and implemented a nationwide monitoring network to obtain the necessary data on which to base a proposed revision of the particulate matter standard and to obtain data on inhalable particulates. This document details network operations and summarizes data gathered during routine operation of the 157 site Inhalable Particulate (IP) Network since its beginning in April 1979 and continuing through December 1982.

Initially, the Network was designed to obtain data on particulates with particle size less than or equal to 15 microns mean aerodynamic diameter. In 1981, as a result of public comment, recommendations by the International Standards Organization (ISO) Task Group and recommendations by the EPA Science Advisory Board, emphasis was shifted from 0-15 μm to 0-10 μm aerodynamic diameter size fraction. As of this publication 0-15 μm data collection has been completed, 0-10 μm data collection is continuing. Upon receipt of one year's data from each 0-10 μm site, the responsibility for IP data collection will shift from EMSL, RTP to the respective Region. All EMSL IP sites are scheduled for deactivation by the end of 1984.

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ABSTRACT

This report is intended to serve as an operations overview and data summary covering the operation of the 157 Inhalable Particulate (IP) Network sites within the United States. Volume I discusses the scope of the Network and instrumentation utilized in the Network. Data (mass only) are traced from measurement through processing and storage to routine reporting. Quality assurance practices are also given. Data summaries are provided. Volume II is a list of individual data upon which Volume I is based.

Analyses, conclusions, and examples, either listed or indicated by reference, should provide the reader with both suggested uses and possible limitations of the data. Chemical analysis of the collected particulate (sulfate, nitrate, and selected metals) is a part of IP Network objectives but those data will be the subject of a separate report.

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SECTION 1

INTRODUCTION

1.1 Background

The 1977 Clean Air Act Amendment requires a reappraisal of the National ambient air quality standard for particulate matter. In order to meet this requirement, information regarding both Total Suspended Particulate (TSP) and smaller particles was required. Research into the health effects of particles suspended in ambient air increasingly focused on the smaller particles. Smaller particles not only penetrate deeper into the human lung, but they are also more difficult for the body to remove, thus body retention time and clearance routes are sufficiently long to increase the probability of damage. These smaller particles are generally referred to as inhalable. Figure 1 illustrates that although particles up to 200 μm are inhaled, those particles above 20-25 μm are retained in the extrathoracic region (mouth, nose, etc.) and do not reach the deep lung.

A further reason to examine the smaller particles is indicated from the bimodal distribution of the large and small particles as found in ambient air (Figure 2). Naturally occurring dust particles of greater than 10-15 μm diameter are collected by the standard High Volume Sampler (Hi-Vol). These particles, therefore, add to the mass collected and together with man-made particles may create TSP concentrations which exceed the current TSP standard of 75 $\mu\text{g}/\text{m}^3$ annual geometric mean. In 1978 over 400 areas in the United States did not meet the TSP standard -- possibly because of mass contributed by naturally occurring particles.

Thus, for two reasons, EPA perceived a need to obtain data on smaller particles. They are: (1) physiological studies have shown that the human lung collects an appreciable percentage of particles at and below 15 μm mean aerodynamic diameter with extremely small particles (2 to 3 μm) reaching the gas exchange area of the lung¹. The deposition efficiency versus particle size is given in Figure 2 for the alveolar region of the human lung. (2) the Hi-Vol collects particles above 15 μm such as naturally occurring dust².

EPA's Environmental Monitoring Systems Laboratory (EMSL), Research Triangle Park, N.C. in conjunction with EPA's Office of Air Quality Planning and Standards was given the responsibility of providing ambient air data for the small particle size range. The exact value for the upper limit, however, was and still remains, controversial. Therefore, data from both the original 0-15 μm samplers and the subsequent 0-10 μm samplers are included. In 1977-78 when the Inhalable Particulate (IP) Network was being planned, the major monitoring emphasis was on collection devices which could provide measurements

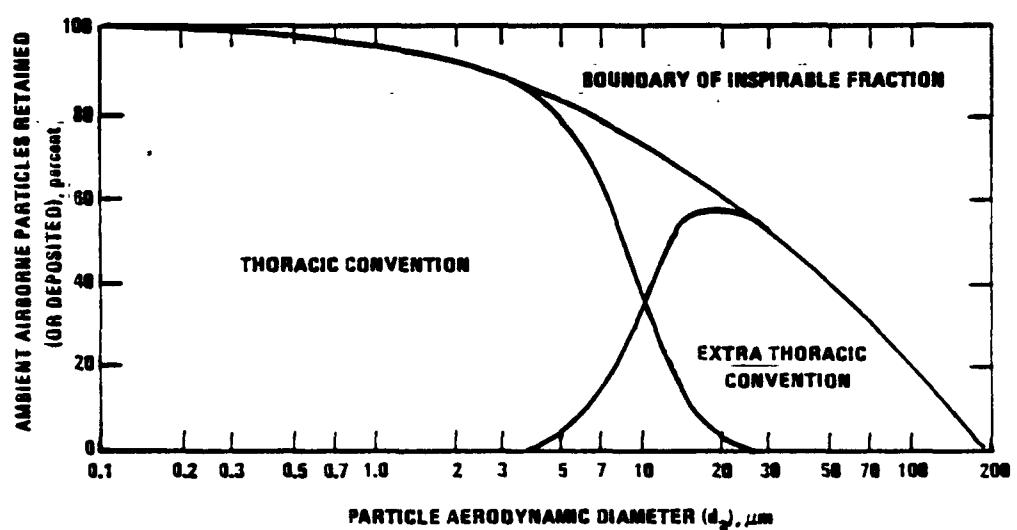


Figure 1. Thoracic/extrathoracic retention vs. particle size distribution. (From Lippman, Morton: Size Selective Health Hazard Sampling, Chapter H; Air Sampling Instruments for Evaluation of Atmospheric Contaminants, 6th Ed., ACGIH, pg. H-13, 1983).

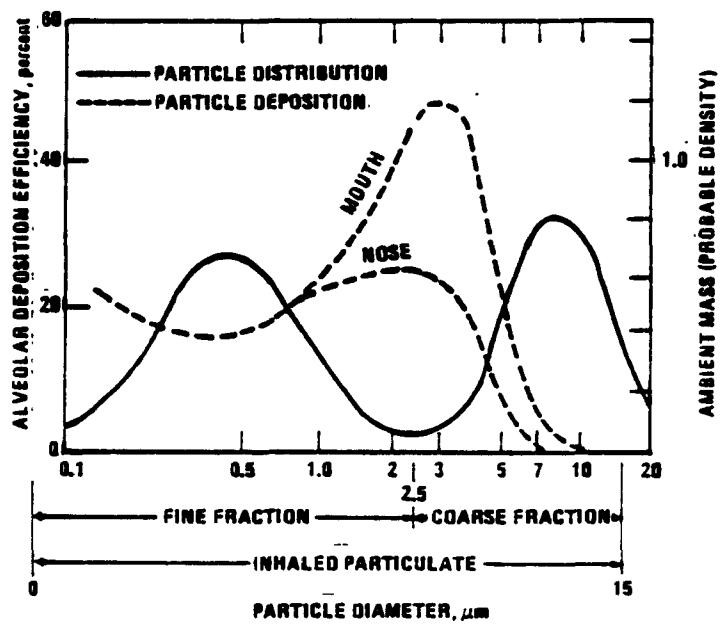


Figure 2. Typical ambient aerosol size distribution and particle respiratory system deposition. (Rodes, C.E., Inhalable Particulate Network, Overview of Network Operations, Environmental Monitoring Systems Laboratory, Research Triangle Park, NC, unpublished, June 10, 1979).

of ambient air concentrations attributed to 15 μm (and smaller) particles and 2.5 μm (and smaller) particles. For these reasons instruments using inlets designed by McFarland³ (single cut) and Wedding⁴ (dual-cut) were evaluated and utilized.

In 1981, after reviewing EPA's Clean Air Science Advisory Committee's recommendations¹ and the concurrent International Standards Organization (ISO) Task Group recommendations (specifically, Technical Committee 146-Air Quality⁵), EPA's Office of Air Quality Planning and Standards recommended that the revised particulate matter primary standard for ambient air should be based on a 10 μm size criteria. The fraction below the 10 μm cut, designated by EPA as PM₁₀, was anticipated to replace the existing TSP standard. EMSL, RTP, responded to the 10 μm recommendation by adding to or replacing existing 15 μm equipment with instruments modified to sample 10 μm and smaller particles. Early published reports referred to the Inhalable Particulate Network as IPN. This and subsequent reports use PM₁₅ and PM₁₀ to distinguish between 15 μm and 10 μm samplers or data respectively.

It is important for the reader to understand that PM₁₅ or PM₁₀ data are data collected by a sampler designed to have a cutpoint (D_{50}) at 15 μm or 10 μm mean aerodynamic diameter respectively. Further, D_{50} is defined as the particle size at which the sampler collects 50% of the sample and rejects 50%. Particles whose size (aerodynamic diameter) is below the D_{50} are collected with progressively greater than 50% efficiency. Particles larger than the D_{50} are collected with progressively less than 50% efficiency. Thus, particulate samples classified as PM₁₅ can and do contain particles above 15 μm . This is consistent with the physiology of particle inhalation where a large percentage of, but not all, particles larger than 15 μm are trapped in the oral/nasal air passages and thereby prevented from entering the human lung. The U.S. definition of "inhalable" is used throughout this report. The U.S. definition is equivalent to the European "thoracic particulate" definition^{7,8}.

1.2 Purpose of Report

The purpose of this report is to describe the IP Network and its operation, and to summarize the mass concentration data obtained from 1979 through 1982. This volume (Volume I) describes and summarizes the data available from both PM₁₅ and PM₁₀ sampling. Appendix A is a univariate analysis of data by pollutant. This analysis groups all data from all sites regardless of location or sample date. Its usefulness is the large sample size. Mean, standard deviation, frequency distributions, maximum, and minimum are given. Appendix B is a frequency distribution with mean, standard deviation, maximum and minimum but for each specific sampling site. This analysis provides more detail for a specific site. Appendix C provides some of the preceding information but also includes sample collection start and stop dates and provides a "paired-data" ratio of IP-to-TSP. PM₁₅ concentrations are obtained from the 15 μm dichotomous sampler total mass concentration (dichotomous sampler operation is explained in Section 3.2.2.4). PM₁₀ concentrations are similarly obtained from 10 μm dichotomous sampler. "Ratio 15" is the paired PM₁₅ concentration divided by TSP mass obtained from the High Volume Sampler. Similarly "Ratio 10" is PM₁₀ divided by TSP. Volume II is a computer printout of all individual validated data upon which Volume I is based.

Data collection began in April 1979 and continues as of this writing, although the latest data provided in this report is December, 1982. By providing sampling procedures, quality assurance flow check audit procedures, data handling procedures, data acceptance/validation procedures, sampler precision estimates, etc. the reader should better understand how to utilize these data in his own specific analyses. A conscious effort was made to limit data analyses to only those areas where data summary would aid in data explanation. Represented in this report are 525 equivalent sampler-years of data (i.e., one sampler operated one year). Beginning in 1979, 57 PM₁₅ sites were started and some are still in operation today. Others were started and quickly stopped due to loss of the site (re-roofing the building, sale of property, loss of operator, etc.). Equipment problems caused the invalidation of a substantial amount of data, especially those problems associated with instrument malfunction and with improper assembly by the manufacturer of the dichotomous sampler impactor assembly (A.E. Bond, EMSL/EPA, personal communication, May, 1982).

In reviewing the data, one can follow the evolution of the PM₁₅ Network starting in 1979 with 57 sites; growing eventually to 157 sites; converting to PM₁₀ in 1982; and shrinking to 63 sites in 1983; further decreasing to 20 sites in 1984 with termination scheduled in 1985. Figure 3 gives the geographical location of all 157 sites. A list of sites is provided in Appendix D.

Although the network was developed and managed by EMSL/RTP, actual sampling was conducted by approximately 1,000 State, county, or local agency on-site personnel. For the most part this sampling effort was undertaken in addition to local agency responsibility, thus local personnel and budget cuts had a direct impact on data collection. The reader, therefore, will notice that data are missing in some areas. Where appropriate we have given reasons. These "reasons" are not intended to be either excuses or apologies, but rather to document that missing data were a consequence of operational constraints rather than deletion on the basis of subjective or judgemental interpretation of the data. Furthermore, if a datum value passed all validation procedures but the value was unusually high or low, the value was still retained even though it would become an outlier under almost any statistical analysis.

A secondary purpose of this report is to provide all individual validated PM₁₅ and PM₁₀ mass concentration data through December 1982. These data are listed in Inhalable Particulate Network Report: Data Listing (Mass Concentrations Only) Vol. II April 1979-December 1982. (Direct computer access of these data are available via public file "TRRIPMN.PUBLIC,DISP=OLD". Contact EMSL for detailed instructions and record format.)

Related documents dealing with earlier portions of the data base have already been published (e.g., (1) "Inhalable Particulate Network Annual Report: Operation and Data Summary (Mass Concentrations Only) April 1979 - June 1980" by J.C. Suggs, C.E. Rodes, E.G. Evans, and R.E. Baumgardner, EPA-600/4-81-037, May, 1981. (2) "Analysis of Inhalable and Fine Particulate Matter Measurements" by J.G. Watson, J.C. Chow, and J.J. Shah, EPA-450/4-81-035, December, 1981. (3) "The Measurement Process: Precision, Accuracy, and Validation" by J.G. Watson, P.J. Lioy, and P.W. Mueller, in Air Sampling

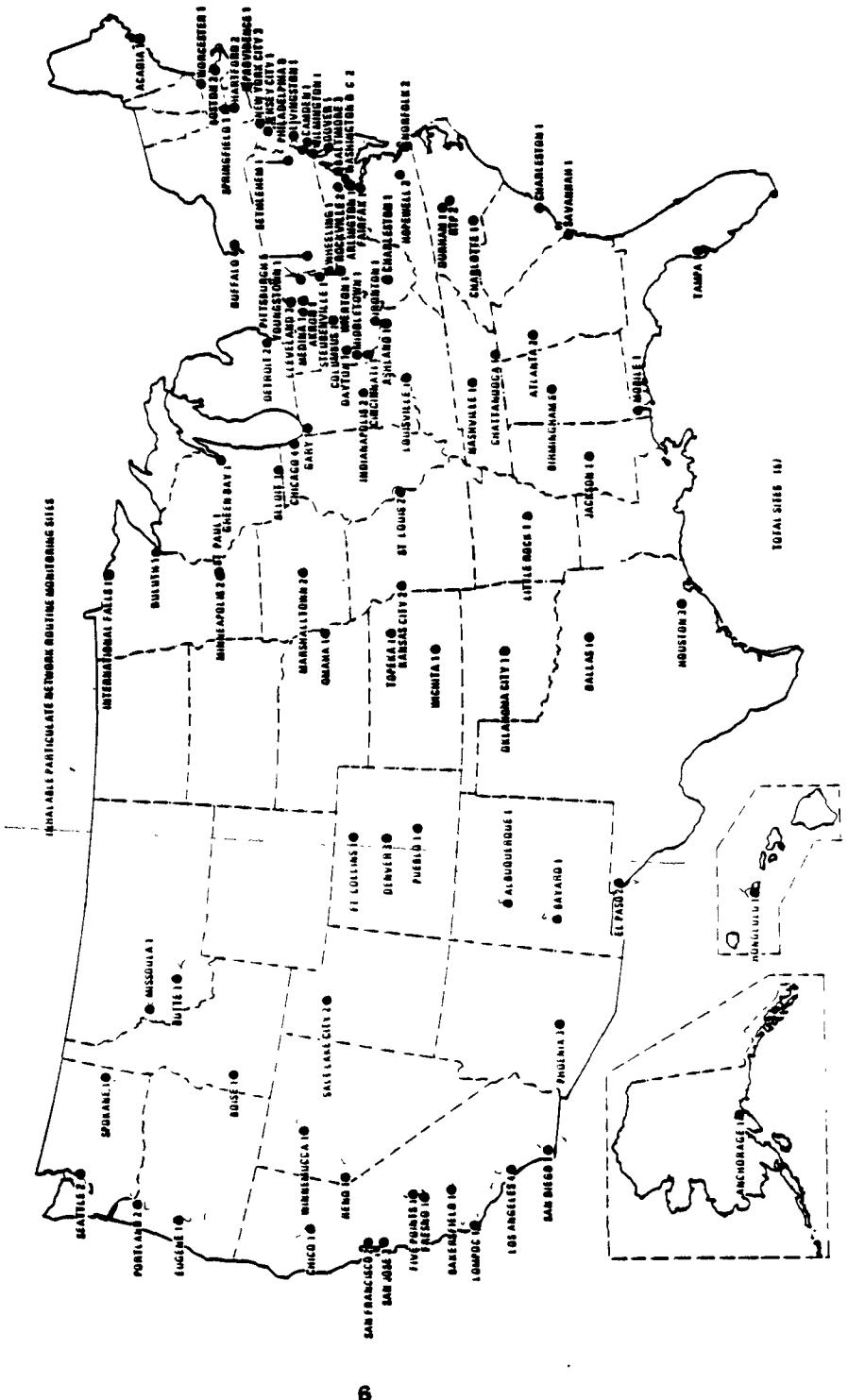


Figure 3. IP sites (PM₁₀ and PM₁₅) operated during 1979 - 1982.

Instruments for Evaluation of Atmospheric Contaminants, 6th Edition, Chapter L, American Conference of Governmental Industrial Hygienists, Cincinnati, Ohio, 1983. (4) "Estimating PM₁₀ Concentrations from IP and TSP data", by T.G. Pace, APCA 82-45.2 proceedings of 75th Annual APCA Meeting, Philadelphia, PA, June, 1982. (5) "Characterizing Ratios of Particulate Concentrations: A Preliminary Step in Assessing Likely Attainment Status under a PM₁₀ NAAQS", by Anthony D. Thrall, SAI, April, 1983. (6) "Potential Causes of Elevated PM₁₀ and PM₁₅ Concentrations in the IP Network", J.C. Watson, Draft Report*, Desert Research Institute, 1983. (7) "Analysis of Particulate Matter Concentrations and Visibility in the Eastern U.S.", by John Trijoinis, Santa Fe Research Corp., EPA-450/4-84-008, August, 1983. (8) "Spatial Characteristics of Inhalable Particles in the Philadelphia Metropolitan Area", by Jack C. Suggs and R.M. Burton, JPCAAC 33(7)637-726 (1983), July, 1983. (9) "Preliminary Assessment of the PM₁₀ Data from Eight Locations in the United States", by C.E. Rodes, and E.G. Evans, Draft Report*, EPA, 1984). The above documents deal with various subsets of the data presented herein, therefore, conclusions based on the data subset may be either strengthened or weakened when one includes the complete data set.

*Reports in draft stage are generally not available until finalized.

SECTION 2

SUMMARY AND CONCLUSIONS

Data from the EMSL, RTP Inhalable Particulate Network is presented herein. Individual values for TSP Hi-Vol; PM₁₅ Dichotomous Coarse, Fine, and Total; and PM₁₅ SSS mass are presented. Ratios of Dichotomous Total-to-TSP Hi-Vol, and SSS-to-TSP Hi-Vol are summarized for PM₁₅ mass. Similar data are presented for PM₁₀ sampling but on a smaller number of samples. (More PM₁₀ samples will become available as PM₁₀ sampling continues throughout 1984).

Quality Control and Quality Assurance procedures and results are presented and used to estimate sampling accuracy by examining sample flow rate, weighing accuracy, etc. Overall sampling accuracy is difficult to determine directly because the measurement requires the production of accurately known concentrations of particulate matter of a wide variety of sizes. For a more detailed explanation of sampling accuracy and potential error sources the reader is referred to Air Quality Criteria for Particulate Matter and Sulfur Oxides, Volume II, U.S. EPA, ORD, Environmental Criteria and Assessment Office, Research Triangle Park, N.C., EPA-600/8-82-0296, December, 1982. Particulate matter is discussed in referenced Chapters 2 and 3. A summary is given in referenced Section 3.3.7.

Data precision is discussed using paired data obtained from collocated instrument sampling. The signed percent difference of the two measurements (expressed as R) was obtained by dividing the difference between the data pair by the average of the two measurements and multiplying by 100. Student's t statistic was used to test the Null Hypothesis that R = 0 (i.e., that the relative bias is zero over each data set).

The value of t was statistically significant at the 5% level for one or more sites within each sampling class (Hi-Vol, SSS, Dichot₁₅) meaning that the differences between paired instruments is probably real.¹⁵ Conversely at least one site within each class was not significant at the 5% level. Overall there is substantial variability but little bias across the entire collocated data set.

The general contention that suspended particulates are a complex mixture of large and small particles, both naturally occurring and man made, is supported by the absence of a simple, consistent ratio of IP to TSP. If the IP were a simple fraction of TSP, a consistent ratio would be expected and estimates of IP from past TSP would have been possible. That this is not the case and that IP is a complex fraction of TSP is supported both by the referenced publications in Section 1.2 and by the data presented herein.

The authors do not infer that for a specific site, a consistent ratio of IP-to-TSP is impossible. If a given site is influenced by particulates originating from a specific source, then the inhalable fraction may possibly be a consistent sub-set of TSP. For instance, if Dichot₁₅ Total and TSP concentrations are paired, one can investigate the ratio of PM₁₅-to-TSP. An example when IP is a consistent subset of TSP is Lompoc, CA (054080002) where 77 samples were compared (Appendix C, page 8). The minimum ratio was 40% (.4) with a maximum at 93%. The mean was 56% with a standard deviation of the ratios of 9%. For a different site, the ratio-of-means would be different.

The ratio-of-means for PM₁₅-to-TSP varies from 32% in St. Paul, MN (243300003) (Appendix C, page 27) to 127% in Philadelphia, PA (397140032) (Appendix C, page 46). The ratio-of-means for PM₁₀-to-TSP varies from 30% in Steubenville, OH (366420012) (Appendix C, page 40) to 191% in Boise, ID (130220003) (Appendix C, page 16).

There are examples where the individual sample-pairs (and multiple sample means) are extreme e.g. Dichot₁₅ Total-to-TSP = 2.93 (293%) in Eugene, OR (380560013) (Appendix C, page 42) and Dichot₁₀-Total-to-TSP = 6.35 (635%) in Boise, ID (130220003) (Appendix C, page 16). These extremes are based on real validated measurements, yet they violate the basic principle that Inhalable Particulates are, in fact, a subset of Total Suspended Particulates.

There are several potential explanations for these extremes:

- (1) ONE OR BOTH DATA VALUES ARE IN ERROR. This is a possible explanation. The data were not removed, however, because they passed the validation criteria. Further, a determination of which value to remove was not possible. To have removed both would have been a subjective decision applied only to the extreme values.
- (2) THE ACTUAL PARTICULATE CONCENTRATION PRESENTED TO EACH INSTRUMENT VARIED SUBSTANTIALLY. This violates the presumption that the particulate is well mixed and homogenous in the microenvironment.
- (3) THE INSTRUMENTS DO NOT MEASURE THE EXPECTED SIZE RANGE OF PARTICULATES. To some degree this is supported due to the orientation and wind speed dependence of the TSP Hi-Vol as reported by McFarland and Rodes⁹.

Perhaps these extreme ratios emphasize the requirement for careful, statistical analysis of IP data prior to using the data for decision making purposes. Certainly, at any given site, a ratio of IP-to-TSP is mathematically possible but the actual value is dependent upon which (if any) outliers are identified as flawed and not used in the computations. Further experience with the operation of these samplers and with the interpretation of the resulting data will be needed to resolve the questions raised and to expand upon the conclusions that can be drawn.

SECTION 3

NETWORK DESIGN

3.1 Rationale

In 1978, the data from the Inhalable Particulate Network were anticipated to be used primarily to assist in a revision of the existing Total Suspended Particulate Standard to a standard based on the specific particle size range of 15 μm mean aerodynamic diameter and below, and to a lesser degree to provide information on the possible sources of the particles for subsequent control strategy implementation. To accomplish this, establishment of a nationwide network of 200 air monitoring sites over a three-year period was planned. However, due to resource constraints, only 157 sites were placed on line.

The following specific Network objectives and design criteria were provided by the Office of Air Quality Planning and Standards (OAQPS): (a) conduct a pilot program to demonstrate that the monitoring technology was adequate to proceed (technology to make routine size-specific aerosol measurements had only recently become commercially available), (b) provide monitoring support to on-going epidemiology studies wherever possible, (c) provide background data for non-urban and rural sites, (d) monitor fugitive dust locations, (e) select urban sites with priorities primarily for population density and non-attainment of the current TSP standard, (f) at all sites, measure the mass concentration of TSP and IP, (g) at selected sites, measure the fine and coarse components of IP (i.e., PM_{15}), and (h) provide for a limited component analysis scheme beyond mass concentration to further characterize the data base. Later a final objective was added: (i) incorporate PM_{10} technology into the network for data collection in the 0-10 μm size range.

OAQPS specified the candidate cities. With OAQPS approval, EMSL and/or an EMSL contractor made the specific site selection within the city, based on desired site classification (Commercial, Residential, Industrial, Rural, etc.) and specific site availability.

All of the objectives and constraints were combined into a protocol of network operations, which was prepared prior to network implementation. This protocol¹⁰ included the various aspects of network design and setup, sample collection, analyses, quality assurance, maintenance, and data processing and analyses. All operations except the actual collection of samples would be provided by EPA. Manpower was to be provided by State and local agency personnel to implement the operation of the sampling equipment. Because of the limited manpower available within EPA, contractor support was also planned. A Quality Assurance program was planned and budgeted at 5-10% of resources.

3.2 Network Operations

3.2.2 Site Selection

Although each sampling site location was physically evaluated against the siting criteria given in the Inhalable Particulate Network Operations and Quality Assurance Manual¹¹, March, 1983, administratively the selection process was quite variable. Land owner permission, local agency approval, Regional Office concurrence, OAQPS recommendations/concurrence all had to occur in order for a specific site to begin and continue sample/data collection. Further, since more than 1000 people were eventually involved directly in the data gathering activities, their performance, interest, and assistance directly affected the amount and quality of data collected. Equally important was the staffing level at EMSL. As the program grew, PM₁₅ Size Selective Samplers (SSS)* and PM₁₀ Dichotomous Samplers were added. Because any large network has delays and false starts, one can find specific instances where EMSL did not provide prompt response to a field problem. Similarly, one finds examples where field problems were not communicated to EMSL for corrective action. The point to be made is not that problems occurred, but that overall, in spite of the diverse demands on time, personnel, and resources, EMSL received excellent cooperation from local, State, and Regional personnel. This cooperation resulted in data collection from 525 sampler-years from 157 sites in the geographical locations as shown in Figure 3. Appendix D gives the SAROAD number, Region, State, Site Name, Instrument Complement, Type, Location, Land use, and Elevation for each site.

All sites provide routine TSP data from a Hi-Volume sampler and PM₁₅ data from either an SSS or Dichotomous Sampler. In addition to routine PM₁₅ and PM₁₀ sampling requirements, EMSL utilized selected sites for intercomparison of instruments. At various times a given site became one or more of the following:

1. Comparison Site: In addition to the instrument complement of a PM₁₅ and a TSP HiVol for routine sampling, some of the initial sites were provided with additional PM₁₅ instruments. These special sites provided data for comparison of SSS-to-Dichotomous, etc. Eventually 128 sites had both SSS and Dichotomous 15 instruments. These are identified in Appendix D.
2. Collocated Site: A site containing duplicate instruments of the same type and usually by the same manufacturer. Duplicates include Dichotomous PM₁₅ to Dichotomous PM₁₅, TSP-to-TSP, SSS₁₅-to-SSS₁₅, Dichotomous PM₁₀ to Dichotomous PM₁₀. The following sites were utilized for collocated data collection:

*In previous publications and in some data listings the Size Selective Sampler is referred to as Size Selective Inlet (SSI). See Section 3.2.2.3 for description of SSS.

SAROAD #	STATE	SITE	TSP-to-TSP	SSS-to-SSS	DICHOT-to-DICHOT
010380023	AL	N.Birmingham	X	X	X
030600002	AZ	N. Phoenix		X	
061260001	CO	Lakewood		X	X
222160011	MA	Springfield			X
222640016	MA	Worcester			X
330660010	NY	Buffalo (PS 28)			X
333520001	NY	Buffalo (Wilmuth Pump)		X	
341160006	NC	Durham	X	X	X
366420012	OH	Steubenville			X
397140003	PA	Phila. (Broad)	X	X	X
397140037	PA	Phila. (U. Temple)			X
491840057	WA	Seattle (Duwamish)			X

3. **Key Site:** An existing PM₁₅ site which was augmented with a PM₁₀ monitor. The objective for a key site is to provide data for both PM₁₅ and PM₁₀. The nine sites designated as key sites are listed below:

SAROAD #	STATE	SITE	TYPE
010380023	AL	N. Birmingham (S.20th)	Center City, Industrial
030600002	AZ	Phoenix (Roosevelt St.)	Center City, Commercial
056535001	CA	Rubidoux (Mission Blvd)	Rural, Commercial
330660010	NY	Buffalo (PS 28)	Center City, Industrial
341160006	NC	Durham (Cameo)	Center City, Industrial
366420012	OH	Steubenville (Wash'ton)	Center City, Residential
396620001	PA	Pittsburgh (N.Braddock)	Suburban, Industrial
397140003	PA	Philadelphia(500 S.Broad)	Center City, Commercial
452560034	TX	Houston (CAMS-1)	Suburban, Industrial

Site considerations based on type (as shown above) range from expected low particulate levels in "Rural" land usage to expected high levels in "Center City". Appendix D gives land usage by Type for all 157 sites.

3.2.2 Instrument Selection

3.2.2.1 Introduction

There were two original requirements for the IP Network. The first requirement was to collect PM₁₅ data at all sites. The second was to collect a sample year of comparison data for both TSP and PM₁₅ to establish an IP/TSP relationship. Later the PM₁₅ requirement was extended to include PM₁₀, therefore, equipment modifications were made and sampling dates were extended.

In early 1978, when the IP Network was being planned, a recently developed dichotomous sampler was available and was incorporated into the network. This sampler (described in more detail in Section 3.2.2.4) provided two particle size fractions. The larger size fraction (Coarse) included particles from 2.5 to 15 μm mean aerodynamic diameter. The smaller

size fraction (Fine) included particles below 2.5 μm . When added together, the Fine and Coarse fractions give a "Total" inhalable concentration in the 0-15 μm range (PM_{15}). Typical size distributions of the Fine and Coarse fractions are given in Figure 2. While the small fraction, "Fine", is not a requirement for defining an Inhalable Particulate Standard per se, it is useful in determining the origin of particulates.

The dichotomous sampler was therefore selected as the initial PM_{15} sampler because of availability and dual size range fractions. It was (and is) suitable for providing IP concentrations and, when paired with the standard Hi-Vol, IP/TSP relationships can be developed. The dichotomous sampler is more complex than the Hi-Vol and the two sample fractions (Coarse and Fine) require twice the sample handling, weighing, calculation, etc. as the Hi-Vol. Alternate samplers were therefore investigated. One PM_{15} sampler, the Size-Selective Sampler (SSS), was developed as a modification to a standard Hi-Vol and tested at 50 of the first field sites. This modified Hi-Vol sampler is identical to the TSP hi-vol except that the gable roof is replaced with a special inlet and the filter faceplate is removed. The SSS was developed as a mono-cut sampler offering ease of operation, single sample, large sample size, and associated cost savings.

3.2.2.2 TSP Hi-Vol Sampler

The TSP high-volume (Hi-Vol) sampler (General Metals Model 2310-105 or equivalent¹²) used in the IP Network was equipped with a mass flow controller, electromechanical elapsed time meter and flow recording device. (See Figure 4.) The nominal operating flowrate is 1.42 m / min (50 cfm). The filter medium was micro-quartz in 1979 and glass fiber from 1980 through 1982.

3.2.2.3 SSS Hi-Vol Sampler

The 15 micron Size-Selective Sampler is a TSP Hi-Vol as described previously, equipped with a special inlet instead of the standard gable roof to collect 0-15 micron (aerodynamic diameter) particulate. (See Figure 5.) This inlet was designed by Dr. A. E. McFarland of Texas A&M University and is currently available commercially. The nominal operating flowrate is 1.13 m / min (40 cfm). The only significant changes from the TSP Hi-Vol (other than the inlet) are the elimination of the faceplate and hold-down screws, which are replaced by a spring clamp mechanism. Filter media were the same as used on TSP Hi-Vol above.

3.2.2.4 Manual Dichotomous Sampler (PM_{15})

The dichotomous sampler is a low flowrate 16.7 L/min (.59 CFM) sampler which splits the air stream passing through the 15 micron inlet into two separately filtered portions. It is often referred to as a "virtual" impactor since the particle size separation is accomplished by pseudo-impaction into an air stream of differing velocity, rather than onto an impaction surface. The PM_{15} dichotomous samplers cut the 0 to 15 micron total sample into 0 to 2.5 micron FINE and 2.5 to 15 micron COARSE fractions which are collected on separate 37 mm (diameter) Teflon[®] filters. The FINE and COARSE concentrations are determined gravimetrically and are combined

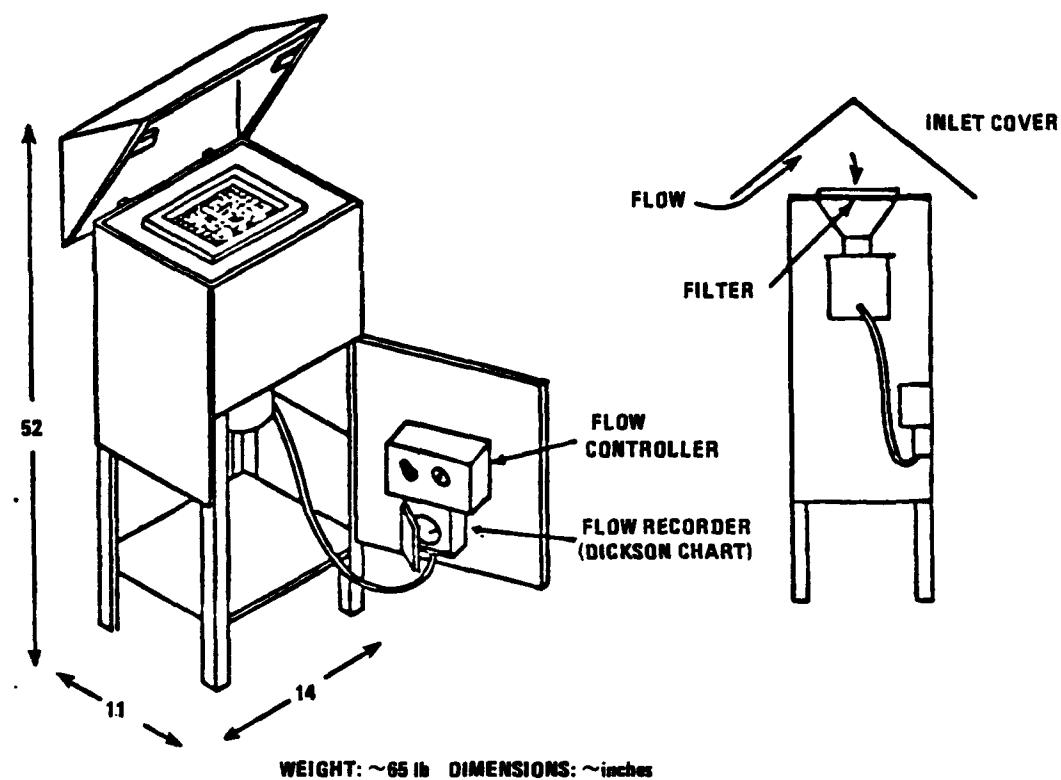


Figure 4. TSP high volume sampler used in IP network.

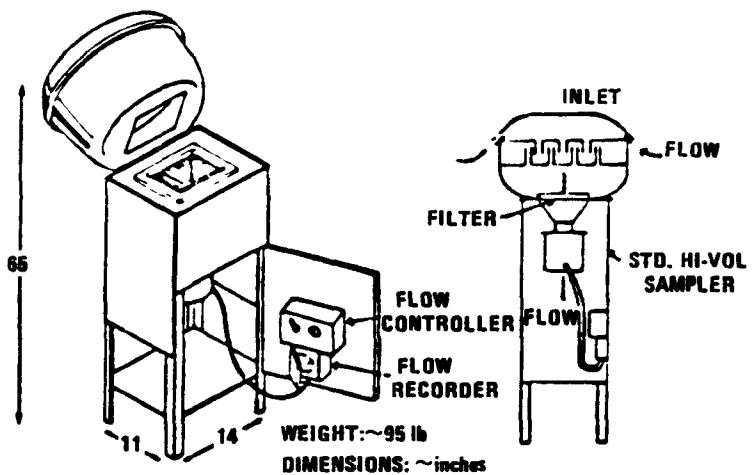


Figure 5. SSS high volume sampler used in IP network (0 - 15 μm cut).

mathematically to give the TOTAL IP fraction. The Sierra Model 244 and Sierra Model 244E were the two models of manual dichotomous samplers used in the IP network in 1979.

Both Sierra Model 244 and 244E Manual Dichotomous Sampler consist of two modules, the sampling module and the flow control module. In the Model 244, the flow module is equipped with a flow controller, digital timer/programmer and elapsed time indicator. The sampler module consists of the sample inlet, "virtual impaction" chamber, two 37 mm filter holders, vacuum lines, and tripod support. The 37 mm diameter Teflon[®] filters are shipped from the lab in nylon cassettes for ease of loading and removal by the operator from the sampler module. The filters remain in these cassettes during sampling and shipment.

The Sierra Model 244E sampler became the predominant Dichotomous Sampler used in later years. The Model 244E is the same basic sampler as the Model 244 with the exceptions that the flow module has a mechanical 7-day timer, and modifications have been made to the flow system to aid in rotameter flow calibration. A diagram of the Sierra Model 244E dichotomous sampler is shown in Figure 6.

3.2.2.5 Automated Dichotomous Sampler (PM₁₅)

An automated version of a PM₁₅ dichotomous sampler (manufactured by Beckman Instruments) was used initially in the IP Network, but was later replaced with manual samplers because of ease of operation and reliability. This sampler utilizes the same basic virtual impaction system found in the manual dichotomous samplers. The major differences between it and the manual model are multiple samples for a given time period and a built in flow sensor to detect filter overloading.

3.2.2.6 Manual Dichotomous Sampler (PM₁₀)

The information given in Section 2.2.2.4 refers equally to PM₁₀ dichotomous samplers except that the inlet is designed to reject particles above 10 microns. The fractions therefore become 0-2.5 μm and >2.5-10 μm .

3.2.2.7 Site Operation

Each site was equipped with an electro-mechanical timer to turn all samplers, except the automated dichotomous sampler, ON and OFF at the same time. All instruments were set initially to the proper flowrates using their respective flow calibration tables. Except in special cases all samplers were operated every sixth day for 24 hours from midnight to midnight on the same schedule as the National Air Monitoring Stations (NAMS) or State and Local Air Monitoring Stations (SLAMS) samplers. Except for special studies (e.g., Philadelphia), operation was allowed only on the day scheduled. Alternative (make-up) days were not used.

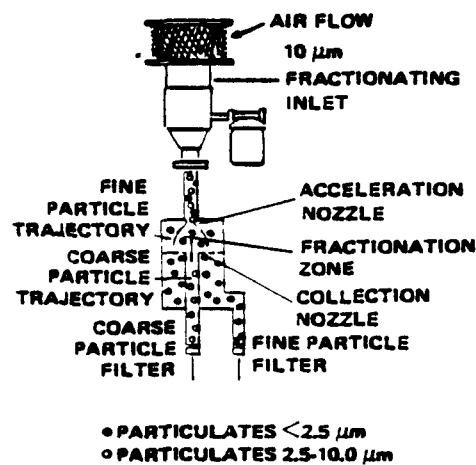
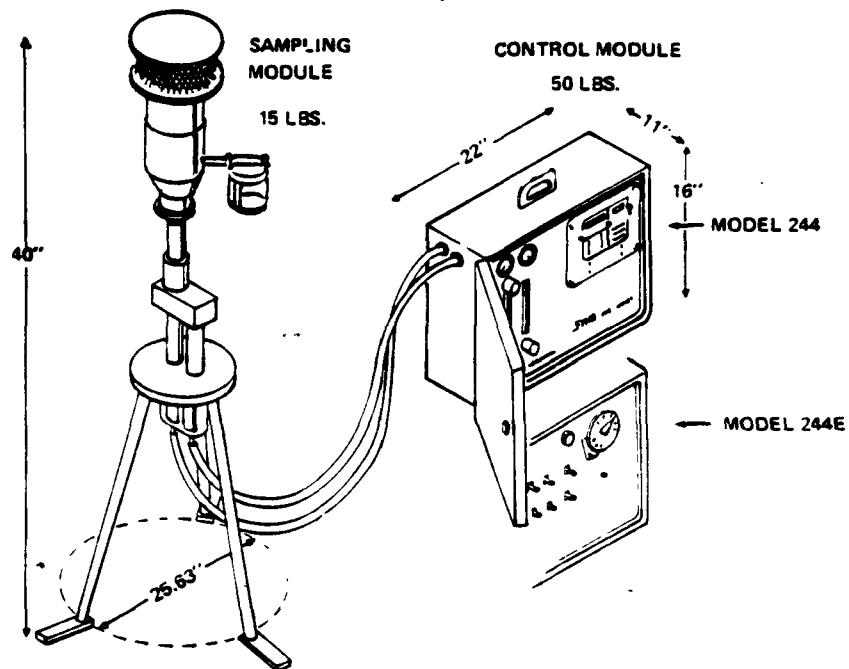


Figure 6. Manual dichotomous sampler used in IP network - Sierra Model 244 and 244E.

3.2.3. Sampling Operations

The mass concentrations provided in this report came from the 157 PM₁₅ and PM₁₀ sites shown on the map in Figure 3. This network includes a variety of sites such as commercial, industrial, and rural sites as indicated in Appendix D.

Data obtained from April 1979 through December 1982 are shown in summary form in Appendix C. Daily values are given in "Vol. II, Inhalable Particulate Network Report: Data Listing (Mass Concentrations Only) April 1979-- December 1982". Samples were collected at each site on an every 6th day schedule and mailed to a central EPA laboratory in the Research Triangle Park for analyses. All samples were analyzed for mass, while every fourth sample was selected for subsequent component analysis (e.g., sulfate, nitrate, selected metals). This report does not include any results except mass concentration. Analytical results will be the subject of a separate report.

Approximately 80 to 85% of the 1500 samples/month were considered valid for mass determination and subsequent component analysis. Of the 15 to 20% invalid samples, about half were caused by reasons such as sampler or power failure. The balance of the invalid samples were voided because of calculational errors, incomplete data, and excessive variability in sampling parameters, or other instrument problems. One major instrument problem was the omission of an internal o-ring by the dichotomous sampler manufacturer. This o-ring is used to provide an airtight seal between the two dichotomous air chambers. This presented an error not detectable by normal calibration or QA procedures and could be discovered only by disassembly of the impactor section. This problem alone accounted for 880 data values being declared void.

3.3 Sample Collection and Validation

Routine network operations began with the RTP contractor laboratory pre-weighing all filters in a controlled environment. The filters were then distributed to network monitoring stations. These filters were used to collect ambient samples from TSP high volume, size selective high volume, and dichotomous samplers every six days according to the NAMS/SLAMS schedule. After collection, the filters were packaged and returned to EMSL's RTP contractor for analyses. The filters and accompanying data cards were checked against criteria¹¹ which help detect sample, sampling, and/or equipment problems. These criteria cover torn filters, gasket leaks, flow leaks, incorrect sampling time, incorrect date sampled, and receipt of sample within six months after sampling. The six months time limit was required and imposed in order to meet validation criteria to complete the data base within one year after sampling.

The filters were then forwarded to the laboratory for final (post-) weighing. After weighing, the filters were either archived or marked for component analyses. The post-weights were recorded, paired with the pre-weights and flow volumes, and appropriate microgram per cubic meter values were calculated. These values were converted to SAROAD¹³ format, and stored in the computer system.

3.4 Data Validation

Preliminary validation listings were produced from the raw data and called OA listings (Operating Agency listings, see Table 1). These preliminary listings were produced for screening of suspect values and distributed to the participating Operating Agencies. The corrected OA listings were used to produce the final validation listings.

Two tests were used to identify unusually high values, low values, and values inconsistent with concurrent pollutant levels for the same site and day. These were the Grubbs¹⁴ test and SAS¹⁵. The statistical outlier test used initially was the Grubbs test. The Grubbs test is based on one or more values being too large or too small when compared to the average and assumes a normal distribution. Using the Grubbs test for sites with less than 10 days of samples, only maximum and minimum values were examined. For sites with 10 to 18 days of samples, the upper two and lower two values were examined. For sites with more than 18 days of samples, the highest 3 and lowest 3 days were examined as possible outliers. Any value determined to be any outlier by the Grubbs test was flagged and included in the printout of the individual results (OA listing). Potential outliers are not necessarily incorrect values, but values which require closer scrutiny before being included in the valid data set. These "flagged" values or outliers, therefore, were not removed from the data set unless a specific reason was identified which would cause invalidation of the data value.

Because IP is a fraction of TSP, the ratios of IP to TSP were thought useful for validation purposes. The ratios SSS-to-TSP (SSS/TSP), Dichotomous Sampler Total-to-TSP (Total/TSP), Dichotomous Sampler Total-to-SSS (Total/SSS), and Dichotomous Coarse-to-Dichotomous Fine (Coarse/Fine) ratios were used. The acceptance ranges used to screen sampling data are shown in Table 2 and were based on previous sampling experience prior to implementation of the Network. Reliance on strictly statistical tests such as the Grubbs test along with predetermined acceptance ranges was abandoned in favor of flagging and investigating extreme values for each data set. This was accomplished with the aid of SAS¹⁵ software. Table 3 is an example of a univariate statistical summary provided by SAS and used for flagging potentially invalid data. If the flagged data were not invalidated because of documented instrument malfunction, calculation error, operator error, flow rate out of tolerance, improper sample date or time, torn or damaged filter, weighing error, and/or improper sample identification, they were accepted as valid. Further, mass concentrations are reported as calculated with no adjustment for the small and variable errors associated with sulfate and nitrate artifact formation on glass fiber, quartz, and teflon filters.⁶

TABLE 1. EXAMPLE OA LISTING

Inhalable Particulate Network
Environmental Protection Agency

*** Not Validated ***

Virginia
APC Division of Health Department

LOCATION/SITE SITE & ADDRESS	TIME CODE	START HOUR	DATE	TOTAL	FINE	COARSE
Fairfax/482630001 A07 Great Falls, 925 Springvale Rd.						
MASS	7	00	80/09/06	49.9	37.7	12.2
MASS	7	00	80/10/12	14.9*	6.8*	8.1
MASS	7	00	80/10/24	22.3	9.8*	12.5
MASS	7	00	80/11/05	17.4	9.9*	7.5
MASS	7	00	80/11/17	19.8	16.5	3.3*R
MASS	7	00	80/11/29	10.6*	8.2*	2.4*R

* = Value out of limits

R = Ratio out of limits

TABLE 2. SAMPLING PARAMETERS AND CONCENTRATION RANGES USED TO SCREEN PARTICULATE DATA FOR FURTHER EXAMINATION

<u>Sample Type</u>	<u>Sampling Rate</u>		
	<u>Low</u>	<u>High</u>	<u>Range [M³/min] ($\pm 20\%$)</u>
Hi-Vol	1.13	1.70	1.42
SSI	1.02	1.24	1.13
Dichot-Coarse	.0015	.0019	.0017
Dichot-Fine	.0135	.0165	.0150
<u>Minutes Sampled</u>			
All "24-hr" samples	<u>Range [minutes] (± 1 hr)</u>		
	<u>Low</u>	<u>High</u>	<u>Expected</u>
All "24-hr" samples	1380	1500	1440
<u>Concentrations for Further Examination</u>			
	<u>Range [$\mu\text{g}/\text{m}^3$]</u>		
	<u>Low</u>	<u>High</u>	
Hi-Vol	20	120	
SSI	15	100	
Dichot-Coarse	10	40	
Dichot-Fine	5	60	
Dichot-Total	15	100	
<u>Ratio Ranges Used to Screen Data for Further Examination</u>			
<u>Instrument Ratio</u>	<u>Ratio Limits of Acceptance</u>		
SSI/Hi-Vol TSP	.4 - 1.09		
Dichot(Tot)/Hi-Vol TSP	.4 - 1.09		
Dichot(Tot)/SSI	.8 - 1.20		
Coarse/Fine	.3 - 1.30		

Table 3. TYPICAL S.A.S. ANALYSIS.

ENVIRONMENTAL PROTECTION AGENCY
AVAILABLE PARTICULATE NETWORK
VALIDATED IPN DATA, (JUL 1979-MAR 1983). VALUES IN $\mu\text{g}/\text{m}^3$
23:01 TUESDAY, FEBRUARY 7, 1984 2

UNIVARIATE

MOMENTS		QUANTILES (DEF=4)				EXTREMES	
N		SUM	MEAN	75% MAX	100% MAX	HIGHEST	LOWEST
MEAN	58.5691	58.5691	75.5	75.5	387.2	175.316	0.9137
STD DEV	33.2732	33.2732	110.7	110.7	72.34	121.31	2.86
SKINNEDNESS	1.99372	1.99372	1.107	1.107	50% MED	99.1099	304.4
CV	3.425520	3.425520	1.107015	1.107015	25% Q1	51.78	1.836
T TEST H0	5.0.8117	5.0.8117	0.3552	0.3552	0% MIN	36.635	3.718
STD RANK	155.673	155.673	0.303116	0.303116	RANGE	0.9137	311.5
OPTIONAL	1.4213e-3	1.4213e-3	0.0001	0.0001	Q3-Q1	166.286	3.967
	75.5	75.5	0.0001	0.0001	MIN	35.705	372.2
	0.10917	0.10917	FFCC_D	FFCC_D	MAX	35.53	367.2

MISSING VALUE COUNT % COUNT/VALUES



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SECTION 4

QUALITY ASSURANCE

4.1. Introduction

Usage of the terms "Quality Assurance" and "Quality Control" varies from discipline to discipline. For IP use, Quality Assurance (QA) is defined as the collective efforts utilized to assure that Quality Control (QC) is properly conducted. In general, QC is conducted at the field operator and/or in-house technician level. QA activities verify existing QC efforts and provide or revise QC procedures as necessary.

4.2 Quality Control and It's Relationship to Quality Assurance

Because the QC procedures are either identical or equivalent the following discussion refers equally to TSP, SSS, and Dichotomous PM₁₅ and PM₁₀ samples. The first quality control check on the filter media is a visual inspection (100%) to detect pinholes or other defects. If defective, the filter is discarded. Next the weighing technician weighs the filter (Tare weight) and records the value and filter serial number. For QC purposes, at least 4% of each batch of filters are reweighed by a different weighing technician. The point here is that the operators conducting the work are responsible for QC. An external auditor conducts a weekly, unannounced, QA audit by reviewing the logs and weighing records and selectively reweighing a small subset of the filters prior to their being shipped to the field.

In the field, the Field Operator is responsible for QC. He verifies that the instrument is operating properly by performing sample handling, sampler operation, inspection/maintenance, and calibration as specified in Section II (Instruments Operation and Maintenance) of the IP Quality Assurance Manual¹¹. Each time the operator operates the sampler, he is supposed to visually inspect the sampler for damage, proper operation, leaks, etc. He measures and records the initial sampler flow setting and verifies and records the sample time. Upon completion of the sample run, the Field Operator conducts a final flow check and records both the final flow and final time on the data card.

The operator is required to perform a one point QC calibration flow check after each fourth sample. Flow rate adjustments are made on the basis of this flow check to keep the sampler within tolerance. The sample time, flowrate, and calibration flowrate data are recorded directly upon the data card, therefore, the information is returned to EMSL, RTP with the sample. Further, the data card provides a comments section for the operator to report any unusual observances including equipment malfunction or unusual situations

which may affect data accuracy. Some examples are snow/ice storms, forest fire, or heavy construction which may elevate particulate levels; known instrument malfunctions such as improper sample flow, and power outage which decreased sample run time. Again the field operator "controls" the data quality. He also records and returns sufficient information for a separate verification of his field activities by EMSL, RTP personnel.

Each sample data card is checked, at RTP, by the Data Technician as the sample is logged in. Sample collection time and flowrate must be within specific limits (See Section 3.4) or the data card is diverted for detailed evaluation. Frequently the data card is simply incomplete and the station log sheet provides a source of information for completion. On occasion a telephone call is made to the site/field operator to verify flowrate, start/stop time, sample date, etc. On other occasions procedural errors are discovered and corrected. The data card is also diverted if the Operator's flow check value is out of tolerance (greater than $\pm 10\%$ of desired flow) or if the comments indicate a requirement for investigation. The Field Operator has the authority to declare a sample void if he/she observes an instrument malfunction or other problems. At this point sample/data quality is controlled primarily by the Field Operator and secondarily by the in-house, RTP Data Technician. Data are accepted or rejected on this basis.

Field Quality Assurance consists of an independent flow check audit conducted by an EPA contractor. These audits were scheduled to occur "as soon as possible" after a monitoring site became operational and annually thereafter. In practice the schedule became one of "opportunity". Frequently, the auditor would conduct an initial audit at one site and conduct the second or third audit at a nearby site especially if the nearby site had a new or inexperienced operator. The opposite is also true. Efficient use of travel funds required minimum scheduling of distant sites and if weather, power failure, or specific instrument malfunction prevented the auditor from completing the audit, the opportunity was lost. In fact, some sites were started up and closed down without ever receiving an independent QA audit. It is therefore important for the reader to understand that data acceptance or rejection was not made on the basis of QA audits but on the basis of, site QC and in-house QC activities. The QA audits do show that the QC requirements are effective and were usually correctly applied. In cases where the QA audit results showed discrepancies greater than $\pm 10\%$ limit, the instrument was operating at a low flow rate which would have been detected at the next field operator flow check. Results of the audits are given in Appendix E and are discussed more fully in Section 4.4.3.

Final weighing of the exposed filter and calculation of the mass concentrations have QC requirements similar to the initial weighing requirements discussed previously.

From the outset EMSL has been concerned with Quality Assurance (QA). Paralleling the growth of the IP Network, the QA activities have changed and increased. While these changes are "evolutionary" rather than "revolutionary" they are, nevertheless, very important. Using internal and external calibrations, QC flow checks, and operator training by EPA and contractor personnel, EMSL has continually tried to improve data quality. To accomplish this, twenty-two (22) people at RTP have been involved full or part time in training,

calibration, data verification, and interpretation. Operating procedures have been provided to each operating agency. Over 500 Site Operators have been given specific, detailed instructions by EMSL personnel during the past four years. EMSL's contractor has visited 142 sites for both maintenance, calibration, and training. An example Training Form is given in Tables 4 and 5. The contractor's and EMSL's field calibration activity are discussed in Section 4.3 below. External flow check audits by an external QA contractor are discussed in Section 4.4 below. The Environmental Monitoring Division (EMD) controls both the day-to-day operation and data collection of IP data via field personnel. EMD controls the instrument repair, calibration and field resupply and Internal Quality Assurance via in-house/contractor personnel. Internal Quality Assurance therefore refers to those QA activities controlled by EMD. External Quality Assurance refers to those QA activities controlled by EMSL's Quality Assurance Division (QAD).

4.3 Internal Quality Assurance

EMSL in-house personnel and contractor personnel were both involved with initial site set-up and instrument check-out. Initial instrument calibrations were conducted at EPA before instruments were shipped to the field. Flow checks were conducted by individual operators and verified by the EMSL (or contractor) personnel during site visits. Subsequent QA audits were scheduled annually but were adjusted downward because of budget (travel) limitations and upward when additional site set-up provided the opportunity to audit/flow-check/or calibrate a nearby existing site. Further, EMSL utilized a contractor to supplement site visits. Instruments which failed either the field operator flow check, EMSL or contractor flow check, or simply malfunctioned were returned to EMSL, RTP for repair and replacement. Upon receipt from the field, a defective instrument was inspected, repaired, and preventative maintenance performed. After repair, separate in-house personnel inspect and perform a multipoint calibration on each instrument prior to shipment to the field providing another QC opportunity. Example calibration curves are given in Figures 7 and 8. One thousand ninety-three official instrument calibrations were performed. Other calibrations were conducted but not officially documented. Dates and locations of official calibrations for TSP, SSS, PM₁₅, Dichotomous Sampler and PM₁₀ Dichotomous Sampler are given in Appendix E.

4.4 External Quality Assurance

4.4.1 Overview

The Quality Assurance Division developed an external QA program for the Inhalable Particulate Network. This program included the implementation of external audits (both flow and analytical), and provisions to give quality assurance support to IP Network special studies. Details of the QA program are provided in the Inhalable Particulate Network Operations and Quality Assurance Manual issued originally in May 1980. Subsequent, updated versions were published in July 1981, June 1982, and March 1983.¹¹

This section provides a summary of the flow audits provided by QAD for the IP Network from its inception in 1979 through December 31, 1982. Actual

Table 4. OPERATOR TRAINING CHECK SHEET.
 (Instructor should check each reference covered)

INSTRUMENT	Reference J	Completing		Instrument		Maintenance Procedures
		Air Flow Measurements	Field Calibration	Instrument Data Sheet	Log Book Entries	
High Volume Sampler (General Model or AMC)	2.2.1.1 2.2.2.1 2.2.3.1 2.2.4.1	2.2.2.2 2.2.2.4 2.3.2.2 2.3.4.1	2.2.2.3 2.2.2.6 2.3.6.1 2.3.7.1	2.2.3 2.3.2.3 2.3.6 2.3.7.1	2.2.3.1 2.3.6.2 2.3.6.1	2.2.4.1 2.2.4.2 2.2.4.3 2.2.4.4
Size Selective Inlet High Volume Sampler (Anderson Inlet)	2.4.1.2 2.4.2.1 2.4.3 2.4.4.1	2.2.2.2 2.2.2.4 2.3.2.2 2.4.1	2.2.2.3 2.2.2.6 2.4.6 2.4.7	2.2.3 2.4.2 2.4.4 2.4.6	2.2.3.1 2.4.4.1 2.4.4.1	2.2.4.1 2.2.4.2 2.2.4.3 2.2.4.4
Automatic Dichotomous Sampler (Dichotomous Sampler) (Manual Mode)	2.2.1.1.1 2.5.2 2.5.3 2.5.3.2	2.2.2.2 2.2.2.6 2.5.4.2	2.2.2.1 2.5.6.1 2.5.6.2	2.2.3 2.5.4.1 2.5.6	2.2.3.1 2.5.4.1 2.5.6	2.2.4.1 2.2.4.2 2.2.4.3 2.2.4.4
Manual Dichotomous Sampler (Dichotomous Model 2446 or 2448)	2.2.1.3.2 2.5.2 2.5.3 2.5.3.1	2.2.2.2 2.2.2.4 2.5.4.2	2.2.2.1 2.5.6.1 2.5.6.2	2.2.3 2.5.4.1 2.5.6	2.2.3.1 2.5.4.1 2.5.6	2.2.4.1 2.2.4.2 2.2.4.3 2.2.4.4
Instrument Test (York or Parappa)	2.2.3.1	N/A	2.2.3.1 2.3.2.3	2.2.3.1 2.3.2.3	2.2.3.1 2.3.2.3	N/A
General Trouble Shooting	2.2.7			Operator Signature _____	Dec(s) _____	
Resupply Procedures	2.2.8			Instructor Signature _____	Total Training Time (hours) _____	

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Table 5. OPERATOR TRAINING CHECK SHEET INSTRUCTIONS.

1. This check sheet should be completed in sufficient detail to document, by instrument, exactly what training a specific individual received. A separate sheet, therefore, should be completed for each individual trained. Because training may be conducted over a time period of several days, some individuals may receive only the first or last portion of the overall training scheduled. Individual sheets will provide a record which can be used for subsequent training scheduling.
2. Only the person receiving the training should complete the "Trainee Section".
3. The instructor should complete the "Instructor Section" indicating date, time, duration, and place of training.
4. The instructor should complete the "Operator Training Check Sheet" and check each item covered. The trainee's signature will verify that these subjects were in fact covered.

IP OPERATOR TRAINING CHECK SHEET

TRAINEE SECTION:

1. Name of Trainee: _____
2. Telephone Number: _____
3. What IP sites are your responsible for? _____

4. Was IP QA/O&M Manual Section 2 available to you prior to training?
Yes _____ No _____
5. If your answer to 4 is NO, did the instructor provide you a copy of Section 2? Yes _____ No _____
6. Do you have a copy of the "IP Network-Quick Reference Operations Summary Sheet" included in the IP Operating Personnel Agency Personnel letter dated December 3, 1981? Yes _____ No _____
7. Were you aware when the following information is to be sent to MD-8 at RTP? (Indicate YES or NO)
a. Log Sheets - Monthly _____
b. Filters and data cards - ASAP _____
c. Field Data Sheets - Monthly _____
d. Equipment Requirements - As needed _____
e. Supplies Requirements - As needed _____
f. Flow Check Sheets - Monthly _____
8. Do you have any comments concerning training received? _____

INSTRUCTOR SECTION:

9. Name of Instructor: _____
10. Period of Training: Date(s) _____ Total Time (hrs) _____
11. Was the training objectives accomplished? Yes _____ No _____
12. Reason/Comments: _____

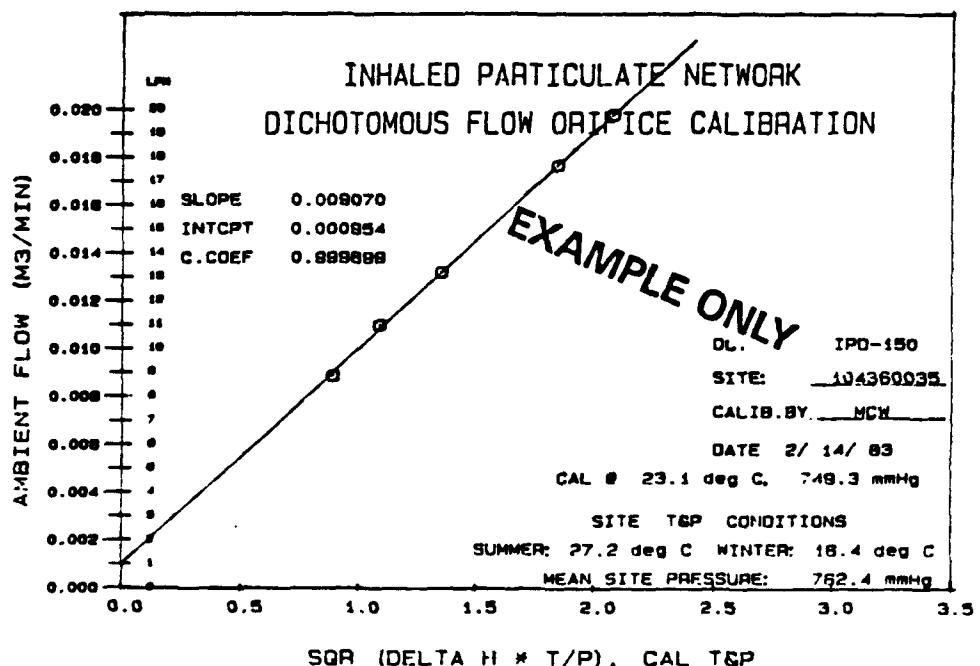


Figure 7. Sample dichotomous flow orifice calibration curve.

INHALED PARTICULATE NETWORK DICHOTOMOUS AMBIENT FLOW ORIFICE CALIBRATION DATAFILE							
ORIFICE # 1PO-150				CALIBRATED AT RTP, NF, ON DATE 2/ 14/ 83			
USE TABLE FOR WINTER MONTHS: OCTOBER THROUGH MARCH				USE TABLE FOR SUMMER MONTHS: APRIL THROUGH SEPTEMBER			
RHO	AMBIENT m³/MIN	RHO	AMBIENT m³/MIN	RHO	AMBIENT m³/MIN	RHO	AMBIENT m³/MIN
4.9	0.0133	8.6	0.0148	4.6	0.0132	7.7	0.0162
5.0	0.0135	8.1	0.0149	4.7	0.0133	7.8	0.0169
5.1	0.0136	8.2	0.0150	4.8	0.0134	7.9	0.0170
5.2	0.0137	8.3	0.0151	4.9	0.0135	8.0	0.0171
5.3	0.0138	8.4	0.0151	5.0	0.0137	8.1	0.0172
5.4	0.0139	8.5	0.0151	5.1	0.0138	8.2	0.0173
5.5	0.0141	8.6	0.0151	5.2	0.0139	8.3	0.0174
5.6	0.0142	8.7	0.0151	5.3	0.0141	8.4	0.0175
5.7	0.0143	8.8	0.0151	5.4	0.0142	8.5	0.0175
5.8	0.0144	8.9	0.0151	5.5	0.0143	8.6	0.0176
5.9	0.0145	9.0	0.0151	5.6	0.0144	8.7	0.0177
6.0	0.0146	9.1	0.0151	5.7	0.0145	8.8	0.0178
6.1	0.0146	9.2	0.0151	5.8	0.0146	8.9	0.0179
6.2	0.0149	9.3	0.0150	5.9	0.0148	9.0	0.0180
6.3	0.0150	9.4	0.0151	6.0	0.0149	9.1	0.0181
6.4	0.0151	9.5	0.0152	6.1	0.0150	9.2	0.0181
6.5	0.0152	9.6	0.0153	6.2	0.0151	9.3	0.0183
6.6	0.0153	9.7	0.0154	6.3	0.0152	9.4	0.0184
6.7	0.0154	9.8	0.0154	6.4	0.0154	9.5	0.0185
6.8	0.0155	9.9	0.0155	6.5	0.0155	9.6	0.0186
6.9	0.0156	10.0	0.0156	6.6	0.0156	9.7	0.0187
7.0	0.0157	10.1	0.0157	6.7	0.0157	9.8	0.0188
7.1	0.0158	10.2	0.0158	6.8	0.0158	9.9	0.0189
7.2	0.0159	10.3	0.0159	6.9	0.0159	10.0	0.0190
7.3	0.0161	10.4	0.0160	7.0	0.0160	10.1	0.0190
7.4	0.0162	10.5	0.0161	7.1	0.0161	10.2	0.0191
7.5	0.0163	10.6	0.0161	7.2	0.0162	10.3	0.0192
7.6	0.0164	10.7	0.0162	7.3	0.0163	10.4	0.0193
7.7	0.0165	10.8	0.0163	7.4	0.0164	10.5	0.0194
7.8	0.0166	10.9	0.0164	7.5	0.0165	10.6	0.0195
7.9	0.0167	11.0	0.0165	7.6	0.0166	10.7	0.0196

AMBIENT RHO/MIN = 0.000870 & SQR(Delt H * T/P) = 0.000734

CALIBRATION CALCULATED USING: AMBIENT WINTER TEMPERATURE: 23.1 deg C
AMBIENT SUMMER TEMPERATURE: 27.2 deg C
AMBIENT SITE PRESSURE: 762.4 mmHg

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Figure 8. Sample interpolation table for dichotomous flow orifice calibration.

audit values are given in Appendix F. These audits provide the network with an external assessment of the accuracy of a portion of the entire sampling system. The precision of the network data is presented through the comparison of the collocated data for each sampler type. See Section 5.2, Data Precision.

4.4.2 Flow Rate Performance Audits of IP Samplers

The flow rate devices used in QA auditing of samplers used in IPN are the mass flow meters for TSP; and the dry gas meter, the bubble meter, or a laminar flow element for the dichotomous sampler. These flow measurement devices are referenced to a Rootsometer® and a laminar flow element calibrated by the National Bureau of Standards.

A QA auditor compares the sampler flow rate, measured with the audit device, to that based on the sampler flow rate calibration. For Hi-Vol and SSS this is 60 and 40 cfm, respectively. For dichotomous samplers this is 16.7 lpm for total and coarse flow, respectively.

Audit data are evaluated on the basis of percent error:

$$\% \text{ error} = \frac{Q_s - Q_a}{Q_a} \times 100 \quad (1)$$

where: Q_s = sampler flow rate
 Q_a = audit flow rate

Based on a desired accuracy for IP data, samplers with percent differences $\leq \pm 10\%$ are rated as exhibiting satisfactory performance. Samplers with differences $> \pm 10\%$ are considered to exhibit unsatisfactory performance and require corrective action by field personnel.

These flow rate audits, initiated in the fall of 1979, have been conducted according to the procedure documented in the Inhalable Particulate Network Operations and Quality Assurance Manual, March 1983, and the Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II, Ambient Air Specific Methods.

Initially, beginning in the fall of 1979, each IP network site was to be audited annually. Due to budget and/or travel restrictions, each site was not audited each year as planned. Recently (1982-1983), however, each site has received an annual audit and thus more data points are available for the latest audits. Example Audit Sheets are given for the Hi-Vol and SSS (Figure 9) and the Dichotomous Sampler (Figure 10).

4.4.3 Audit Results

The audit results for the high volume, SSS, and the dichotomous samplers TOTAL and COARSE are shown in the form of box and whisker plots in Figures 11 through 14, respectively. The box includes the 25th percentile, the median, and the 75th percentile. The 25th percentile is the lower line of the box, the median is the dotted line through the box and the 75th percentile is the upper line of the box. The whiskers include all the other data with the exception of "box and whisker" outliers.

HIGH VOLUME AUDIT DATA SHEET

TIME START: _____ DATE: _____
 STATION: _____ AUDITOR: _____
 ADDRESS: _____ OBSERVER: _____
 SAMPLER NO: _____ MOTOR NO: _____
CALIBRATION INFORMATION:
 SLOPE (m) = _____
 INTERCEPT (b) = _____
 Ref DEVICE S/N: _____
 STANDARD (std) a = _____ ACTUAL (act) a = _____
 b = _____ b = _____
 BAROMETRIC PRESSURE (P_0): _____
 TEMPERATURE (T_a): _____
 WEATHER CONDITIONS: _____

Plate Number	Audit Manometer Reading (in H ₂ O)	$\frac{\Delta H_2O}{P_b - P_a}$	Audit Flow (m ³ /min)	Sampler Response ()	Sampler Flow (m ³ /min)	Difference (m ³ /min)	Percent Difference
No Plate							
18							
13							
10							
7							
5							

*If no mass flow controller installed, use resistance plates.

**If actual flow rates are desired use

$$\sqrt{\Delta H_2O} \frac{T_a}{P_b}$$

Figure 9. High volume sampler audit data sheet.

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DICHOTOMOUS SAMPLER AUDIT DATA SHEET

STATION NAME _____ DATE _____
 ADDRESS _____ TIME _____
 STATION SAROAD NO. _____
 TA = K, PA = mm Hg AUDITOR _____
 WATER VAPOR CORRECTION (WVC) = mm Hg
 SAMPLER MODEL _____ EPA S/N _____ INLET CUT SIZE _____
 SAMPLER S/N'S _____
 DRY GAS METER _____ S/N _____ CORRECTION FACTOR (CF) _____
 BUBBLE FLOW KIT _____ S/N _____

FLOW TYPE	DICHOT. ROTAMETER SETTING	TIME (min)	Volume Timed (mL)	Audit Flow Determined		INSTRUMENT SET POINT (L/min)	DIFFERENCE (L/min)	% DIFF.
				Act L/M	Std L/M			
Total						16.67		
Fine						15.0		
Coarse						1.67		

* 10 micron dichots; all flows to be in actual

% Difference = $(\text{set point flow} - \text{audit flow determined})(100)/(\text{audit flow determined})$

$$\text{Total Flow} = \frac{\text{Volume (CF)}}{\text{Time}} \quad (\text{Act})$$

$$\text{Coarse Flow} = \frac{\text{Volume}}{\text{Time}} \quad (\text{Act})$$

$$\text{Total Flow} = \frac{\text{Volume (CF)}}{\text{Time}} \frac{P_A}{T_A} \left(\frac{298}{760} \right)$$

$$\text{Coarse Flow} = \frac{\text{Volume}}{\text{Time}} \left(\frac{P_A}{T_A} \right) \left(\frac{298}{760} \right)$$

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Figure 10. Dichotomous sampler audit data sheet.

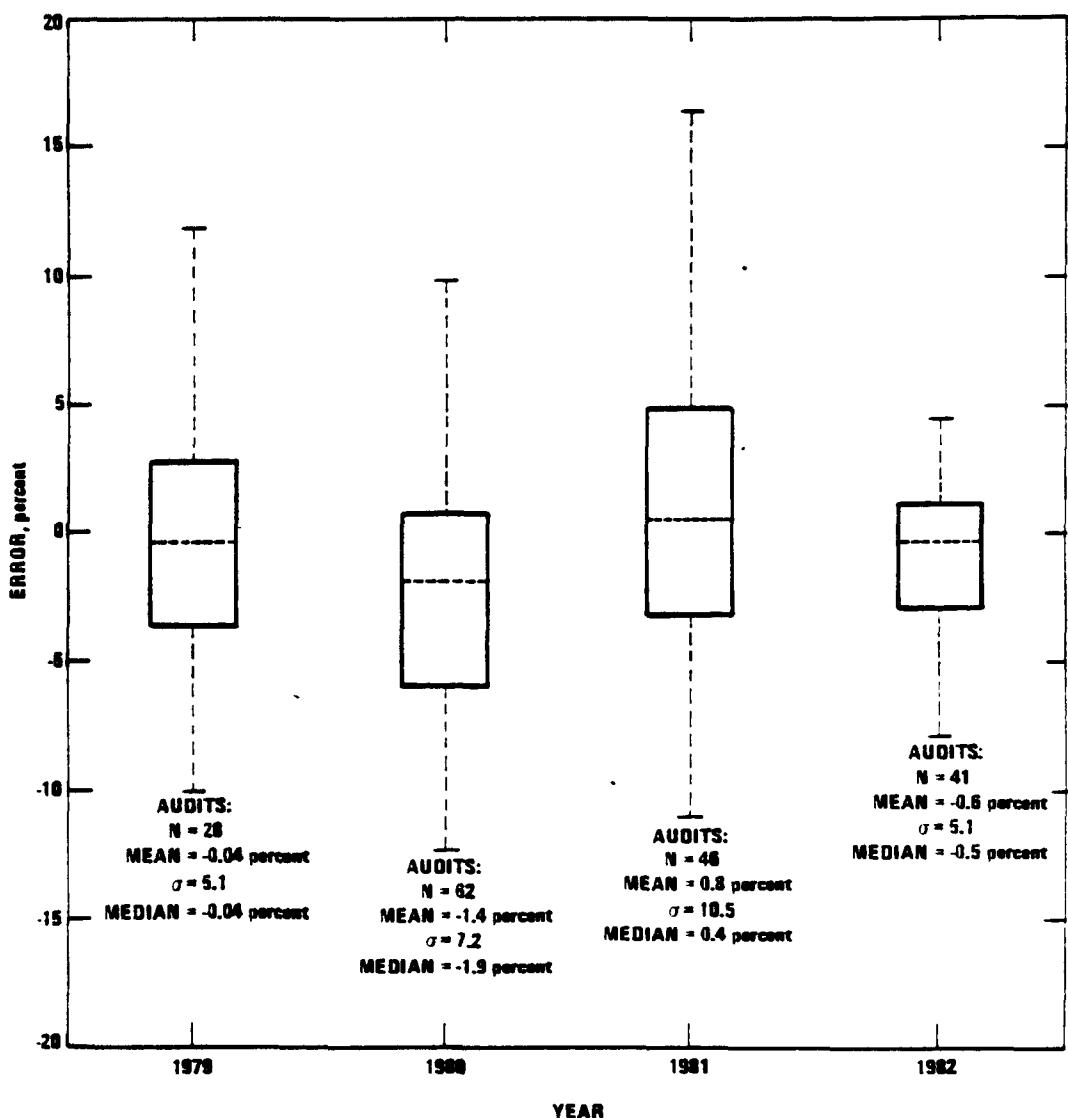


Figure 11. High volume sampler flow audit accuracy, 1979 - 1982.

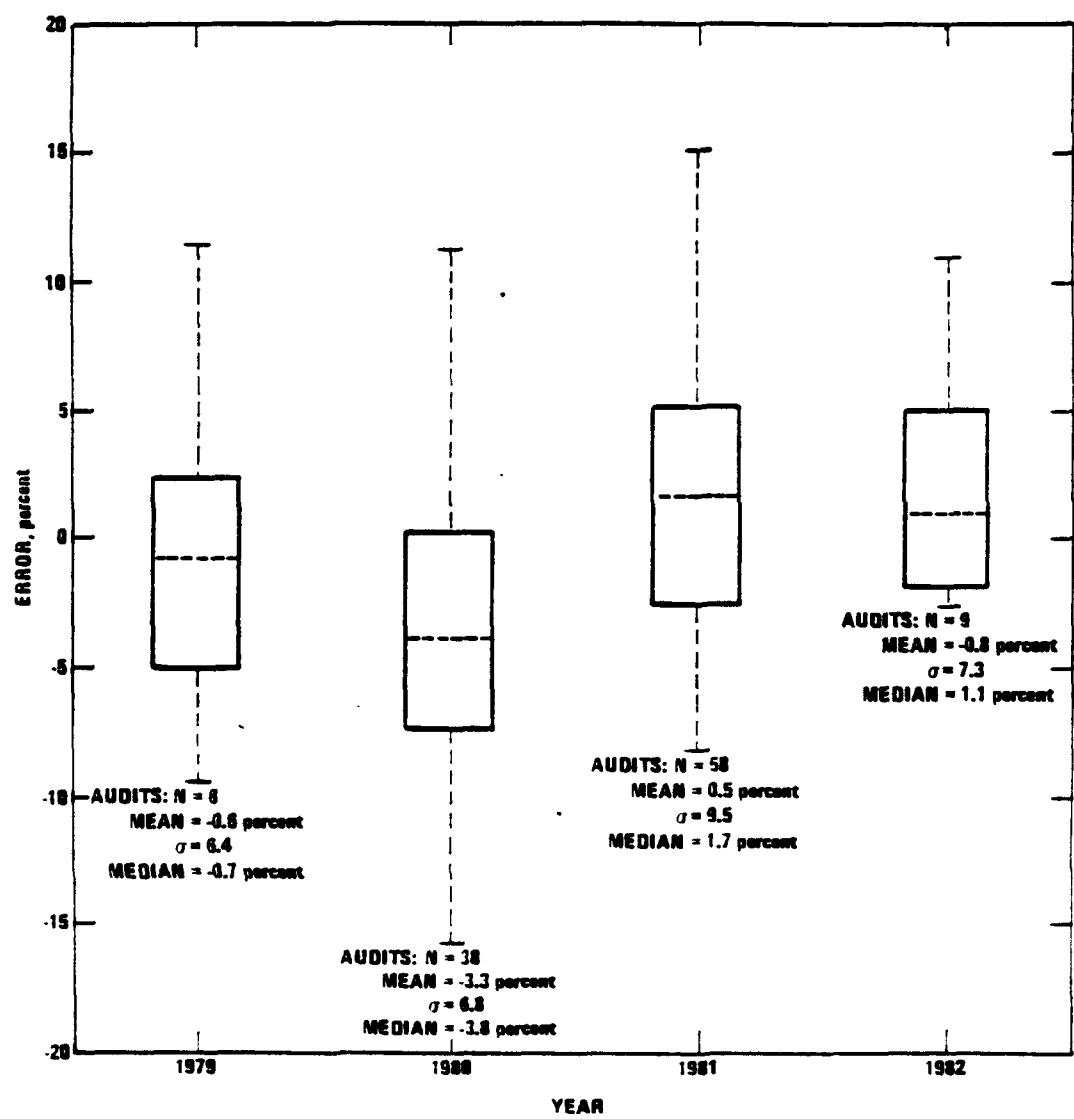


Figure 12. Size selective sampler flow audit accuracy, 1979 - 1982.

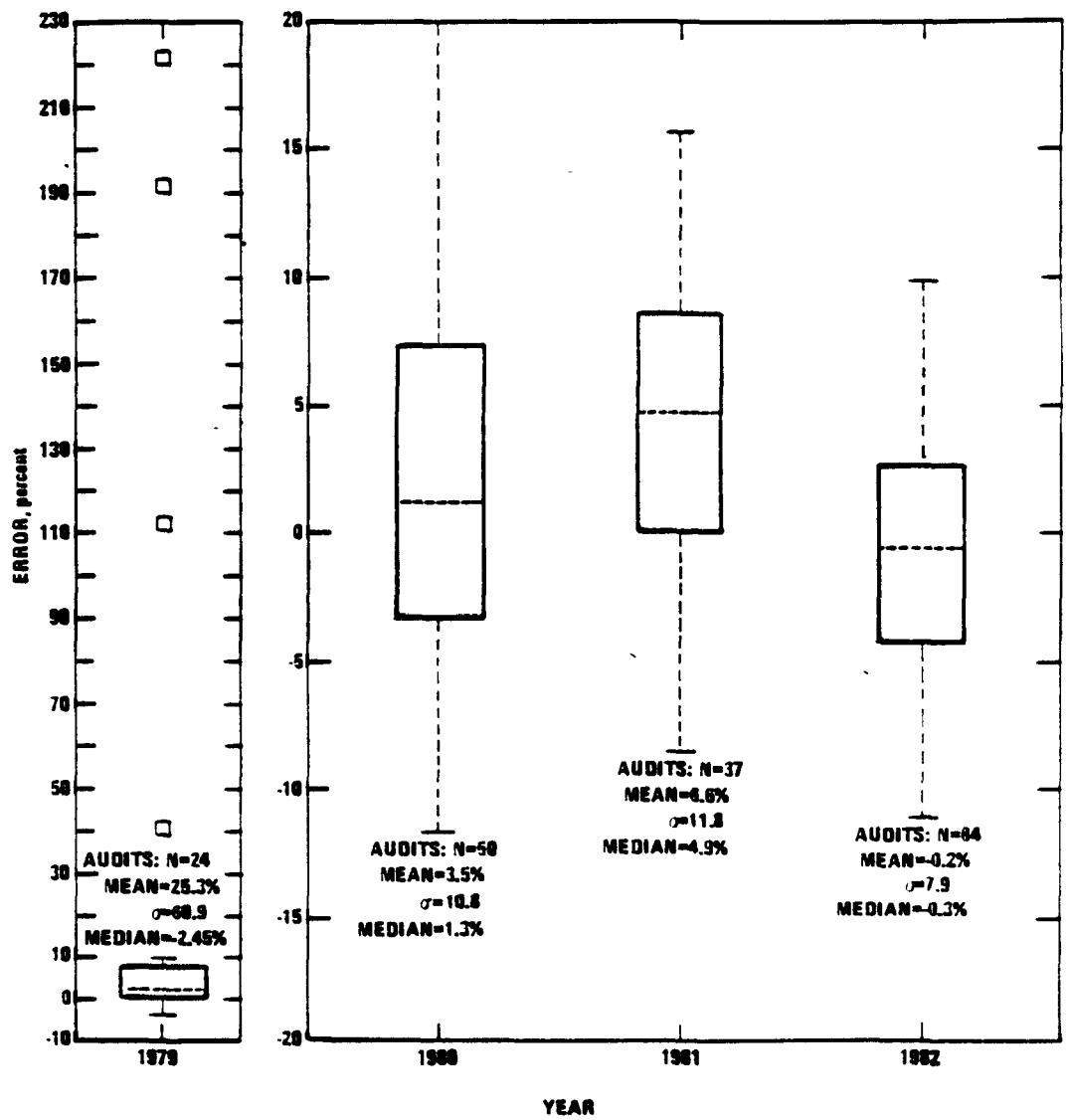


Figure 13. Dichotomous sampler total flow audit accuracy, 1979 - 1982.

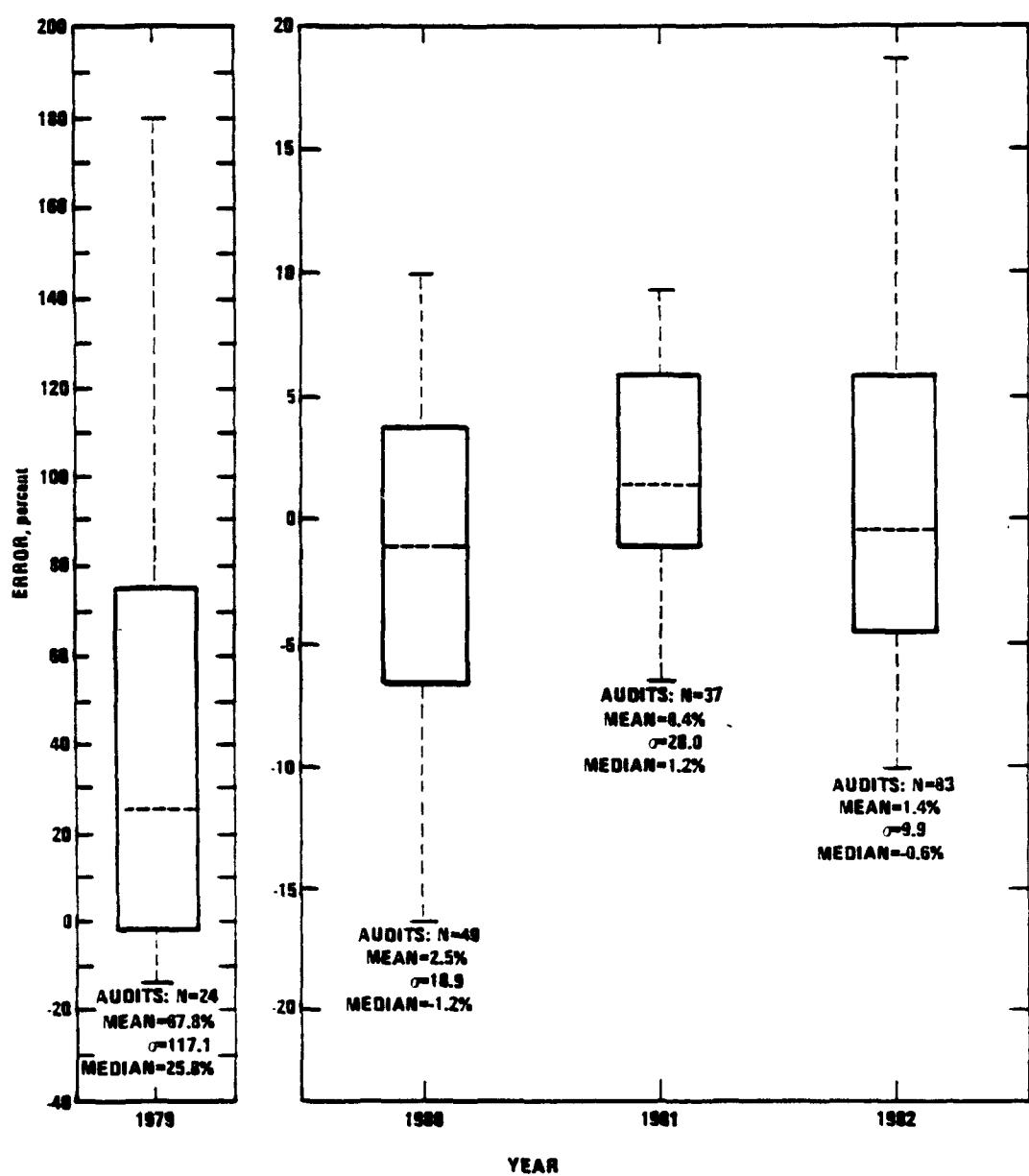


Figure 14. Dichotomous sampler coarse flow audit accuracy, 1979 - 1982.

The plots show the number of audits per year and the mean, median and standard deviation for each year. Statistics for each sampler type for all audits are given below. Outliers are included in the calculations but are not shown on the diagrams.*

(1) High Volume Sampler

Number of audits:	177
Standard deviation:	7.5
Mean:	-0.4%
Median:	-1.0%
Percent of audits between $\pm 20\%$ limits:	97.7
Percent of audits between $\pm 10\%$ limits	88.0

(2) Size Selective Sampler ($0-15 \mu\text{m}$)

Number of audits:	113
Standard deviation:	8.4
Mean:	-0.9%
Median:	-0.3%
Percent of audits between $\pm 20\%$ limits:	99.1
Percent of audits between $\pm 10\%$ limits	87.0

(3) Dichotomous Sampler, Total Flow

Number of audits:	195
Standard deviation:	24.2
Mean:	5.2%
Median:	1.5%
Percent of audits between $\pm 20\%$ limits:	92.8
Percent of audits between $\pm 10\%$ limits:	82.0

(4) Dichotomous Sampler, Coarse Flow

Number of audits:	193
Standard deviation:	48.8
Mean:	11.3%
Median:	0.9
Percent of audits between $\pm 20\%$ limits:	90.7
Percent of audits between $\pm 10\%$ limits:	79.0

As experience was gained in both operations and auditing the IP Network, audit values began to center more toward the zero percent error line. This is vividly shown in the coarse flow for the dichotomous sampler where between 1979 and 1980 the scale was reduced by a factor of ten. With the one exception for the 1979 coarse flow audits, all of the boxes were within the $\pm 10\%$ bracket and many within the $\pm 5\%$ lines.

*Exception - Figure 13, year 1979 - outliers are included to explain why mean (25.3%) is much larger than median (2.45%).

SECTION 5

DATA SUMMARY AND ASSESSMENT

This section provides assessment of the validated IP Network mass concentration data collected from 4/1/79 through 12/31/82. A total of 157 routine monitoring sites were established at various times during this period.

The routine monitoring data base includes 12,385 TSP Hi-Vol; 7,363 Size-Selective Inlet (SSS) Hi-Vol; and 11,056 Dichotomous Sampler 24-hour measurements, collected on an every-sixth-day schedule. Because of an initial emphasis on sites in the Philadelphia area to support other projects, a large percentage of the total data collection is from this area. Also, note that because of staggered sampler set up schedules and/or sampler downtime, TSP, SSS, and Dichotomous samplers were not always operated simultaneously. Therefore, care must be taken when comparing means of different sampler types. The number of samples, means, standard deviation, etc., are given in Vol. I, Appendix B.

5.1 DATA ACCURACY

The reader is reminded that there is no reference "TOTAL PARTICULATE", "RESPIRABLE PARTICULATE", or "INHALABLE PARTICULATE" aerosol which one can use to calibrate a particulate instrument for accuracy. The calibrations and audits referred to previously are for flow rate only. Accuracy determinations for particle size therefore rely upon laboratory studies conducted by equipment manufacturers and in some cases by EPA⁶.

5.2 DATA PRECISION

Precision estimates were made by comparing duplicate, collocated like instruments. Like instruments are defined as similar instruments, or dissimilar instruments designed to do the same thing. Instruments were collocated at selected sites and duplicate samples were taken. Data from these collocated samplers from June 1979 through June 1982 are given in an unpublished report¹⁶ and summarized below.

In the report, both bias and precision are addressed using formulas for summarizing paired data. The formulas are the "percent difference" ratio type commonly applied to collocated air pollution data. The equations are given below to provide the reader with a better understanding of their use as estimators and in making inference.

The general formula for sample variance is:

$$s^2 = \frac{\sum(y - \bar{y})^2}{n-1} \quad \text{or} \quad \frac{1}{n-1} \left[\sum y^2 - \frac{(\sum y)^2}{n} \right] \quad (1)$$

for sample standard deviation:

$$s = \sqrt{s^2} \quad (2)$$

for sample average (arithmetic mean):

$$\bar{y} = \frac{\sum y}{n} \quad (3)$$

for coefficient of variation

$$CV = \frac{s}{\bar{y}} \quad (4)$$

By solving equations 1 through 4 for collocated data pairs (i.e., $n = 2$) equations 2, 3, and 4 become equations 5, 6, and 7 respectively.

5.2.1 Estimation

Given a pair of measurements (y_1 , y_2) ordered in the sense that the instruments from which the measurements come always retain their identity as either instrument #1 or instrument #2, the following statistics can be calculated:

$$\text{Standard deviation } s = \sqrt{\frac{(y_1 - y_2)^2}{2}}^{1/2} = \frac{|y_1 - y_2|}{\sqrt{2}} \quad (5)$$

(NOTE: the vertical bars indicate absolute value).

$$\text{Average } \bar{y} = \frac{y_1 + y_2}{2} \quad (6)$$

$$\text{Coefficient of variation } CV = \frac{s}{\bar{y}} = \sqrt{2} \frac{|y_1 - y_2|}{(y_1 + y_2)} \quad (7)$$

$$\text{Absolute Percent Difference } D = \frac{|y_1 - y_2|}{(y_1 + y_2)/2} \times 100 \quad (8)$$

Sometimes the absolute value signs are removed to retain the sign (+ or -) of the difference.

$$\text{Signed Percent Difference} \quad R = \frac{y_1 - y_2}{(y_1 + y_2)/2} \times 100 \quad (9)$$

This value can be divided by 2 to obtain

$$X = \frac{y_1 - y_2}{y_1 + y_2} \quad (10)$$

Expressions (7) through (10) can easily be derived from one another especially when $y_1 > 0$, $y_2 > 0$. (Multiplication by 100 converts value to percent.)

e.g. $CV = \sqrt{2} |X|$

$$D = \sqrt{2} CV$$

$$D = 2 |X|$$

$$X = \frac{R}{2} \quad \text{where } R = \text{signed percent difference}$$

Also, $R = \ln \frac{y_1}{y_2}$

Expressions (7) and (8) are estimators of relative dispersion.

Expressions (9) and (10) are estimators of relative bias.

5.2.2 Inference

Assume that y_1 and y_2 are both normally distributed around a mean μ with variance σ^2 . This characterizes the monitors during a given sampling period. The concentrations may also vary from period to period but according to another distribution. For example 24-hour particulate concentrations are often characterized by a lognormal distribution. In addition, the monitor variability may change proportionally with levels of concentration.

Under these assumptions:

$(s)^2$ is an estimate of σ^2 ,

\bar{y} is an estimate of μ ,

and CV is an estimate of $\frac{\sigma}{\mu} = \tau$

If y_1 and y_2 are normally distributed around μ with variance σ^2 , and
 $r < \frac{1}{3}$ then

$$\ln y_1 \text{ and } \ln y_2 \sim N(\ln \mu, r^2)$$

Therefore,

$$R \sim N(0, 2r^2)$$

$$X \sim N(0, \frac{r^2}{2})$$

Given n values $X_1, X_2 \dots X_n$, where X is defined in equation (10), then

$$t = \frac{\bar{X} \sqrt{n}}{s_x} = \frac{\bar{R} \sqrt{n}}{s_r} \quad (11)$$

is distributed as a Student's t with $n-1$ degrees of freedom where

$$\bar{X} = \frac{\sum X}{n}, \quad (12)$$

$$s_x = \left[\frac{n \sum x^2 - (\sum x)^2}{n(n-1)} \right]^{1/2}, \quad (13)$$

and

$$s_r = 2s_x \quad (14)$$

The precision of the instruments is also available since

$$1) \quad \frac{\hat{r}}{\sqrt{2}} = s \quad \text{and} \quad 2) \quad \sqrt{2} \hat{r} = s_r \quad (15)$$

Another way of estimating r according to Ziegler¹⁷ is to average all the coefficients of variation according to

$$\hat{r} = 1.25 \frac{\sum CV}{n} \quad (16)$$

where the 1.25 is a weighting factor for using paired data. This formula applies to data where $CV < 20\%$ as it is in the collocated data given in Tables 6, 7, and 8.

TABLE 6. HI-VOL AND SSI COLLOCATED DATA COEFFICIENTS OF VARIATION

<u>Site</u>	<u>Name</u>	<u>#Samples</u>	<u>C.V. (%)^a</u>	<u>t^b</u>
<u>Hi-Vol to Hi-Vol Collocated Data (Mass)</u>				
010380023	N. Birmingham, AL	37	4.67	1.90842
341160006	Durham, NC	23	4.67	-6.60188*
397140003	Broad St, Phila., PA	74	6.00	5.05410*
	TOTAL	134		
<u>SSS to SSS HiVol (0-15 μm)Collocated Data (Mass)</u>				
010380023	N. Birmingham, AL	37	7.81	3.56240*
030600004	N. Phoenix, AZ	29	7.55	1.19676
061260001	Lakewood, CO	6	8.50	1.81929
333520001	Wilmuth Pump, Lacawana, NY	25	6.24	-2.67033*
341160006	Durham, NC	27	3.47	-1.87103
397140003	Broad St, Phila., PA	56	6.53	6.35084*
	TOTAL	180		

$$^a \text{C.V.} (\%) = \hat{\tau} = \frac{s_r}{2}$$

^bStudents t for the Null Hypothesis that the true mean of R is zero.

*Significant at the 5% level; reject the Null Hypothesis.

TABLE 7 MANUAL DICHOTOMOUS SAMPLER DATA COEFFICIENT OF VARIATION

Dichotomous Sampler (0-15 μm)

Manual Sierra to Manual Sierra (Model 244E)

<u>Site</u>	<u>Name</u>	#Samples	Coarse Fraction		Fine fraction		C.V. (%) ^a	<u>t</u> ^b	Total
			(2.5-15 μm)	C.V. (%) ^a	(0-2.5 μm)	C.V. (%) ^a			
010380023	N. Birmingham, AL	27	24.13	-2.18197*	9.52	1.79829	16.50	-1.13915	
061260001	Lakewood, CO	26	15.08	3.34867*	8.91	0.05564	11.13	2.96480*	
222160011	Springfield, MA	7	5.55	2.04241	6.49	0.82132	5.69	1.27025	
222640016	Worcester, MA	34	17.20	0.87813	3.82	0.69973	11.90	0.42263	
330660010	Buffalo, NY	16	11.30	0.06750	6.86	-0.71238	7.32	-0.21677	
366420012	Steubenville, OH	20	14.97	0.83627	19.95	-0.51719	15.36	-0.10564	
397140003	(Broad St) Phila., PA	15	5.14	2.39879*	3.91	3.26219*	3.27	4.50440*	
397140037	(Temple) Phila., PA	12	10.44	-3.09167*	2.77	0.47799	4.93	-2.21460*	
491840057	(Duwamish) Seattle, WA	56	11.08	2.29873*	9.37	-2.82045*	8.56	1.21282	
		TOTAL	213						

$$^a \hat{C.V.}(\%) = \hat{T} = \frac{s}{2}$$

^b Students t for the Null Hypothesis that the true mean of R is zero.

*Significant at the 5% level, reject the Null Hypothesis.

TABLE 8. 15 MICRON AND 10 MICRON DICHOTOMOUS SAMPLER COLLOCATED DATA COEFFICIENTS OF VARIATION

Site	Name	#Samples	Coarse Fraction		Fine Fraction		C.V. (%) ^a	Total				
			C.V. (%) ^a	t ^b	C.V. (%) ^a	t ^b						
Dichotomous Sampler (0-15 μm)												
Auto Sierra to Auto Sierra												
010380023	N. Birmingham, AL	35	23.98	-1.10435	8.99	-2.71990*	16.52	-1.36142				
Dichotomous Sampler (0-15 μm)												
Beckman to Beckman												
397140003	(Broad St) Phila., PA	17	9.14	-1.79375	7.46	-0.77147	7.21	-1.50353				
Dichotomous Sampler (0-15 μm)												
Anderson to Anderson												
341160006	Durham, NC	5	16.21	0.36121	6.43	-1.64750	5.02	-1.39113				
Dichotomous Sampler (0-10 μm)												
Manual Sierra to Manual Sierra												
397140003	(Broad St) Phila., PA	7	4.87	-0.91141	2.73	1.33635	5.48	1.05148				

$$^a \text{C.V. (\%)} = r = \frac{s}{2}$$

^bStudents t for the Null Hypothesis that the true mean of R is zero.
*Significant at the 5% level, reject the Null Hypothesis.

5.2.3 Data Presentation

When one compares actual measurements to a reference value or standard, the signed value of the percent difference is normally represented by:

$$\text{Percent Difference} = \frac{\text{Measurement-Reference}}{\text{Reference}} \times 100 \quad (17)$$

When comparing two field instruments, however, neither instrument is, in fact, a standard. A close approximation to equation (17) is:

$$\text{Percent Difference} = \frac{\text{Measurement 1} - \text{Measurement 2}}{\text{Average of the 2 measurements}} \times 100 \quad (18)$$

If y_1 = measurement 1, and y_2 = measurement 2, equation 18 may be rewritten as:

$$\text{Percent Difference} = \frac{y_1 - y_2}{(y_1 + y_2)/2} \times 100 \quad (19)$$

The results of solving this equation for each pair of collocated sample measurements is the signed percent difference, R ($CV/\sqrt{2}$). For analysis each resultant (the signed percent difference R) was treated as a statistical sample. The hypothesis to be tested is that the average difference (i.e., the relative bias) is zero over each data set.

One is reminded that the differences between a specific pair of measurements include the combined effects of many potential differences. Measurement differences are theoretically zero only if the following occur:

1. Ambient air is homogeneous (i.e., air is fully mixed in particle size and chemical composition).
2. Identical air mass is presented to each instrument (i.e., no interference between instruments in which one instrument reduces the particle concentration presented to the other instrument).
3. Instrument flow rates are identical (e.g., instruments are dependent upon flow rate for particle separation).
4. Identical particle separation (i.e., identical percentage of each size particle captured by the instrument.)
5. Filter efficiency is the same in both instruments.
6. Both instruments sampled over identical time periods.
7. Filter tare weight, final weight, and mass calculations are without error.

Because differences do occur in the above, even though they may tend to cancel each other, it is important to consider both the average percentage differences together with its standard error.

5.2.4 Data Processing

Data processing consists of:

1. Calculating the signed difference expressed as a percent (R explained previously) for each data-pair collected at each site (i.e., Coarse Fraction Dichot Mass collected in Birmingham, Alabama).
2. Calculating % Standard Deviation for each measurement pair.
3. Applying the Dixon Ratio to R for each data set to test for outliers.
4. Removing outliers.
5. Calculating the coefficient of variation where $CV (\%) = \text{Standard Deviation of } R \text{ divided by } \sqrt{2}$.
6. Testing the Null Hypothesis that $R=0$ using the t-Test at $\alpha = .05$.
7. Testing the homogeneity of variances by applying Bartlett's test to variance of each mass measurement pair for each pollutant and measurement method. The test showed that a pooled estimate of variance was generally not possible. There were exceptions. These were 10 μm Sierra - fine, coarse, and total; 15 μm Beckman - coarse and total; 15 μm Anderson - fine, coarse and total. It appears that for all the hi-vol data (TSP and 15 μm SSI) as well as manual Sierra and automatic Sierra dichotomous data the variances are nonhomogeneous.

5.3 RESULTS

Collocated TSP (Hi-Vol) Mass Difference averages were obtained at three IP sites (Table 6). From Table 6 one observes that TSP mass difference average is not statistically different from zero in Birmingham, AL, yet they are statistically different from zero in Durham, NC and Philadelphia, PA. Based on these measurements one may conclude that there is substantial variability but little bias between the collocated values.

Similar conclusions can be drawn from collocated SSS Mass Difference averages (Table 6) and all collocated Dichotomous Sampler data (Tables 7 and 8). Overall, the conclusions are that coefficients of variation (C.V.) are slightly larger for SSS than for TSP and Dichotomous CV's are larger than SSS CV's.

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APPENDIX A

ENVIRONMENTAL PROTECTION AGENCY
 INHALABLE PARTICULATE NETWORK
 IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTION
 VALUES IN MICROGRAMS PER CUBIC METER

SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	12385	15.7186	26.2030	32.712	46.12	64.530	91.050	125.100	155.970	220.514	74.0253	41.9431	4.4900	466.0
SSI	7363	14.2228	21.5920	26.420	37.13	52.160	72.700	98.256	121.100	175.244	59.0348	33.0395	1.0360	367.2
DICHOT15	11056	7.3651	12.6585	16.100	23.44	34.460	50.465	70.393	87.146	134.243	40.4079	25.4567	0.6921	323.9
DICHOT10	415	10.6716	14.7360	17.062	25.68	35.280	52.060	79.452	96.072	137.362	42.9432	26.5399	0.4350	199.1
FINE15	11056	3.1735	5.3600	6.940	10.59	16.790	25.930	37.653	47.047	70.344	20.2864	14.2835	0.0453	201.7
FINE10	415	5.7920	8.3104	10.122	14.16	20.620	32.030	47.350	59.002	95.650	25.4298	17.1688	4.1600	154.7
COARSE15	11056	1.0000	3.6898	5.540	9.36	15.435	25.170	39.433	52.680	87.043	20.3215	17.5633	0.0170	308.5
COARSE10	415	0.3692	2.5540	4.770	6.00	13.390	23.490	35.994	45.318	65.249	14.0316	0.1000	100.0	

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
VALIDATED 1979-82 DATA, VALUES IN MICROGRAMS/CUBIC METER

22:02 THURSDAY, OCTOBER 25, 1984

1

UNIVARIATE

VARIABLE=HIVOL	MOMENTS	QUANTILES(DEF=4)	EXTREMES
N	12385	SUM WGT\$	100% MAX
MEAN	74.0253	SUM	464.0
STD DEV	41.9631	75% Q3	99%
SKEWNESS	1.61712	50% MED	220.514
KURTOSIS	5.63432	25% Q1	155.97
USS	89632949	0% MIN	371(115152001)
CV	56.6605	0.376889	4.49(05262000)
T:MEAN=0	196.412	RANGE	4.858(05282000)
SGN RANK	38350153	0.0001	388.7(05635001)
NUH ~z 0	12385	Q3-Q1	5.179(06222010)
		MODE	408.9(49184005)
		105.1	5.212(45233002)
			458.8(45131005)
			464.8(05635001)
		MISSING VALUE	
		COUNT	5197
		% COUNT/HOBS	30.35

ENVIRONMENTAL PROTECTION AGENCY
 INHALABLE PARTICULATE NETWORK
 VALIDATED 1975-82 DATA, VALUES IN MICROGRAMS/CUBIC METER

22:02 THURSDAY, OCTOBER 25, 1984

2

UNIVARIATE

VARIABLE=SSI

MOMENTS		QUANTILES(DEF=4)				EXTREMES		
N	7363	SUM WGT\$	7363	100% MAX	367.2	99%	175.244	HIGHEST ID
MEAN	59.0348	SUM	434673	75% Q3	72.7	95%	1.636136414000	280(05653500)
STD DEV	33.0395	VARIANCE	1091.61	50% MED	52.16	90%	121.1	304.4(45131005)
SKEWNESS	2.02708	KURTOSIS	8.01557	25% Q1	37.13	10%	98.2559	3.967105262000
USS	33697292	CSS	6036431	0% MIN	1.636	5%	26.42	4.19534116000
CV	55.9662	STD MEAN	0.38504	RANGE	365.364	1%	21.592	5.45112037000
T:MEAN=0	153.321	FROB>|T|	0.0001	Q3-Q1	35.57		14.2528	372.2(05052000)
SGN RANK	13555283	FROB>|S|	0.0001	HCDE	35.53		6.5641062222010	367.2(05653500)
NUL - 0	7363							

MISSING VALUE		
COUNT	% COUNT	COUNT/NOBS
10419	56.59	

ENVIRONMENTAL PROTECTION AGENCY
 INHALABLE PARTICULATE NETWORK
 VALIDATED 1979-82 DATA, VALUES IN MICROGRAMS/CUBIC METER

22:02 THURSDAY, OCTOBER 25, 1984 3

UNIVARIATE

VARIABLE=TOTAL_15

	MOMENTS		QUANTILES(DEF=4)				EXTREMES	
N	11056	SUM WGT\$	11056	100% MAX	323.9	99%	134.243	HIGHEST ID
MEAN	40.4079	SUM	446750	75% Q3	50.465	95%	87.1463	265.3(32009000)
STD DEV	25.6567	VARIANCE	658.268	50% MED	34.46	90%	70.393	267.6(05653500)
SKENNESS	2.25018	KURTOSIS	9.32885	25% Q1	23.44	10%	16.1	297.6(45170000)
USS	25129399	CSS	7277152	0% MIN	0.6921	5%	12.8585	0.8639(16250000)
CV	63.4943	STD MEAN	0.244007	RANGE	323.208	1%	7.36514	303.6(05050000)
T:MEAN=0	165.602	PROB>|T|	0.0001	Q3-Q1	27.025			323.9(39714002)
SGN RANK	30561548	PROB>|S|	0.0001	MODE	16.97			
NUH ~= 0	11056							

	MISSING	VALUE
	COUNT	6726
	% COUNT/HOBS	37.82

ENVIRONMENTAL PROTECTION AGENCY
 INHALABLE PARTICULATE METRO^K
 VALIDATED 1979-82 DATA, VALUES IN MICROGRAMS/CUBIC METER

UNIVARIATE

VARIABLE=TOTAL_10

	MOMENTS			QUANTILES(DEF=4)				EXTREMES		
N	415	SUM WTGS	415	100% MAX	199.1	99%	137.362	HIGHEST ID		
MEAN	42.9432	SUM	17821.4	75% Q3	52.06	95%	96.0719	6.435(34116010)	127.2(39662000)	
STD DEV	26.5399	VARIANCE	704.368	50% MED	35.28	90%	79.452	10.2(33066001)	139.3(05653500)	
SKENNESS	1.87918	KURTOSIS	5.42212	25% Q1	25.68	10%	17.062	10.63(34116010)	171.1(01038002)	
USS	1056916	CSS	291608	0% MIN	6.435	5%	14.736	10.63(39662000)	172.5(01038002)	
CV	61.8024	STD MEAN	1.30279	RANGE	190.665	1%	10.6716	10.89(34116010)	199.1(05653500)	
T:MEAN=0	32.9624	PROB>|T|	0.0001	RANGE	190.665					
SGN RANK	43160	PROB>|S|	0.0001	Q3-Q1	26.38					
NUM ~ 0	415			MODE	23.52					
MISSING VALUE COUNT										
X COUNT/HOBS										
17367										
97.67										

ENVIRONMENTAL PROTECTION AGENCY
 INHALABLE PARTICULATE NETWORK
 VALIDATED 1979-82 DATA, VALUES IN MICROGRAAMS/CUBIC METER
 22:02 THURSDAY, OCTOBER 25, 1984 5

UNIVARIATE

VARIABLE=FINE_15	MOMENTS	QUANTILES(DEF=4)	EXTREMES
N	11056	SUM WGTS	11056
MEAN	20.2864	SUM	224226
STD DEV	14.2835	VARIANCE	204.018
SKENNESS	2.34555	KURTOSIS	11.4587
USS	6805377	CSS	2255419
CV	70.4092	STD MEAN	0.135842
T:MEAN=0	149.338	PROB>ITI	0.0001
SGN RANK	30561568	RANGE	201.655
NUH ~= 0	11056	Q3-Q1	15.34
		MODE	7.92
MISSING VALUE			
% COUNT		6726	
% COUNT/NODES			37.62

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
VALIDATED 1973-82 DATA, VALUES IN MICROGRAMS/CUBIC METER

22:02 THURSDAY, OCTOBER 25, 1984

6

VARIABLE=FINE_10	MOMENTS	QUANTILES(DEF=4)	EXTREMES
N	415	SUM WT\$	10553.4
MEAN	25.4298	SUM	10553.4
STD DEV	17.1888	75% Q3	32.03
SKEWNESS	2.35018	50% MED	20.62
USS	390698	25% Q1	14.16
CV	67.5931	0% MIN	4.16
T:MEAN=0	30.1385	RANGE	150.54
SGN RANK	43160	Q3-Q1	17.87
NUM ~= 0	415	MODE	10.08
		MISSING VALUE	
		COUNT	17367
		% COUNT/HOBS	97.67

ENVIRONMENTAL PROTECTION AGENCY
 INHALABLE PARTICULATE NETWORK
 VALIDATED 1979-82 DATA, VALUES IN MICROGRAMS/CUBIC METER

22:02 THURSDAY, OCTOBER 25, 1984

7

UNIVARIATE

VARIABLE=COARSE15

	MOMENTS		QUANTILES(DEF=4)				EXTREMES	
N	11056	SUM WT\$	11056	100% MAX	308.5	99%	67.0426	HIGHEST ID
MEAN	20.1215	SUM	222464	75% Q3	25.17	95%	52.68	177.9(130040000)
STD DEV	17.5633	VARIANCE	308.469	50% MED	15.435	90%	39.433	0.07(14236001)
SKEWNESS	3.28661	KURTOSIS	23.2336	25% Q1	9.36	10%	5.54	0.07(14236001)
USS	7836437	CSS	3410130	0% MIN	0.017	5%	3.68985	0.09(14236001)
CV	87.2861	STD MEAN	0.167035	RANGE	308.463	1%	1	0.105(49184007)
T:MEAN=0	120.463	PROB>|T|	0.0001	Q3-Q1	15.61			0.1102(33352000)
SGN RANK	30561548	PROB>|S|	0.0001	MODE	1			308.5(39714003)
NUM - = 0	11056							

	MISSING	VALUE	
COUNT	6726		
X COUNT/NBRS	37.62		

ENVIRONMENTAL PROTECTION AGENCY
 INHALABLE PARTICULATE NETWORK
 VALIDATED 1979-82 DATA, VALUES IN MICROGRAMS/CUBIC METER

UNIVARIATE

VARIABLE=COARSE10

MOMENTS		QUANTILES(SIDE=F=4)				EXTREMES			
N	415	SUM WGT\$	415	100% MAX	100	99%	65.249	HIGHEST ID	10
MEAN	17.5127	SUM	7267.19	75% Q3	23.49	95%	45.318	0.1(34116010)	62.36(0563500)
STD DEV	14.0316	VARIANCE	196.865	50% MED	13.39	90%	35.99	0.107(34116010)	65.8(01038002)
SKEWNESS	1.89432	KURTOSIS	5.4724	25% QL	6	10%	4.77	0.23(34116010)	73.4(45100001)
US\$	208789	CSS	81510.5	0% MIN	0.1	5%	2.55399	0.35(34116010)	92.7(01038002)
CV	80.1222	STD MEAN	0.688783	RANGE	99.9	1%	0.3692	0.47(34116010)	100(01038002)
T:MEAN=0	25.4256	PROB>|T|	0.0001	Q3-Q1	15.49				
SGN RANK	43160	PROB>|S|	0.0001	MODE	1.57				
NUH ~ = 0	415								
		MISSING VALUE COUNT				17367			
		% COUNT/NOBS				97.67			

APPENDIX B

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

1

NAME=SOUTH BIRMINGHAM											
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN
HIVOL	80	20.95	32.0365	36.055	47.39	66.715	92.845	109.640	135.125	242.10	74.2151
SSI	36	25.19	30.4435	40.826	46.09	61.765	71.205	89.304	92.874	93.52	61.1068
DICHOT15	0	.	.	.	.	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.	.	.	.	.

NAME=NORTH BIRMINGHAM (S 20TH)											
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN
HIVOL	178	29.6725	41.522	52.1209	64.6325	92.820	131.175	196.410	258.855	323.568	109.613
SSI	146	27.9174	33.500	41.5240	51.4650	72.005	109.550	145.820	170.680	229.176	84.313
DICHOT15	147	14.0572	20.162	28.5220	49.730	71.820	96.740	127.500	178.460	57.914	32.2247
DICHOT10	41	15.710	17.526	25.9980	30.0050	42.040	64.255	104.920	166.040	172.500	53.247
FINE15	147	8.1044	11.486	13.1820	16.1800	25.520	35.750	48.958	55.816	70.636	13.5179
FINE10	41	7.7800	11.515	14.8160	16.7500	24.210	38.185	57.260	74.340	79.600	30.410
COARSE15	147	2.9944	5.584	9.0560	14.2200	24.060	36.750	57.328	73.920	124.380	29.236
COARSE10	41	4.5300	5.277	7.5260	10.7800	18.170	25.040	35.912	90.010	100.000	22.836

NAME=NORTH BIRMINGHAM (COL)											
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN
HIVOL	40	37.29	48.9165	56.481	70.1175	96.375	150.300	230.58	270.880	276.0	116.739
SSI	36	29.12	36.3495	41.543	54.1025	72.165	103.900	163.99	179.360	205.2	86.909
DICHOT15	89	18.43	26.4650	30.340	39.3500	53.570	80.260	119.20	153.800	167.8	64.430
DICHOT10	0	.	.	.	.	.	.	.	.	.	.
FINE15	89	7.93	12.5400	13.500	18.5500	25.040	36.930	50.35	60.385	71.5	28.989
FINE10	0	1.00	8.4100	11.370	18.1600	26.320	45.395	72.10	104.150	147.2	35.442
COARSE15	89	0	.	.	.	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.	.	.	.	.

NAME=INGLENOOK											
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN
HIVOL	74	25.74	33.2950	42.410	63.1700	87.845	125.200	166.850	185.875	206.3	97.9834
SSI	32	24.22	30.8565	40.372	48.6675	58.110	78.957	105.284	138.780	141.9	65.5609
DICHOT15	0	.	.	.	.	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

SITE=010570001A07 NAME=HUFFMAN														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	89	20.79	31.930	36.240	44.3900	59.380	72.5900	84.6000	132.80	60.1009	19.8754	20.79	132.80	
SSI	90	19.33	23.405	28.898	38.1175	47.790	59.4600	70.0400	74.2495	95.94	49.0081	15.3273	19.33	95.94
DICHOT15	84	12.92	19.135	21.355	28.4975	40.555	58.6225	69.3650	74.4425	95.19	43.0185	16.3638	12.92	95.19
DICHOT10	0													
FINE15	84	6.61	10.405	11.820	16.3325	22.500	29.4800	38.2649	44.9525	51.46	23.6720	9.8021	6.61	51.46
FINE10	0													
COARSE15	64	3.29	6.365	7.280	9.7475	16.665	25.4675	39.7400	48.6800	58.14	19.3462	12.6506	3.29	58.14
COARSE10	0													

SITE=012360029A07 NAME=MOBILE (MKRG STA TOWER)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	0													
SSI	0													
DICHOT15	60	16.45	17.6430	20.666	25.8950	36.010	46.9350	63.447	72.4105	86.05	39.2513	16.2769	16.45	86.05
DICHOT10	0													
FINE15	60	6.58	7.5265	9.437	12.6150	16.225	26.5725	34.613	43.4025	47.57	20.3376	10.0071	6.58	47.57
FINE10	0													
COARSE15	60	5.18	5.8850	8.842	12.8525	17.055	22.1075	31.451	40.9845	56.88	18.9138	10.5015	5.18	56.88
COARSE10	0													

SITE=012540001A07 NAME=MTN BROOK														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	84	12.1600	24.0800	28.930	37.1675	49.610	62.3675	78.7749	88.2650	138.400	51.5505	20.3411	12.160	138.40
SSI	33	24.0500	25.7510	27.106	32.7950	42.990	53.5400	67.3560	72.2650	73.140	44.6270	14.0137	24.050	73.14
DICHOT15	126	8.8124	12.4855	15.016	19.4975	26.899	32.6400	44.8700	51.2585	62.447	28.0009	11.4076	8.702	64.65
DICHOT10	0													
FINE15	126	5.0138	8.2715	9.809	12.6625	17.695	22.7200	30.0240	36.0325	50.333	19.0504	8.5956	4.746	51.04
FINE10	0													
COARSE15	126	0.8563	2.2675	2.848	4.2450	6.015	11.7975	16.7720	20.0290	38.046	8.9423	6.2113	0.670	41.24
COARSE10	0													

SITE=013200001A07 NAME=TARRANT (PINSON ST)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	92	28.74	52.9360	58.834	76.8300	113.60	158.750	185.63	202.830	324.60	120.169	51.2384	28.74	324.60
SSI	92	22.10	35.4445	43.086	56.1125	80.79	107.075	128.90	137.805	173.50	84.3668	31.9175	22.10	173.50
DICHOT15	5	18.26	18.2500	18.260	18.4350	30.42	39.590	45.32	45.320	45.32	29.294	11.3451	18.26	45.32
DICHOT10	0													
FINE15	5	7.58	7.5800	7.580	7.6250	11.32	23.940	29.78	29.780	29.78	14.890	9.3585	7.58	29.78
FINE10	0													
COARSE15	5	10.59	10.5900	10.590	10.8100	15.54	17.430	19.10	19.10	19.10	14.404	3.5746	10.59	19.10
COARSE10	0													

ENVIRONMENTAL PROTECTION AGENCY
 INHALABLE PARTICULATE NETWORK
 IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
 VALUES IN MICROGRAMS PER CUBIC METER

NAME=ANCHORAGE											
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN
											STD
HIVOL	65	5.321	10.681	14.4180	19.110	41.73	80.61	110.120	161.74	260.30	5.321
SSI	49	0.263	9.138	11.1200	17.080	29.98	53.90	75.020	103.41	118.40	0.263
DICHOT15	11	7.156	7.156	7.1630	9.692	12.01	19.42	86.600	103.10	20.8199	7.156
DICHOT10	0										103.10
FINE15	11	2.590	2.590	2.9896	4.983	6.75	11.03	14.762	15.68	6.2345	2.590
FINE10	0										15.68
COARSE15	11	1.121	1.121	1.1788	1.660	3.74	9.51	76.102	92.70	12.5743	1.121
COARSE10	0										92.70

NAME=CAREFREE AIRPORT											
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN
											STD
HIVOL	116	10.3131	14.5245	19.8030	27.4450	40.985	51.705	64.463	75.4815	96.5446	41.3222
SSI	41	10.8900	14.2650	15.8820	23.9300	28.680	38.3350	44.608	62.8789	67.6400	10.240
DICHOT15	62	3.4030	6.7523	9.6500	15.9400	23.200	29.4800	37.6644	44.2880	68.1700	32.5482
DICHOT10	0										67.64
FINE15	62	1.2080	2.3540	3.7430	5.4225	7.180	9.2075	11.288	12.0440	16.5500	11.2229
FINE10	0										66.17
COARSE15	62	1.6250	3.0445	5.1998	9.0150	15.970	21.6050	26.883	33.1180	57.4900	7.3344
COARSE10	0										1.208

NAME=PHOENIX (ROOSEVELT ST)											
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN
											STD
HIVOL	146	30.1396	59.6975	69.566	84.4525	105.500	141.375	176.690	203.315	249.843	114.879
SSI	96	22.5500	36.2150	46.859	57.2400	75.065	96.242	128.600	151.315	179.100	43.5056
DICHOT15	95	12.3900	21.6500	31.682	45.3700	59.580	84.720	116.820	129.420	148.400	26.88
DICHOT10	49	12.6100	14.0050	15.740	26.8600	38.960	45.475	64.640	75.050	99.540	22.55
FINE15	95	6.0900	7.3460	8.264	11.9400	18.250	29.60	46.326	63.660	106.900	17.6777
FINE10	49	5.5300	5.9250	7.250	10.0650	12.540	17.070	25.190	30.500	66.910	12.81
COARSE15	95	5.5800	11.4360	16.526	28.7300	40.010	54.560	71.340	77.800	106.000	42.322
COARSE10	49	3.2300	5.2450	6.570	16.9050	24.260	30.985	37.520	44.660	51.340	9.7582

NAME=NORTH PHOENIX											
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN
											STD
HIVOL	71	24.78	36.5340	63.046	74.2700	106.500	142.400	163.120	184.740	239.3	110.156
SSI	75	28.17	38.5880	44.026	52.900	65.720	92.300	123.640	133.900	155.7	43.0318
DICHOT15	50	14.06	17.3060	26.268	39.8050	50.180	66.205	88.814	94.279	112.9	26.78
DICHOT10	0										179.10
FINE15	50	4.86	5.8550	7.131	9.4925	12.870	20.347	31.065	34.216	37.0	53.652
FINE10	0										14.06
COARSE15	50	5.65	8.9265	15.284	25.7300	33.695	48.430	62.994	70.589	75.9	112.9
COARSE10	0										110.156

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

NAME=NORTH PHOENIX (COL)										
SITE=03060004A57										
NAME=LITTLE ROCK										
SITE=04440001A07										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	Amean
HIVOL	0	36.61	39.255	43.29	49.6525	63.805	81.3275	122.35	127.7	70.6133
SSI	24	.	.	.	.	.	.	.	.	26.6832
DICHOT15	0	.	.	.	.	.	.	.	.	30.61
DICHOT10	0	.	.	.	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.	.	.	.
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	Amean
HIVOL	114	27.9275	32.2825	35.935	44.8375	59.065	75.1700	92.370	109.000	133.645
SSI	63	20.3000	26.0080	31.420	39.9300	47.090	61.2300	76.290	88.980	124.100
DICHOT15	32	10.0400	15.9550	19.925	23.5975	33.440	41.9700	57.393	64.640	69.320
DICHOT10	0	.	.	.	.	.	.	.	.	34.9144
FINE15	32	5.0600	6.6915	10.672	12.0150	16.255	22.3325	34.554	38.181	41.100
FINE10	0	.	.	.	.	.	.	.	.	18.6606
COARSE15	32	3.8400	4.5610	7.915	11.6175	14.735	20.5625	26.459	29.830	32.820
COARSE10	0	.	.	.	.	.	.	.	.	16.2537
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	Amean
HIVOL	113	21.3496	44.6670	62.132	88.1200	125.700	162.850	186.180	212.080	272.284
SSI	68	15.8800	39.8260	48.044	63.0675	95.450	123.175	158.160	179.925	216.300
DICHOT15	92	3.8450	14.0435	19.848	28.6425	51.145	77.195	104.300	112.930	303.600
DICHOT10	0	.	.	.	.	.	.	.	.	57.189
FINE15	92	2.0240	5.5365	9.582	14.7975	23.165	37.597	58.890	68.600	90.800
FINE10	0	.	.	.	.	.	.	.	.	28.765
COARSE15	92	1.0000	2.6465	6.754	11.2875	21.665	39.815	51.908	60.265	283.600
COARSE10	0	.	.	.	.	.	.	.	.	28.426
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	Amean
HIVOL	61	40.84	45.970	55.504	90.2450	117.60	142.400	195.26	226.150	356.00
SSI	40	27.08	33.240	71.611	85.6825	103.10	119.375	177.40	210.575	372.20
DICHOT15	53	14.55	18.526	24.774	40.9350	58.38	74.890	119.56	177.050	195.10
DICHOT10	5	57.67	57.670	57.670	62.6350	68.95	76.765	79.92	79.920	69.550
FINE15	53	7.43	7.506	9.438	13.6350	19.66	32.925	76.82	102.150	140.80
FINE10	5	43.14	43.140	43.140	44.0450	48.03	55.750	58.48	58.480	30.803
COARSE15	53	5.51	6.791	10.876	21.5400	29.42	47.040	54.26	58.526	49.524
COARSE10	5	14.53	14.530	14.530	17.0500	20.59	22.720	24.00	24.00	20.026

ENVIRONMENTAL PROTECTION AGENCY
 INHALABLE PARTICULATE NETWORK
 IPPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
 VALUES IN MICROGRAMS PER CUBIC METER

SITE=051260002A07 NAME=CHICO

SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	116	16.4915	25.913	29.347	37.2075	52.27	70.720	90.821	101.425	170.89	57.0921	26.3039	16.16	176.59
SSI	49	12.9000	16.575	18.380	30.6850	44.90	58.215	72.420	110.350	147.80	47.7724	25.6639	12.90	147.80
DICHOT15	25	10.5300	10.968	12.710	17.0750	24.25	38.800	46.202	47.333	47.36	27.6988	11.9557	10.53	47.36
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	25	4.6400	4.955	5.828	6.6250	10.17	12.400	13.532	21.037	24.22	9.9920	4.0733	4.64	24.22
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	25	3.1600	3.697	6.342	9.6300	13.78	25.580	31.068	33.641	34.34	17.7064	9.3564	3.16	34.34
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.

SITE=052220003A07 NAME=SAN DIEGO (EL CAJON)

SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	58	13.270	22.7980	29.417	44.0525	58.105	72.1275	83.452	90.4479	99.58	57.6379	19.9620	13.270	99.58
SSI	0	.	.	.	.	.	.	.	.	.	.	.	.	.
DICHOT15	66	7.378	12.6340	15.657	26.5650	38.085	48.9875	58.255	73.7144	113.50	39.4053	19.3135	7.378	113.50
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	66	4.990	5.4615	7.518	11.1825	16.025	26.6625	34.905	46.4065	92.30	19.8732	13.9289	4.990	92.30
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	66	1.977	5.0235	5.650	12.8575	17.885	23.9800	30.805	41.9629	76.50	19.5286	12.4169	1.977	76.50
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.

SITE=052800005A07 NAME=FRESNO (E OLIVE)

SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	64	24.73	42.880	64.295	78.62	110.700	144.825	191.25	220.775	262.60	117.759	50.1014	24.73	262.60
SSI	52	17.64	43.136	52.231	63.13	86.045	121.250	183.26	232.230	254.00	100.769	52.2639	17.64	254.00
DICHOT15	2	36.94	36.940	36.940	42.060	47.180	47.18	47.180	47.180	47.18	42.060	7.2408	36.94	47.18
DICHOT10	1	47.90	47.900	47.900	47.90	47.900	47.900	47.900	47.900	47.90	47.900	47.90	47.90	47.90
FINE15	2	9.80	9.800	9.800	9.80	10.315	10.830	10.830	10.830	10.83	10.830	10.315	9.80	10.83
FINE10	1	35.05	35.050	35.050	35.05	35.050	35.05	35.05	35.05	35.05	35.050	35.05	35.05	35.05
COARSE15	2	27.14	27.140	27.140	27.14	31.745	36.350	36.350	36.350	36.35	31.745	6.5125	27.14	36.35
COARSE10	1	12.85	12.850	12.850	12.85	12.850	12.850	12.850	12.850	12.85	12.850	12.85	12.85	12.85

SITE=052820002A07 NAME=FIVE POINTS

SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	84	4.49000	8.6052	18.3650	37.1675	66.665	117.875	180.100	214.000	307.800	86.1383	66.1273	4.490	307.8
SSI	88	3.96700	10.1286	21.9270	37.6125	54.745	91.052	141.010	196.990	253.500	71.1741	50.6819	3.967	253.5
DICHOT15	153	2.35976	5.5916	10.5840	18.9400	33.460	55.565	73.890	93.733	182.125	40.9786	30.9271	2.282	218.9
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	153	1.36594	2.9257	4.9360	7.6850	12.120	22.020	44.482	57.570	90.945	18.4784	17.5346	1.002	98.5
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	153	0.15160	0.5767	1.9382	6.7800	13.950	35.385	52.272	60.718	131.908	22.5012	23.1011	0.130	145.3
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

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NAME=LIVERMORE (RAILROAD AVE)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	52	18.590	26.3635	30.016	46.4675	73.630	94.8500	142.390	160.005	233.70	77.6740	41.7611	16.590	233.70
SSI	0													
DICHOT15	58	8.038	14.3280	17.762	24.1050	37.380	60.6500	78.258	95.609	138.80	45.0462	27.2728	8.038	138.80
DICHOT10	0													
FINE15	58	2.240	3.9167	5.206	6.5200	11.525	21.6800	49.095	60.336	62.63	17.3978	15.5469	2.240	62.63
FINE10	0													
COARSE15	58	4.754	6.7440	10.618	17.2250	24.125	31.2475	47.299	66.860	125.70	27.6483	19.3722	4.754	125.70
COARSE10	0													
NAME=LIVERMORE (OLD FIRST ST)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	11	37.250	37.2500	37.458	40.1400	48.270	61.0300	80.036	83.030	83.03	52.1745	14.3394	37.250	83.03
SSI	2	56.750	56.7500	56.750	56.7500	69.855	82.960	82.960	82.96	82.96	69.8550	16.5333	56.750	82.96
DICHOT15	82	8.320	14.7745	15.973	20.4800	28.250	38.1150	44.599	60.1004	69.37	30.5166	14.1457	8.320	69.37
DICHOT10	0													
FINE15	82	3.420	4.7934	5.320	6.6775	9.550	14.6700	23.721	27.0800	63.66	12.2595	6.6539	3.420	63.66
FINE10	0													
COARSE15	82	3.533	5.1760	7.030	10.2450	15.780	24.6425	31.568	37.2495	76.07	16.2577	11.1382	3.533	76.07
COARSE10	0													
NAME=LOMPOC														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	126	16.9742	32.955	42.580	50.2325	63.625	75.7675	92.230	102.860	109.017	64.4717	19.4104	15.500	109.80
SSI	60	15.3000	23.064	24.711	30.2200	43.195	53.4800	65.069	75.663	81.940	43.6602	15.4183	15.300	81.94
DICHOT15	91	9.1550	15.498	21.622	26.5500	34.850	42.5200	56.520	60.670	64.730	36.0798	12.4420	9.155	64.73
DICHOT10	0													
FINE15	91	3.2700	5.072	5.634	7.4300	9.980	12.2700	16.814	21.424	30.150	10.6314	4.6488	3.270	30.15
FINE10	0													
COARSE15	91	3.0660	10.240	13.262	17.1700	24.260	29.1400	41.244	51.366	56.640	25.4486	11.1804	3.086	56.64
COARSE10	0													
NAME=WEST LOS ANGELES														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	77	31.8300	39.393	43.696	57.855	75.64	94.735	129.160	143.740	167.700	78.7738	30.2078	31.83	167.70
SSI	95	18.0400	30.068	42.184	51.760	66.44	76.840	98.692	117.880	154.000	67.8715	23.8499	18.04	154.00
DICHOT15	147	14.4656	18.480	21.472	31.460	44.90	57.490	71.638	80.758	135.047	46.5464	20.9216	14.24	165.00
DICHOT10	0													
FINE15	147	5.7716	7.662	10.122	15.500	21.81	32.660	48.090	58.792	122.339	26.7518	16.6665	5.33	156.90
FINE10	0													
COARSE15	147	1.0000	7.580	10.080	14.670	19.17	24.340	30.680	34.420	56.232	19.7947	8.6847	1.00	59.29
COARSE10	0													

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

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NAME=PASADENA														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	76	26.04	45.5120	55.378	71.5025	94.495	120.875	154.020	170.300	239.3	98.2570	36.2167	26.04	239.3
SSI	89	18.76	29.7100	35.380	56.6550	75.110	90.930	103.300	125.450	156.0	74.1772	27.1999	18.76	156.0
DICHOT15	28	16.67	17.8895	21.954	40.2725	55.110	75.890	96.019	108.949	117.4	58.8882	24.8345	16.67	117.4
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	28	9.16	10.7305	13.928	21.8925	31.075	42.212	61.684	73.829	75.4	36.1743	16.8566	9.16	75.4
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	28	6.73	7.0810	8.104	15.0375	21.530	33.962	46.359	54.881	61.2	24.7143	13.4513	6.73	61.2
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
NAME=RICHMOND CA														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	66	24.0100	31.4645	33.948	39.9675	51.785	63.6750	79.628	101.203	130.000	54.0750	20.0637	26.010	130.00
SSI	76	15.0600	21.0940	22.531	26.7725	38.435	50.625	66.279	84.402	116.400	41.2408	19.1056	15.060	116.40
DICHOT15	167	6.1094	12.2540	14.254	17.8220	25.730	34.4500	45.584	51.036	67.311	28.3060	14.1691	7.885	98.47
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	167	3.3890	4.7020	5.474	7.1600	9.900	16.5000	30.272	35.742	72.042	13.9197	11.3327	3.217	76.85
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	167	2.5896	4.9872	6.988	8.7900	12.900	17.8900	25.640	30.628	39.233	14.3864	7.4735	1.930	41.64
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
NAME=FRIBOURG (MISSION BLVD)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	129	16.5840	39.4800	48.360	99.1450	146.40	195.200	246.300	278.700	441.968	148.024	75.9261	16.17	464.80
SSI	128	12.6539	29.1695	41.5825	122.60	149.475	208.90	232.495	365.246	121.691	64.1864	10.36	387.20	
DICHOT15	127	14.1784	22.6660	35.954	60.3800	102.10	130.220	169.780	252.431	98.427	44.9345	14.03	267.60	
DICHOT10	47	16.8100	17.1580	22.172	48.2200	61.89	99.630	109.100	129.460	199.10	76.646	35.8944	16.81	199.10
FINE15	127	2.5200	8.2640	11.300	21.2100	39.30	58.600	81.300	104.700	157.641	43.337	28.6691	1.82	163.80
FINE10	47	4.1600	7.4040	9.390	22.3500	30.51	59.420	76.720	98.220	156.700	43.111	28.4797	4.16	154.70
COARSE15	127	4.0404	11.4500	19.674	33.3600	50.98	76.600	103.760	122.272	55.087	27.8492	3.57	125.80	
COARSE10	47	5.8800	7.9760	9.262	19.0600	34.54	45.280	57.744	61.680	62.360	33.531	16.6410	5.88	62.36
NAME=SAN FRANCISCO EAST														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	112	23.6901	28.2855	34.014	39.1025	55.125	69.6575	90.158	107.790	163.546	58.7240	25.2010	23.200	165.60
SSI	0	.	.	.	.	.	.	.	.	.	.	.	.	.
DICHOT15	115	9.2750	11.8100	14.956	20.2200	26.630	38.7600	54.954	62.330	109.028	31.3246	17.0434	9.234	112.30
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	115	3.7752	5.4600	6.142	8.2300	12.160	18.8400	34.844	43.458	72.700	16.3522	12.6762	3.580	75.50
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	115	1.5614	5.4228	6.962	9.2000	13.290	18.1900	25.056	34.000	47.753	14.9725	8.2520	1.330	46.88
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

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NAME=SAN JOSE														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	100	21.0176	36.9835	43.150	60.1375	75.455	102.195	137.120	197.950	262.383	87.5341	44.7166	20.93	262.50
SSI	10	52.6900	52.761	57.0675	62.725	64.857	83.162	85.130	85.130	62.7570	9.0441	52.69	85.13	122.60
DICHOT15	174	11.5300	16.9075	18.295	24.9150	34.210	45.750	65.005	84.932	119.750	38.5684	20.7284	10.66	111.60
DICHOT10	0													
FINE15	174	3.9300	4.9825	5.780	8.6900	12.445	18.617	36.460	58.797	88.275	17.7884	16.4867	3.72	111.60
FINE10	0													
COARSE15	174	5.2175	8.8675	10.690	13.1775	20.070	25.612	33.485	37.715	51.600	20.7786	9.2942	4.52	52.60
COARSE10	0													
NAME=DEVER (BUCKLEY FIELD)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	104	6.8378	16.220	19.425	24.4925	35.310	47.7150	59.235	62.9075	107.595	37.2538	16.8759	6.544	107.70
SSI	57	9.1610	13.867	16.470	19.7350	27.110	37.3300	44.568	48.4520	51.720	20.5335	10.6650	9.161	51.72
DICHOT15	4	8.1470	8.147	9.3977	14.500	15.9175	15.940	15.940	15.940	15.940	13.2717	3.6535	8.147	15.94
DICHOT10	0													
FINE15	4	4.8480	4.848	4.8785	5.310	6.1375	6.300	6.300	6.300	5.4420	0.6721	4.848	6.30	
FINE10	0													
COARSE15	4	3.2990	3.299	3.299	4.1867	6.525	10.7775	10.970	10.970	10.970	7.8297	3.5103	3.299	10.97
COARSE10	0													
NAME=DENVER (14TH STREET)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	132	24.3299	50.8375	52.835	68.2150	94.990	119.600	164.830	198.710	272.29	102.596	46.7513	14.42	284.60
SSI	76	27.5800	36.0475	39.734	46.6800	61.925	80.517	110.550	151.945	235.60	70.608	35.9391	27.58	235.60
DICHOT15	10	20.7400	20.7400	21.851	40.7675	57.250	69.617	87.880	88.580	88.580	55.535	20.6897	20.74	88.58
DICHOT10	0													
FINE15	10	8.9000	8.9000	9.378	13.7925	15.195	23.172	39.677	41.010	41.010	18.884	9.2774	8.90	41.01
FINE10	0													
COARSE15	10	11.8400	11.8400	12.352	24.7825	37.235	46.530	65.103	66.910	66.910	36.651	16.2108	11.84	66.91
COARSE10	0													
NAME=DENVER (LAKEWOOD)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	67	26.92	33.332	36.970	44.330	54.72	75.530	116.040	130.740	258.80	66.0773	36.2274	26.92	258.80
SSI	37	19.87	24.730	30.058	34.095	39.74	56.555	87.192	106.390	140.50	49.8438	25.2766	19.87	140.50
DICHOT15	27	16.99	17.334	18.450	22.820	27.19	38.810	62.072	71.540	72.38	33.0752	15.3134	16.99	72.38
DICHOT10	0													
FINE15	27	3.28	3.528	4.804	6.940	8.57	10.950	21.900	39.726	44.89	11.2352	8.7104	3.28	44.89
FINE10	0													
COARSE15	27	7.30	8.148	10.452	14.340	20.74	25.390	40.448	47.750	52.49	21.8404	10.4447	7.30	52.49
COARSE10	0													

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

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NAME=DENVER (LAKEWOOD COL)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	0	23.48	23.480	25.688	30.65	37.55	43.58	64.986	77.84	40.2333
SSI	15	14.22	14.604	17.540	19.59	22.50	38.61	73.618	89.0318	33.7644
DICHOT15	0									21.4184
DICHOT10	0									14.22
FINE15	27	3.41	3.726	5.104	6.78	9.31	12.24	34.376	40.2640	41.98
FINE10	0									12.3115
COARSE15	27	4.85	6.042	8.798	12.59	15.73	26.21	54.206	56.68	21.4541
COARSE10	0									14.5678

NAME=PUEBLO (CENTRAL MAIN ST)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	2	54.56	54.56	54.560	54.560	83.43	112.30	112.30	112.30	83.4300
SSI	12	22.25	24.248	34.4275	54.56	83.755	101.65	102.00	102.00	86.3377
DICHOT15	6	15.40	15.40	15.40	15.7025	27.00	33.350	44.58	44.58	26.5312
DICHOT10	5	16.97	18.97	18.97	20.7050	31.99	49.665	57.84	57.84	36.5460
FINE15	6	9.30	9.300	9.300	9.5000	11.38	13.232	14.96	14.96	11.5037
FINE10	5	8.46	8.46	8.460	8.460	10.1800	14.25	25.325	32.53	32.53
COARSE15	6	2.02	2.02	2.020	4.4900	15.94	20.720	35.17	35.17	15.0287
COARSE10	5	7.07	7.07	7.070	10.5200	17.74	24.340	25.31	25.31	17.4920

NAME=PORT COLLINS										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	63	5.179	10.624	11.950	15.420	23.47	35.110	42.5960	56.066	65.64
SSI	19	6.564	6.564	7.488	8.981	15.71	23.410	37.6199	43.96	43.96
DICHOT15	25	13.520	13.973	15.984	23.865	32.15	47.530	71.7759	171.101	208.40
DICHOT10	0									43.2368
FINE15	25	4.340	4.415	4.6332	5.690	6.93	12.545	38.9039	45.436	46.42
FINE10	0									13.2876
COARSE15	25	3.630	4.320	7.328	13.920	20.05	34.475	49.8660	138.864	175.80
COARSE10	0									29.9484

NAME=HARTFORD (PUBLIC LIB)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	98	16.210	28.8755	33.280	41.2425	56.52	72.1125	92.5920	114.845	199.50
SSI	94	9.729	19.7025	23.295	30.1275	43.82	56.6625	64.9099	85.052	144.50
DICHOT15	139	11.620	14.1500	15.920	20.990	33.08	41.3100	52.3600	60.590	112.70
DICHOT10	0									33.3637
FINE15	139	4.302	6.7100	7.820	9.8000	14.77	23.8400	31.6200	42.290	57.72
FINE10	0									18.3949
COARSE15	139	3.244	5.2600	6.490	9.0700	13.76	18.4500	24.4000	28.820	54.92
COARSE10	0									14.9686

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

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NAME=MORRIS DAM/LITCHFIELD CO)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	70	8.545	12.2240	16.1690	23.9125	31.450	42.2900	52.0910	57.7350	67.99
SSI	0									33.0549
DICHOT15	54	2.586	4.5005	5.6055	7.7672	12.915	26.2825	34.9099	64.3024	74.99
DICHOT10	0									19.0769
FINE15	54	0.950	1.3117	2.3940	4.2075	7.525	15.8075	24.7800	42.6073	55.86
FINE10	0									11.6502
COARSE15	54	1.177	1.9017	2.4220	3.7900	5.425	9.6325	11.6750	14.3100	51.62
COARSE10	0									7.4277
NAME=DOVER (POLICE STA)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	50	10.97	14.6220	16.616	26.2300	36.86	61.7775	65.2223	99.908	108.20
SSI	0									46.1448
DICHOT15	60	11.27	13.5515	17.451	22.9475	31.35	47.2275	56.463	73.370	97.49
DICHOT10	0									35.6619
FINE15	60	5.57	6.7975	6.251	10.4975	15.71	27.2675	36.507	38.998	64.50
FINE10	0									19.5280
COARSE15	60	4.56	4.7960	6.365	9.1575	14.60	19.8250	30.183	32.872	50.10
COARSE10	0									16.1339
NAME=WILMINGTON DE (CLAYMONT)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	118	21.1669	24.5675	28.263	40.6275	49.465	64.22	73.857	85.5715	107.254
SSI	75	13.0700	19.8640	23.772	30.2200	40.250	50.75	61.984	70.8720	84.010
DICHOT15	35	12.6700	12.9500	15.428	24.9100	32.020	42.37	53.186	65.5560	67.980
DICHOT10	0									33.4034
FINE15	35	6.7200	6.8560	8.068	13.4600	19.360	24.99	37.746	42.1500	48.230
FINE10	0									20.3743
COARSE15	35	4.5300	5.0260	6.066	8.1400	12.710	15.68	23.230	26.8640	29.120
COARSE10	0									13.0300
NAME=WASHINGTON (L STREET)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	94	27.6880	34.8550	38.310	52.9750	66.500	84.2500	111.200	120.600	186.900
SSI	31	24.3300	25.4460	27.672	37.7600	42.560	67.5300	65.648	67.674	88.430
DICHOT15	116	12.0796	16.5915	19.216	28.6925	36.250	55.9650	76.028	85.949	119.553
DICHOT10	0									43.2061
FINE15	116	5.2828	8.8035	10.483	16.1600	23.700	34.4275	45.818	53.316	64.140
FINE10	0									26.8322
COARSE15	116	2.2379	4.0770	6.011	9.5200	13.385	19.4675	31.527	39.448	58.899
COARSE10	0									16.3740

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

NAME=WASHINGTON (GARRISON SCH)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AHEAN	STD	MIN	MAX
HIVOL	47	22.390	28.314	35.226	43.26	60.43	79.51	104.84	127.460	155.00	65.9506	28.6001	22.390	155.00
SSI	39	21.100	23.560	26.310	35.69	47.59	67.59	84.25	91.450	120.90	52.4046	22.2475	21.100	120.90
DICHOT15	19	6.403	6.403	13.670	23.67	31.07	36.50	66.92	79.470	79.47	33.8626	18.0001	6.403	79.47
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	19	3.650	3.850	6.200	10.33	19.35	24.80	45.05	49.100	49.10	20.4137	11.7577	3.850	49.10
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	19	2.553	2.553	5.240	6.29	9.12	14.52	20.06	23.259	73.26	13.4286	15.1914	2.553	73.26
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
NAME=DAVIS ISLAND)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AHEAN	STD	MIN	MAX
HIVOL	0	.	.	.	.	.	.	.	.	.	.	.	.	.
SSI	0	.	.	.	.	.	.	.	.	.	.	.	.	.
DICHOT15	78	12.16	16.8035	18.789	26.1525	33.925	43.0625	55.455	59.7884	83.52	35.6841	13.6176	12.16	83.52
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	78	4.64	6.1240	6.807	8.6800	11.475	17.3850	21.972	24.3415	47.63	13.7337	6.9098	4.64	47.63
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	78	5.34	8.8235	10.614	14.9075	20.020	27.1450	34.373	39.3789	66.16	21.9496	10.3012	5.34	66.16
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
NAME=ATLANTA (BUTLER STREET)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AHEAN	STD	MIN	MAX
HIVOL	105	21.5608	30.5970	35.478	43.3950	52.740	72.7250	87.500	93.4230	120.826	58.3876	20.4002	21.13	121.00
SSI	42	25.9900	27.8625	33.933	37.1225	46.075	56.3225	79.328	87.1549	92.860	50.9874	16.5209	25.99	92.86
DICHOT15	102	11.8036	18.0190	20.345	23.4200	30.830	46.0525	57.547	66.1005	77.018	35.7465	14.7480	11.65	77.14
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	102	6.5248	10.9055	12.648	15.2650	20.510	25.2900	35.279	43.6415	58.284	22.1232	9.5788	6.46	58.36
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	102	1.9904	4.5125	5.820	7.5720	12.055	17.3550	23.170	27.1865	62.048	13.6228	8.4371	1.97	62.78
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
NAME=ATLANTA (MARIETTA BLVD)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AHEAN	STD	MIN	MAX
HIVOL	61	29.50	36.6060	39.082	53.5900	69.640	104.400	122.260	126.750	165.80	76.8887	31.1948	29.50	165.80
SSI	25	31.21	33.5380	39.354	46.7600	64.140	78.460	106.144	119.850	120.90	65.6760	23.5914	31.21	120.90
DICHOT15	54	10.89	12.0725	16.715	24.4125	36.050	56.637	71.525	78.607	94.31	40.4713	20.2231	10.89	94.31
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	54	9.25	10.0550	11.955	15.4300	20.775	29.902	36.730	47.812	60.51	23.4106	10.8555	9.25	60.51
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	54	1.39	1.8625	2.360	7.6100	14.020	25.627	34.040	45.542	59.44	17.0606	13.1732	1.39	59.44
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

		NAME=SAVANNAH (SCOTT MID SCH)													
		NAME=PEARL CITY (HI)													
		NAME=BOISE (FIRE STATION #6)													
		NAME=CHICAGO (FARR DORMITORY)													
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX	
HIVOL	0	.	.	.	.	.	.	.	.	.	.	.	.	.
SSI	0	9.169	14.632	18.610	26.11	36.54	53.55	70.268	76.524	90.95	41.1167	19.2027	9.169	90.95	
DICHOT15	75	6.114	7.564	9.356	11.25	15.29	21.52	31.566	35.958	55.51	17.8127	9.2414	6.114	55.51	
DICHOT10	0	4.816	6.408	11.96	19.95	31.46	46.338	54.274	64.20	23.3066	14.3478	1.400	64.20		
FINE15	0	1.400	1.400	1.400	1.400	1.400	1.400	1.400	1.400	1.400	1.400	1.400	1.400		
COARSE15	75	0	0	0	0	0	0	0	0	0	0	0	0		
COARSE10	0	0	0	0	0	0	0	0	0	0	0	0	0		
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SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX	
HIVOL	75	16.2700	16.5940	23.8800	30.4200	34.2800	37.3100	42.534	49.7380	70.1100	34.0871	6.59821	16.270	70.11	
SSI	109	5.7372	12.9600	15.3500	19.1450	21.6500	26.5500	29.030	31.5800	48.6519	22.5296	5.99444	5.451	50.11	
DICHOT15	156	6.9914	8.6313	9.8495	11.8850	15.3150	18.4375	22.152	24.7160	51.1787	16.0729	6.62291	6.740	56.44	
DICHOT10	0	2.3241	3.0431	3.2110	3.8125	4.5185	5.8850	7.798	8.9150	37.5291	5.5579	4.82660	2.091	55.12	
FINE15	0	1.56	1.9675	4.4977	5.2992	7.0500	10.0200	13.1875	15.461	16.6195	32.4613	10.5154	4.89363	1.320	37.05
COARSE15	156	0	0	0	0	0	0	0	0	0	0	0	0		
COARSE10	0	0	0	0	0	0	0	0	0	0	0	0	0		
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SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX	
HIVOL	104	12.919	35.3175	41.420	55.1325	63.380	112.775	153.850	171.575	294.255	90.3296	49.2999	12.220	294.50	
SSI	14	24.490	24.4900	25.3190	34.0275	65.520	92.815	126.000	129.500	129.500	67.0679	35.070	24.490	129.50	
DICHOT15	92	8.762	11.3020	13.463	22.4150	33.015	51.205	68.310	84.377	113.000	37.9065	21.9680	8.762	113.00	
DICHOT10	5	15.840	15.8400	15.840	33.1350	54.310	70.870	77.600	77.600	77.600	52.4660	23.0055	15.840	77.60	
FINE15	92	1.760	3.0300	5.099	6.4575	12.115	25.090	40.370	49.682	75.700	18.0052	15.2809	1.760	75.70	
FINE10	5	8.850	8.8500	8.850	25.3050	43.060	55.955	58.950	58.950	61.1160	19.3863	8.850	58.95		
COARSE15	92	1.060	3.9907	5.865	9.5625	16.990	26.802	37.931	43.03	71.600	19.9043	13.7253	1.060	71.60	
COARSE10	5	7.000	7.0000	7.000	7.1800	11.170	15.600	16.650	18.650	11.3660	4.7330	7.000	18.65		
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SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX	
HIVOL	28	32.70	36.7320	43.478	50.4975	68.765	85.4800	101.171	135.830	149.60	71.1064	26.1455	32.70	149.60	
SSI	42	24.16	25.1820	28.113	36.6250	48.225	65.6700	86.647	98.553	224.70	56.0066	33.1192	24.16	224.70	
DICHOT15	40	11.56	12.6470	15.518	25.8300	34.225	49.8600	78.381	86.838	90.36	39.1557	20.6144	11.56	90.36	
DICHOT10	0	4.65	6.1120	7.393	10.7875	16.920	27.7125	33.091	42.323	67.76	19.9560	12.1371	4.65	67.76	
FINE15	40	0	4.44	4.5075	6.956	8.8825	12.355	22.7900	49.615	57.405	60.95	19.1982	14.9754	4.44	60.95
FINE10	0	0	0	0	0	0	0	0	0	0	0	0	0		
COARSE15	40	0	0	0	0	0	0	0	0	0	0	0	0		
COARSE10	0	0	0	0	0	0	0	0	0	0	0	0	0		

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

NAME=CHICAGO (WASHINGTON HS)															
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX	
HIVOL	34	40.08	42.9675	53.490	60.6750	98.38	125.475	166.750	191.225	201.50	104.139	38.2550	40.08	201.50	
SSI	29	29.98	38.1800	47.820	61.8600	74.30	105.300	154.500	251.449	286.70	90.746	52.5663	29.98	286.70	
DICHOT15	56	14.27	18.9525	23.270	36.1000	52.02	73.055	87.984	103.670	116.50	54.558	24.6199	14.27	116.50	
DICHOT10	0														
FINE15	56	6.23	10.3625	12.315	17.0525	21.02	35.510	43.163	54.020	60.14	25.772	12.7936	6.23	60.14	
FINE10	0														
COARSE15	56	3.33	7.0640	10.389	14.7275	26.19	37.677	57.310	65.457	73.60	28.784	16.8194	3.33	73.60	
COARSE10	0														

NAME=CHICAGO (EVANSTON)															
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX	
HIVOL	55	21.480	23.8740	26.9320	33.1300	52.66	61.230	87.670	111.340	114.10	53.0584	23.5680	21.480	114.10	
SSI	1	35.770	35.7700	35.7700	35.7700	35.77	35.770	35.770	35.77	35.77	35.770	35.770	35.77	35.77	
DICHOT15	32	7.960	8.0497	9.6149	13.7500	27.29	43.680	55.736	61.252	65.38	26.8593	16.6517	7.960	65.38	
DICHOT10	0														
FINE15	32	7.334	7.8195	8.6149	12.9125	26.29	43.185	54.407	59.277	64.38	27.9905	16.4775	7.334	64.38	
FINE10	0														
COARSE15	32	0.017	0.0514	0.1080	0.5615	1.00	1.000	1.217	2.242	2.97	0.8695	0.5511	0.017	2.97	
COARSE10	0														

NAME=CHICAGO (BRAIDWOOD)															
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX	
HIVOL	67	10.720	16.940	22.324	36.2400	58.150	83.49	104.580	142.220	170.90	61.8728	34.5683	10.720	170.90	
SSI	32	24.020	25.125	29.183	32.6075	42.075	49.83	66.086	82.322	84.76	43.6691	14.4880	24.020	84.76	
DICHOT15	59	8.543	9.947	10.780	13.9000	22.560	39.54	57.420	69.590	68.12	28.1989	17.9552	8.543	68.12	
DICHOT10	0														
FINE15	59	2.970	4.650	5.710	9.2900	15.090	27.35	32.470	35.600	37.58	17.1851	9.8387	2.970	37.58	
FINE10	0														
COARSE15	59	0.290	1.310	1.680	3.0800	6.760	14.01	26.350	38.710	56.79	11.0138	11.6250	0.290	56.79	
COARSE10	0														

NAME=GARY (FEDERAL BLDG)															
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX	
HIVOL	31	39.05	47.6300	54.996	73.6700	111.600	149.600	217.460	295.759	371.0	122.716	70.0487	39.05	371.0	
SSI	21	47.45	47.6900	49.992	52.9250	77.790	95.175	130.480	214.429	223.6	84.100	39.9038	47.45	223.6	
DICHOT15	14	18.92	19.6025	29.890	37.6025	58.925	60.940	99.115	116.424	152.8	60.376	28.7440	18.92	152.8	
DICHOT10	0														
FINE15	34	9.90	11.3925	13.975	18.5825	24.950	34.237	46.210	50.962	51.3	27.519	11.4360	9.90	51.3	
FINE10	0														
COARSE15	34	2.08	3.4450	6.460	14.8775	28.210	47.102	68.500	80.800	101.5	32.862	23.5754	2.08	101.5	
COARSE10	0														

ENVIRONMENTAL PROTECTION AGENCY
 INHALABLE PARTICULATE NETWORK
 IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
 VALUES IN MICROGRAMS PER CUBIC METER

SITE=152040021A07 NAME=INDIANAPOLIS(MICHIGAN ST)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	69	29.440	33.305	38.970	46.985	56.38	82.4050	107.900	120.700	163.50	65.0303	27.6469	29.440	163.50
SSI	40	25.440	26.383	35.666	40.440	49.54	61.6775	72.491	93.576	94.80	52.0592	16.6862	25.440	94.80
DICHOT15	41	1.535	12.366	17.372	24.220	34.01	54.5650	79.290	98.794	99.72	42.7248	24.4804	1.535	99.72
DICHOT10	0													
FINE15	41	1.052	6.799	7.694	11.600	21.43	30.6100	48.456	58.047	60.85	23.0925	14.6218	1.052	60.85
FINE10	0													
COARSE15	41	0.484	4.781	5.992	10.405	15.37	27.3450	38.710	49.446	63.61	19.6323	13.3687	0.484	63.61
COARSE10	0													

SITE=152160002A07 NAME=JEFFERSONVILLE (LIBRARY)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	54	33.98	42.260	46.385	58.4325	72.215	87.4525	105.600	112.750	119.70	75.2919	21.3769	33.98	119.70
SSI	41	23.77	31.089	35.768	50.6350	64.680	78.0550	86.354	94.598	99.45	63.0337	16.3377	25.77	99.45
DICHOT15	0													
DICHOT10	0													
FINE15	0													
FINE10	0													
COARSE15	0													
COARSE10	0													

SITE=162500003A07 NAME=MARSHALLTOWN (CITY HALL)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	91	26.2700	30.508	38.592	49.15	65.44	93.95	110.700	119.980	150.10	71.8529	27.7463	26.2700	150.10
SSI	57	12.4500	19.313	25.796	37.42	53.21	71.16	81.802	90.193	92.85	54.0282	21.0254	12.550	92.85
DICHOT15	95	0.8839	13.672	16.100	25.66	37.86	52.50	67.972	72.856	89.06	40.0168	18.4777	0.8839	89.06
DICHOT10	0													
FINE15	95	0.1239	3.748	4.686	7.58	12.79	20.19	24.558	28.352	42.08	14.1798	8.1196	0.1239	42.08
FINE10	0													
COARSE15	95	0.7600	6.172	10.276	15.90	23.81	31.53	47.310	53.992	66.46	25.8375	13.8214	0.7600	66.46
COARSE10	0													

SITE=162500004A07 NAME=MARSHALLTOWN (FISHER SCH)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	69	0.2080	21.8800	25.690	32.9100	46.710	56.3100	71.850	75.4550	123.700	47.0811	19.2461	0.208	123.70
SSI	40	8.4050	19.7855	22.114	24.9275	35.095	51.6575	62.880	71.4240	82.310	38.3941	16.4156	8.405	82.31
DICHOT15	102	7.14563	9.9473	12.079	18.1125	27.425	38.0125	49.730	70.3725	80.466	29.8501	16.1255	7.145	80.47
DICHOT10	0													
FINE15	102	0.46958	3.2490	4.226	7.5425	12.740	19.4400	23.703	28.0670	37.502	13.6021	7.6301	0.404	37.77
FINE10	0													
COARSE15	102	3.65052	4.3456	4.950	7.4750	12.465	19.7250	32.704	51.5300	62.003	16.1680	12.8983	3.650	62.07
COARSE10	0													

ENVIRONMENTAL PROTECTION AGENCY
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IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

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NAME=KANSAS CITY KS (FAIRFAX)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AHEAN	STD	MIN	MAX
HIVOL	128	35.4843	45.925	54.072	66.835	94.75	116.75	135.93	156.98	220.093	95.5305	34.9103	34.71	225.4
SSI	0	.	.	.	.	.	.	.	.	.	.	.	.	.
DICHOT15	0	.	.	.	.	.	.	.	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.

NAME=TOPEKA (QUINCY SCHOOL)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AHEAN	STD	MIN	MAX
HIVOL	120	23.383	33.5565	38.357	50.605	65.815	86.84	109.050	124.460	158.607	70.7816	28.0506	22.90	159.30
SSI	67	18.660	25.9940	28.946	39.220	53.850	71.06	89.290	99.316	106.900	56.4293	21.7479	18.68	104.90
DICHOT15	71	12.280	13.2460	14.996	19.110	27.500	36.09	46.822	55.424	60.740	29.7087	13.3024	12.26	80.74
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	71	3.110	4.5900	5.906	7.330	10.330	14.70	20.032	22.920	31.820	11.5973	5.6631	3.11	31.82
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	71	3.470	4.5640	6.520	9.290	15.270	23.39	32.018	40.716	61.190	18.1118	11.0854	3.47	61.19
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.

NAME=WICHITA (SEGWICK AVE)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AHEAN	STD	MIN	MAX
HIVOL	0	.	.	.	.	.	.	.	.	.	.	.	.	.
SSI	0	.	.	.	.	.	.	.	.	.	.	.	.	.
DICHOT15	47	10.13	13.680	19.662	24.61	30.93	51.62	77.752	86.9679	103.10	40.3438	22.5294	10.13	103.10
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	47	3.13	5.452	5.954	6.74	13.25	16.50	23.424	27.4760	30.25	13.5883	6.2412	3.13	30.25
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	47	5.78	7.502	9.622	13.50	16.13	36.16	64.060	71.4119	78.10	26.7549	19.5395	5.78	78.10
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.

NAME=ASHLAND (OIL REFINERY)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AHEAN	STD	MIN	MAX
HIVOL	22	31.78	33.6845	46.089	59.8475	107.90	127.800	210.160	253.06	256.60	106.255	57.5436	31.78	256.60
SSI	9	28.21	28.100	28.210	35.310	45.51	72.565	95.990	95.99	95.99	53.814	23.5638	28.21	95.99
DICHOT15	11	23.88	23.6800	27.812	45.8200	65.70	99.290	147.600	159.20	159.20	77.235	37.6349	23.88	159.20
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	11	12.45	12.4500	13.592	24.3100	33.35	56.300	59.262	60.00	60.00	37.770	16.6270	12.45	60.00
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	11	11.43	11.4300	12.990	27.6600	33.51	44.900	90.200	99.20	99.20	39.465	23.2327	11.43	99.20
COARSE10	0

ENVIRONMENTAL PROTECTION AGENCY
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IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

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NAME=LOUISVILLE (OKOLONA)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	74	36.00	41.1975	49.935	64.5625	77.515	102.225	118.550	123.350	234.50	81.6945	29.9507	36.00	234.50
SSI	52	27.73	29.2045	35.718	45.3425	59.150	69.050	84.108	97.381	136.50	58.9271	19.8841	27.73	136.50
DICHOT15	35	11.74	14.7160	22.360	29.7400	42.820	51.360	66.662	79.904	83.56	42.6160	16.6173	11.74	83.56
DICHOT10	0													
FINE10	35	6.40	8.6400	10.552	14.4200	22.310	31.830	40.962	52.758	53.59	24.2134	12.0140	6.40	53.59
FINE15	35	5.34	6.3760	7.876	12.6600	17.350	23.670	29.922	32.780	41.82	16.4029	8.0913	5.34	41.82
COARSE15	0													
COARSE10	0													

NAME=BALTIMORE (FIRE DEPT HQ)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	59	22.750	30.2600	33.650	45.6100	64.200	86.0500	98.250	110.200	141.90	65.8546	27.0200	22.750	141.90
SSI	13	38.660	38.6600	39.308	48.5800	66.110	71.5900	90.578	91.990	91.99	63.2823	16.4637	38.660	91.99
DICHOT15	52	4.714	12.1172	16.599	25.7025	37.350	48.1350	65.474	69.010	83.70	38.6227	17.8519	4.714	83.70
DICHOT10	0													
FINE15	52	0.710	7.7011	10.575	16.1075	22.205	29.6450	36.130	40.591	49.24	22.7354	9.9404	0.710	49.24
FINE10	0													
COARSE15	52	2.495	3.0100	4.980	7.4900	13.005	23.6425	32.480	43.909	47.29	16.0867	11.3720	2.495	47.29
COARSE10	0													

NAME=BALTIMORE (SE POLICE STA)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	35	24.73	26.546	34.520	41.4900	61.560	89.300	126.020	159.860	163.30	70.3454	35.7739	24.73	163.30
SSI	19	43.08	43.080	45.660	64.7400	73.840	95.390	138.400	145.400	145.40	62.4195	27.9840	43.08	145.40
DICHOT15	20	12.09	12.199	14.689	20.7175	27.680	37.285	73.804	85.218	85.66	32.8235	18.7443	12.09	85.66
DICHOT10	0													
FINE15	20	6.13	6.199	7.604	12.7125	16.635	21.245	36.273	50.252	50.98	16.9720	10.8032	6.13	50.98
FINE10	0													
COARSE15	20	4.20	4.281	5.034	7.6375	10.715	15.335	26.975	49.529	50.71	13.8520	10.5653	4.20	50.71
COARSE10	0													

NAME=BALTIMORE (SW POLICE STA)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	70	20.4900	25.8395	29.974	41.0925	52.10	69.3150	86.431	93.501	129.100	55.8869	21.3490	20.490	129.10
SSI	40	16.7800	20.2545	28.344	37.6575	49.80	63.4125	87.489	107.459	119.90	52.9522	22.7028	16.780	119.90
DICHOT15	105	8.1378	12.0770	15.282	20.6850	29.83	43.9400	59.268	74.184	91.396	34.5223	18.0910	8.063	91.58
DICHOT10	0													
FINE15	105	5.0333	6.4950	7.746	12.7900	17.94	28.3600	39.012	49.931	60.724	21.4899	12.4928	5.010	60.72
FINE10	0													
COARSE15	105	0.5170	2.6332	4.310	7.0100	10.75	17.9700	25.038	29.083	56.016	13.0328	8.8995	0.490	54.02
COARSE10	0													

ENVIRONMENTAL PROTECTION AGENCY
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IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

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NAME=ROCKVILLE (CITY HALL)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	12	30.69	30.69	31.638	38.5300	47.120	66.4725	91.759	100.30	100.30	53.3075	20.3587	30.69	100.30
SSI	14	22.45	22.45	24.040	26.5175	35.155	52.7025	65.925	78.67	78.67	39.2571	15.6431	22.45	78.67
DICHOT15	1	29.16	29.16	29.160	29.1600	29.160	29.1600	29.160	29.16	29.16	29.1600	-	29.16	29.16
DICHOT10	0	-	-	-	-	-	-	-	-	-	-	-	-	-
FINE15	1	11.27	11.27	11.270	11.2700	11.270	11.2700	11.270	11.27	11.27	-	-	-	-
FINE10	0	-	-	-	-	-	-	-	-	-	-	-	-	-
COARSE15	1	17.69	17.69	17.690	17.6900	17.690	17.6900	17.690	17.69	17.69	-	-	-	-
COARSE10	0	-	-	-	-	-	-	-	-	-	-	-	-	-
NAME=ROCKVILLE (MARYVALE SCH)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	46	23.040	27.1695	31.743	39.345	51.465	61.6725	72.259	82.6644	105.60	51.7057	16.4190	23.040	105.60
SSI	0	-	-	-	-	-	-	-	-	-	-	-	-	-
DICHOT15	57	7.372	13.0605	17.870	21.535	27.960	36.9250	47.494	52.9560	55.81	29.7561	11.2594	7.372	55.81
DICHOT10	0	-	-	-	-	-	-	-	-	-	-	-	-	-
FINE15	57	6.644	6.9250	8.114	11.920	18.760	25.2500	33.128	38.1999	42.60	19.6894	9.1048	6.644	42.60
FINE10	0	-	-	-	-	-	-	-	-	-	-	-	-	-
COARSE15	57	0.250	0.8154	0.960	6.820	10.220	12.7900	17.576	19.3100	29.70	10.0676	5.8858	0.250	29.70
COARSE10	0	-	-	-	-	-	-	-	-	-	-	-	-	-
NAME=BOSTON (FIRE HQ)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	117	23.0672	31.3620	36.366	45.485	55.80	71.575	89.1160	99.650	126.070	60.2476	21.2297	22.880	124.70
SSI	79	9.7040	22.9700	26.200	32.750	41.81	58.030	76.9699	84.350	105.400	46.1576	10.3069	9.704	105.40
DICHOT15	125	9.0550	14.5500	15.468	23.040	30.05	40.230	50.9740	68.490	123.801	33.4932	17.4165	8.853	140.60
DICHOT10	0	-	-	-	-	-	-	-	-	-	-	-	-	-
FINE15	125	4.4758	7.0854	8.514	11.210	15.97	22.170	31.3920	39.909	53.422	16.3777	9.9266	4.116	54.20
FINE10	0	-	-	-	-	-	-	-	-	-	-	-	-	-
COARSE15	125	2.5213	4.7649	6.170	9.560	12.98	18.555	25.4500	29.047	91.794	15.1155	11.2815	2.462	105.90
COARSE10	0	-	-	-	-	-	-	-	-	-	-	-	-	-
NAME=BOSTON (E BOSTON SOC CTR)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	81	16.72	24.540	34.034	44.080	54.46	64.605	77.470	83.2510	96.44	54.8154	16.3887	16.72	96.44
SSI	15	16.13	16.130	21.004	30.700	37.14	45.740	53.608	63.640	63.64	37.8640	11.2068	16.13	63.64
DICHOT15	89	10.86	14.875	16.790	22.685	29.74	39.295	54.010	63.8050	80.78	32.6363	14.0355	10.86	80.78
DICHOT10	0	-	-	-	-	-	-	-	-	-	-	-	-	-
FINE15	89	4.37	6.940	8.800	10.645	15.16	21.470	29.460	41.3049	48.63	17.5507	9.6153	4.37	48.63
FINE10	0	-	-	-	-	-	-	-	-	-	-	-	-	-
COARSE15	89	0.94	4.415	6.470	9.335	13.72	19.555	24.950	28.5450	64.37	15.0860	8.6546	0.94	64.37
COARSE10	0	-	-	-	-	-	-	-	-	-	-	-	-	-
NAME=BOSTON (E BOSTON SOC CTR)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	81	16.72	24.540	34.034	44.080	54.46	64.605	77.470	83.2510	96.44	54.8154	16.3887	16.72	96.44
SSI	15	16.13	16.130	21.004	30.700	37.14	45.740	53.608	63.640	63.64	37.8640	11.2068	16.13	63.64
DICHOT15	89	10.86	14.875	16.790	22.685	29.74	39.295	54.010	63.8050	80.78	32.6363	14.0355	10.86	80.78
DICHOT10	0	-	-	-	-	-	-	-	-	-	-	-	-	-
FINE15	89	4.37	6.940	8.800	10.645	15.16	21.470	29.460	41.3049	48.63	17.5507	9.6153	4.37	48.63
FINE10	0	-	-	-	-	-	-	-	-	-	-	-	-	-
COARSE15	89	0.94	4.415	6.470	9.335	13.72	19.555	24.950	28.5450	64.37	15.0860	8.6546	0.94	64.37
COARSE10	0	-	-	-	-	-	-	-	-	-	-	-	-	-

APPENDIX B

**ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER**

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NAME=SPRINGFIELD(HOWARD ST) -										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	0	25.84	25.84	25.84	47.76	76.06	76.06	76.06	49.8867	25.1775
SSI	3	10.99	12.02	14.03	19.71	28.87	38.06	43.57	50.3300	68.62
DICHOT15	59	5.51	6.55	7.26	11.06	14.25	24.38	30.21	40.1399	42.56
DICHOT10	0	5.51	6.55	7.26	11.06	14.25	24.38	30.21	40.1399	42.56
FINE15	59	3.48	4.22	5.20	7.60	10.63	14.53	21.60	23.0100	30.02
FINE10	0	3.48	4.22	5.20	7.60	10.63	14.53	21.60	23.0100	30.02
COARSE15	59	0	0	0	0	0	0	0	0	0
COARSE10	0	0	0	0	0	0	0	0	0	0

NAME=SPRINGFIELD COLOCATED -										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	0	24.45	24.45	24.45	26.65	29.57	34.49	34.49	34.49	29.5700
SSI	2	11.56	11.56	11.56	12.97	18.40	34.01	39.02	39.02	6.9579
DICHOT15	7	0	0	0	0	0	0	0	0	10.8466
DICHOT10	0	7.00	7.00	7.00	8.46	12.03	26.89	29.21	29.21	16.1900
FINE15	7	0	0	0	0	0	0	0	0	9.1845
FINE10	0	0	0	0	0	0	0	0	0	7.00
COARSE15	7	4.49	4.49	4.49	4.56	7.12	9.81	10.09	10.09	7.2186
COARSE10	0	0	0	0	0	0	0	0	0	2.5664

NAME=WORCESTER (YHCA BLDG) -										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	0	22.110	22.110	25.595	38.2025	46.975	53.0025	57.860	59.3700	59.37
SSI	14	7.542	11.8530	17.194	22.0175	30.435	40.2175	52.290	62.1375	78.01
DICHOT15	60	0	0	0	0	0	0	0	0	32.7175
DICHOT10	0	5.060	5.9145	7.797	10.5075	15.125	21.6425	27.911	33.9705	35.23
FINE15	60	0	0	0	0	0	0	0	0	16.5327
FINE10	0	1.960	4.2260	6.270	9.7725	13.825	19.2850	30.161	42.5320	51.36
COARSE15	60	0	0	0	0	0	0	0	0	16.1841
COARSE10	0	0	0	0	0	0	0	0	0	10.4727

NAME=WORCESTER (YHCA COL) -										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	0	0	0	0	0	0	0	0	0	0
SSI	0	0	0	0	0	0	0	0	0	0
DICHOT15	43	8.738	10.168	14.712	24.87	29.55	43.50	55.2099	76.0519	78.71
DICHOT10	0	4.950	5.639	6.958	10.33	14.95	20.48	26.4400	32.1219	35.83
FINE15	43	2.543	4.266	5.482	9.38	13.21	21.94	39.9919	51.1560	64.16
FINE10	0	0	0	0	0	0	0	0	0	17.4845
COARSE15	43	0	0	0	0	0	0	0	0	13.3109
COARSE10	0	0	0	0	0	0	0	0	0	2.543

ENVIRONMENTAL PROTECTION AGENCY
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IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

NAME=DETROIT (SOUTHWEST HS)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	54	26.41	46.4300	52.230	67.3600	86.535	117.15	153.00	184.749	219.4
SSI	30	19.63	27.8525	39.236	46.9075	65.115	112.90	134.78	153.035	171.9
DICHOT15	0	.	.	.	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.	.	.	.

NAME=DETROIT (APC HQ BLDG)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	44	40.96	45.4725	48.270	64.135	73.765	106.10	116.900	126.150	136.8
SSI	43	16.55	19.9360	28.746	42.780	56.160	73.98	93.504	99.182	101.2
DICHOT15	0	.	.	.	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.	.	.	.

NAME=DULUTH (ELLIOT MEATS)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	64	16.60	23.3925	26.885	40.69	59.525	88.4275	112.500	156.825	162.4
SSI	47	15.76	16.7300	20.064	29.39	40.130	61.9800	76.902	109.980	110.5
DICHOT15	0	.	.	.	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.	.	.	.

NAME=INT FALLS (CUSTOM BLDG)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	25	11.17	14.155	28.008	39.6400	53.220	73.790	97.6240	122.865	133.50
SSI	24	14.68	16.485	22.000	27.9425	37.255	50.475	68.7299	74.565	75.08
DICHOT15	0	.	.	.	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

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NAME=MINNEAPOLIS (REGINA HS)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	84	15.6500	19.1625	22.2250	32.0725	45.455	62.5175	77.5099	93.0324	124.600
SSI	0	.	.	.	.	.	.	.	49.1860	22.5144
DICHOT15	128	7.7423	10.6940	12.4970	16.4525	26.315	37.2900	43.0650	51.6455	79.568
DICHOT10	0	.	.	.	.	.	.	10.2200	23.6960	29.3360
FINE15	128	3.4607	4.7158	6.0040	8.2150	12.745	16.4630	21.514	14.6330	8.3889
FINE10	0	.	.	.	.	.	.	10.2200	25.0470	28.8325
COARSE15	128	1.9696	3.4727	5.3204	7.1550	11.2225	16.4408	21.4953	13.4408	8.2666
COARSE10	0	.	.	.	.	.	.	.	1.610	45.73

NAME=MINNEAPOLIS (INCOLLET) -										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	73	24.1600	30.5010	35.136	48.185	68.500	89.1500	112.220	136.079	220.400
SSI	77	15.1500	23.4480	29.146	36.980	49.740	66.6150	72.624	89.667	128.700
DICHOT15	144	10.6985	16.9925	18.035	23.045	33.235	46.7650	55.025	60.175	126.665
DICHOT10	0	.	.	.	.	.	.	10.0525	17.6692	10.37
FINE15	144	3.5335	6.2950	7.355	9.785	13.850	20.0525	27.910	32.292	98.965
FINE10	0	.	.	.	.	.	.	10.0520	16.5650	13.2637
COARSE15	144	2.3310	6.2875	7.930	10.405	16.275	26.3025	36.020	39.935	71.239
COARSE10	0	.	.	.	.	.	.	.	.	11.9624

NAME=ST PAUL (FIRE STA) -										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	111	24.3184	29.8140	39.7240	53.8000	65.800	85.5200	101.360	110.600	157.952
SSI	56	14.5300	17.8430	27.5220	49.775	65.0750	83.463	92.540	139.700	52.5609
DICHOT15	32	7.6810	9.2793	12.7780	15.6725	22.045	29.5775	41.803	56.168	60.610
DICHOT10	0	.	.	.	.	.	.	10.0216	11.6926	7.681
FINE15	32	5.3900	5.7410	6.2956	9.0200	12.160	16.6825	30.000	32.311	35.620
FINE10	0	.	.	.	.	.	.	14.0759	7.6750	5.390
COARSE15	32	1.6820	2.6362	3.7350	5.2875	8.375	13.5050	19.517	25.085	30.480
COARSE10	0	.	.	.	.	.	.	.	.	9.9560

NAME=JACKSON(SUN & SAND MOTEL)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	0	.	.	.	.	.	.	.	.	.
SSI	0	.	.	.	.	.	.	.	.	.
DICHOT15	70	15.15	16.9725	18.396	24.6650	32.905	46.840	57.119	73.2465	82.00
DICHOT10	0	.	.	.	.	.	.	10.2760	32.254	38.1635
FINE15	70	6.79	8.5285	9.612	11.8275	15.920	20.670	27.9039	33.70	16.1339
FINE10	0	.	.	.	.	.	.	10.2760	32.381	50.2760
COARSE15	70	3.57	4.8355	6.466	10.0225	15.555	24.835	32.480	67.54	16.6897
COARSE10	0	12.5392

ENVIRONMENTAL PROTECTION AGENCY
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SITE=260030001A07 NAME=ST LOUIS (AFTON)															
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX	
HIVOL	74	27.090	35.0675	38.0600	48.3035	60.545	81.1325	101.050	112.700	137.60	66.0005	23.5611	27.090	137.60	
SSI	29	20.360	22.7600	25.0200	34.4350	41.030	55.0200	59.490	64.115	68.43	43.0076	12.1063	20.360	68.43	
DICHOT15	75	3.529	5.6439	12.1160	20.3100	33.780	51.2300	60.440	70.128	85.40	35.8226	19.4712	3.529	65.40	
DICHOT10	0														
FINE15	75	0.739	1.2004	5.7540	10.5300	16.670	24.1700	37.346	39.416	48.44	17.9669	10.9329	0.739	48.44	
FINE10	0														
COARSE15	75	2.668	4.0056	4.8368	6.1300	14.770	26.0400	36.438	40.486	46.53	17.0381	11.6118	2.668	46.53	
COARSE10	0														

SITE=262380002A07 NAME=KANSAS CITY MO (FIRE STA)															
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX	
HIVOL	103	29.8456	43.2460	50.506	59.2100	87.200	106.100	116.820	138.500	160.820	85.4416	20.4298	29.83	161.00	
SSI	62	26.3800	32.0760	39.420	48.2725	66.935	77.777	86.264	108.725	121.700	64.6663	20.3429	28.38	121.70	
DICHOT15	126	10.9233	17.6310	21.005	28.2175	38.570	56.995	67.773	77.200	91.366	42.8073	16.2336	10.41	92.03	
DICHOT10	0														
FINE15	126	4.7274	6.5145	7.660	10.6225	14.475	22.210	30.293	33.062	53.265	17.0630	9.1738	4.71	56.04	
FINE10	0														
COARSE15	126	3.3249	7.1860	10.325	15.1625	22.720	31.087	44.438	54.034	61.188	25.7439	13.6113	3.09	61.58	
COARSE10	0														

SITE=264280007A07 NAME=ST LOUIS (S BROADWAY)															
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX	
HIVOL	53	32.80	45.097	50.796	60.0900	84.84	109.550	132.680	152.390	199.20	89.5632	32.5263	32.80	199.20	
SSI	52	17.53	28.978	38.408	54.6125	70.68	78.865	91.747	116.885	124.70	68.5117	21.6745	17.53	124.70	
DICHOT15	19	17.23	17.230	19.010	32.7400	42.78	68.540	75.370	106.100	106.10	48.6321	22.6593	17.23	106.10	
DICHOT10	1	29.06	29.060	29.060	29.060	29.06	29.060	29.060	29.060	29.06	22.9600	29.06	29.06	29.06	
FINE15	19	7.62	7.620	8.960	15.7400	24.59	28.590	37.620	41.970	41.97	22.7295	9.4058	7.62	41.97	
FINE10	1	17.17	17.170	17.170	17.1700	17.17	17.170	17.170	17.170	17.17	17.1700	17.17	17.17	17.17	
COARSE15	19	8.27	8.270	10.500	11.5600	19.22	37.750	53.660	76.700	76.70	25.9032	16.1033	8.27	76.70	
COARSE10	1	11.89	11.890	11.890	11.8900	11.89	11.890	11.890	11.890	11.89	11.8900	11.89	11.89	11.89	

SITE=270160005A07 NAME=BUTTE (GREENLY SCHOOL)															
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX	
HIVOL	0														
SSI	0														
DICHOT15	13	10.13	10.13	10.438	12.705	19.8	35.490	64.598	80.71	80.71	26.5546	19.4535	10.13	80.71	
DICHOT10	0														
FINE15	13	3.55	3.55	4.134	5.470	6.4	10.505	22.072	25.86	25.86	8.9715	6.1682	3.55	25.86	
FINE10	0														
COARSE15	13	3.82	3.82	4.092	5.365	14.6	25.620	43.766	54.85	54.85	17.5823	14.1554	3.82	54.85	
COARSE10	0														

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
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NAME=MISSOULA (ROSE LAWN PK)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	0
SSI	0	18.08	18.08	18.08	18.08	29.97	41.86	41.86	41.86	41.86
DICHOT15	2	7.89	7.89	7.89	13.83	19.77	19.77	19.77	19.77	19.77
DICHOT10	0	10.19	10.19	10.19	10.19	16.14	22.09	22.09	22.09	22.09
FINE15	2	0	0	0	0	0	0	0	0	0
FINE10	0	0	0	0	0	0	0	0	0	0
COARSE15	2	0	0	0	0	0	0	0	0	0
COARSE10	0	0	0	0	0	0	0	0	0	0

NAME=OMAHA (D STREET)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	125	27.745	35.6080	40.038	49.1400	63.860	81.0950	95.284	104.140	128.354
SSI	73	16.400	29.5780	54.546	39.1600	62.9200	74.852	86.005	104.300	127.3593
DICHOT15	30	21.670	22.2805	23.358	31.9375	39.090	55.3025	67.460	84.519	91.730
DICHOT10	2	36.060	36.060	36.060	36.060	36.630	37.2000	37.200	36.6300	36.8061
FINE15	30	7.310	7.3145	8.054	8.6550	13.075	18.5100	24.887	37.045	45.570
FINE10	2	11.190	11.1900	11.190	11.1900	11.765	12.3400	12.340	12.340	11.7650
COARSE15	30	9.540	12.1065	15.145	19.7350	26.940	34.0500	43.869	58.369	72.680
COARSE10	2	24.860	24.8600	24.860	24.8600	24.870	24.880	24.880	24.880	24.880

NAME=RENO (KIRMAN ST)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	123	23.8948	36.648	41.652	56.140	74.000	95.3600	155.32	185.760	299.447
SSI	66	14.8100	19.369	36.384	56.830	71.275	129.97	177.425	202.700	47.6322
DICHOT15	19	12.8600	12.860	14.650	21.080	32.650	43.1300	56.98	72.420	34.0911
DICHOT10	5	27.9700	27.970	29.080	51.970	69.8450	75.08	75.080	49.9640	20.7611
FINE15	19	3.3700	3.370	3.530	8.560	11.820	28.18	31.590	31.590	13.1184
FINE10	5	11.4000	11.400	11.400	13.135	37.500	41.9350	42.61	42.610	29.5280
COARSE15	19	9.0600	9.060	11.110	13.360	19.070	26.1300	36.47	40.830	20.9721
COARSE10	5	16.4700	16.470	16.470	14.895	16.570	27.9050	33.81	33.810	20.4360

NAME=WINNEMUCCA										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	113	13.2124	22.2780	27.048	36.760	47.09	62.975	85.918	98.067	255.035
SSI	0	5.0650	9.7994	12.852	17.625	24.62	34.910	45.058	59.865	156.668
DICHOT15	105	0	2.4772	3.5160	3.896	4.885	6.77	9.260	14.520	16.590
DICHOT10	0	105	0	0.9857	2.130	6.975	17.25	27.120	38.338	49.603
FINE15	0	0	0	0	0	0	0	0	0	0
FINE10	0	0	0	0	0	0	0	0	0	0
COARSE15	105	0	0.2362	0.9857	2.130	6.975	17.25	27.120	38.338	49.603
COARSE10	0	0	0	0	0	0	0	0	0	0

**ENVIRONMENTAL PROTECTION AGENCY
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IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
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NAME=CARDEN														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	123	25.1136	35.1620	39.546	50.050	62.540	80.9000	102.180	112.700	148.552	67.3548	24.2149	24.460	152.20
SSI	51	22.5500	25.0080	28.506	37.150	51.880	67.2600	88.156	105.600	54.7733	21.9726	22.550	105.60	87.37
DICHOT15	72	6.6100	15.0810	17.640	24.4925	32.985	46.2975	59.571	65.327	87.370	36.0277	16.3349	8.610	87.37
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	72	3.7650	6.3530	8.060	13.5350	19.160	24.9800	32.035	46.145	61.250	20.6529	10.3976	3.765	61.25
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	72	4.4100	4.9457	6.199	9.1700	12.665	19.3425	25.117	32.242	70.050	15.3751	9.8758	4.410	70.05
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
NAME=LIVINGSTON														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	122	12.1346	16.0315	25.5690	31.3375	41.255	52.5875	67.450	80.3795	100.008	44.2866	17.5462	11.210	100.90
SSI	62	11.4500	13.9235	20.3210	27.9200	36.520	45.8000	61.104	71.3844	69.010	38.2929	15.0008	11.450	88.01
DICHOT15	116	6.1312	9.8504	12.9320	16.0200	23.345	32.2575	46.369	59.4425	71.162	26.9250	14.0050	5.773	71.01
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	116	3.1694	5.7642	6.7443	9.2625	13.505	20.6850	31.142	40.8420	58.285	16.4775	10.9794	3.032	58.53
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	116	2.4770	3.1182	4.1240	6.1775	8.430	14.0275	17.337	22.0715	42.583	10.4475	6.6946	2.425	43.89
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
NAME=JERSEY CITY (BAY STREET)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	96	38.20	47.4100	49.620	56.6100	70.860	85.035	103.820	131.175	152.70	74.6031	23.5062	38.20	152.70
SSI	43	23.51	25.7540	31.672	37.980	51.890	68.220	87.346	96.760	108.60	55.3428	20.6278	23.51	108.60
DICHOT15	58	15.24	15.6575	20.545	24.9725	32.285	39.195	47.890	58.478	86.62	33.6091	13.0065	15.24	86.62
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	58	7.45	7.7250	10.999	13.1950	17.615	24.535	29.310	35.406	67.08	19.8609	10.1495	7.45	67.08
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	58	6.01	6.6765	7.546	9.5825	12.595	17.195	21.425	25.345	26.81	13.7481	5.4661	6.01	26.81
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
NAME=ALBUQUERQUE (YMCA)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	95	34.940	42.9760	47.362	59.9300	77.590	95.280	161.600	180.360	228.2	88.4602	42.0067	34.940	228.2
SSI	36	22.390	23.6395	28.083	39.4225	51.550	63.825	103.430	114.495	115.6	60.4831	26.7067	22.390	115.6
DICHOT15	96	9.680	13.5430	16.042	22.5275	30.940	43.700	63.698	85.673	124.4	36.6908	21.5507	9.680	124.4
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	96	3.510	4.1275	5.030	6.7325	8.825	12.835	24.230	34.910	51.3	12.0147	9.5300	3.510	51.3
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	96	5.354	7.4460	8.894	14.4875	20.750	29.735	46.935	58.245	63.0	24.6750	14.8705	5.354	83.0
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.

**ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER**

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NAME=BAYARD (COBRE SCHOOL) - SITE=330200900010A07														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AVERAGE	STD	MIN	MAX
HIVOL	110	27.6313	47.0865	54.444	82.6150	115.250	148.575	184.56	194.725	246.423	116.276	45.9639	27.320	251.0
SSI	48	14.9300	30.8680	33.561	58.6900	78.240	92.090	114.38	119.435	122.300	75.378	27.2031	14.930	122.3
DICHOT15	102	7.8494	27.4555	35.490	51.9500	64.590	94.360	120.93	140.925	262.524	73.806	37.0823	7.580	265.3
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	102	5.1003	7.0175	7.464	9.7025	12.250	16.355	24.85	31.069	71.584	14.594	9.0977	5.100	72.3
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	102	2.0739	15.9630	24.235	37.1400	51.685	74.510	103.45	116.255	233.727	59.212	33.7353	1.985	236.5
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
NAME=BUFFALO (PS #26) - SITE=330660003A07														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AVERAGE	STD	MIN	MAX
HIVOL	75	25.1400	30.6360	36.156	53.1400	61.380	115.700	145.300	154.160	160.400	85.2175	36.3430	25.14	160.4
SSI	24	22.6400	23.025	36.490	53.4975	68.735	79.615	115.750	133.425	136.600	70.3829	27.3887	22.64	136.6
DICHOT15	115	17.3996	24.0380	28.760	42.4900	60.250	89.470	110.240	128.080	143.556	66.1270	30.5594	17.15	143.7
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	115	6.7912	11.0550	15.944	23.5100	34.860	51.660	71.380	79.120	102.244	39.6904	20.9262	6.34	104.1
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	115	4.9980	6.4760	9.324	13.2500	23.680	36.500	51.634	57.004	72.744	26.2372	15.7148	4.99	73.0
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
NAME=BUFFALO (PS #28) - SITE=330660010A07														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AVERAGE	STD	MIN	MAX
HIVOL	116	24.6169	34.6355	46.815	56.3525	77.550	106.950	141.470	153.550	169.536	85.2124	35.8358	24.420	191.10
SSI	70	15.640	20.6770	30.369	41.6750	65.205	65.372	95.727	107.430	137.900	56.6447	23.1515	15.640	137.90
DICHOT15	164	11.1580	15.6775	18.865	30.1875	40.790	59.080	74.815	81.807	99.855	44.4356	20.6879	9.520	106.70
DICHOT10	37	10.2000	11.4240	14.604	23.7000	31.110	45.260	62.550	73.258	80.080	34.9665	17.6147	10.200	80.08
FINE15	164	3.6126	7.7550	10.355	16.3850	22.235	31.677	41.145	48.117	57.275	24.4469	11.4448	2.759	58.14
FINE10	37	5.9600	6.8510	9.138	13.2100	19.050	26.210	31.050	40.352	50.270	19.9614	9.3905	5.960	50.27
COARSE15	164	1.3125	3.4075	5.615	9.4450	16.695	26.137	37.635	48.910	66.480	19.9671	13.953	1.280	69.10
COARSE10	37	2.990	4.5920	5.438	7.3450	10.940	20.375	30.840	41.631	50.370	15.0038	10.9943	2.990	50.37
NAME=BUFFALO (PS #28) - SITE=330660010A57														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AVERAGE	STD	MIN	MAX
HIVOL	0	.	.	.	.	.	.	.	.	.	.	.	.	.
SSI	0	.	.	.	.	.	.	.	.	.	.	.	.	.
DICHOT15	74	13.64	17.4225	19.340	30.1575	39.755	58.3850	78.8250	90.5024	129.80	46.3204	23.2566	13.64	129.80
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	74	2.71	6.8075	9.350	13.5250	20.385	27.8475	38.2300	44.8824	55.01	21.8078	11.1357	2.71	55.01
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	74	3.45	7.6725	9.785	14.5675	19.470	29.8925	48.4999	57.9349	86.40	24.5126	15.6987	3.45	86.40
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

NAME=ANGOLA (BIG SISTER STP)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	76	5.9390	12.3090	16.4270	22.610	34.775	52.0175	64.960	71.035	84.640	37.9521	18.4760	5.939	84.64
SSI	26	11.8100	12.4400	16.6290	28.935	34.600	55.2200	72.865	77.032	78.390	40.7573	17.976	11.810	78.39
DICHOT15	141	2.6623	9.5562	11.5520	19.235	30.780	49.4550	92.920	113.200	170.512	41.1334	33.1529	1.464	171.10
DICHOT10	0													
FINE15	141	0.69260	5.6490	7.2348	10.530	16.720	26.7100	39.292	49.633	62.914	20.4571	12.8742	0.175	68.50
FINE10	0													
COARSE15	141	0.6806	1.8724	2.6900	5.370	10.220	27.1600	60.356	75.730	131.314	20.6773	24.9688	0.240	134.80
COARSE10	0													

NAME=BUFFALO(WILMUTH PUMP STA)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	72	22.4900	40.6635	57.8090	83.6875	110.800	157.725	187.790	209.870	300.40	119.3467	53.3669	20.4900	300.40
SSI	80	24.5700	30.1260	47.2475	71.730	97.392	126.300	159.210	176.80	206.80	76.367	36.4593	24.5700	204.80
DICHOT15	74	0.6921	2.8437	7.1805	23.4800	33.780	52.207	93.940	131.600	196.60	44.103	38.7916	0.6921	196.60
DICHOT10	4	16.2500	16.2500	17.4650	24.305	26.767	29.190	29.190	29.19	23.512	5.9624	16.2500	29.19	
FINE15	74	0.5819	2.0560	4.2230	13.9075	19.970	30.167	41.600	49.525	59.94	22.010	12.8690	0.5819	59.94
FINE10	4	10.0800	10.0800	10.0800	10.2775	13.460	16.470	16.610	16.61	13.402	3.4934	10.0800	16.61	
COARSE15	74	0.1102	0.3227	0.8895	4.0325	11.520	25.717	62.475	96.675	149.60	22.094	30.080	0.1102	149.60
COARSE10	4	6.1800	6.1800	6.1800	7.1950	10.840	12.287	12.570	12.57	10.107	2.7556	6.1800	12.57	

NAME=WILMUTH PUMP STATION COL														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	0													
SSI	25	42.20	43.451	47.936	54.305	60.90	102.67	158.80	214.51	229.90	85.6196	46.1220	42.20	229.90
DICHOT15	0													
DICHOT10	3	17.05	17.050	17.050	26.76	28.77	28.77	28.77	28.77	24.1933	6.2674	17.05	26.77	
FINE15	0													
FINE10	3	10.26	10.260	10.260	15.73	16.21	16.21	16.21	16.21	14.6667	3.3054	10.26	16.21	
COARSE15	0													
COARSE10	3	6.79	6.790	6.790	11.03	12.56	12.56	12.56	12.56	10.1267	2.9892	6.79	12.56	

NAME=NY CITY (CENTRAL PARK)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	62	26.61	33.1510	34.778	45.0125	58.400	76.2650	92.7050	106.439	135.00	62.1744	22.6360	26.61	135.00
SSI	28	26.70	28.9610	32.646	45.5900	58.740	77.0475	88.7469	97.288	99.66	60.3386	19.3043	28.70	99.66
DICHOT15	72	14.40	17.2305	18.299	25.3600	31.505	43.0025	58.7620	62.643	82.86	35.1569	14.5516	14.40	82.86
DICHOT10	0													
FINE15	72	6.25	8.6855	10.380	14.5525	20.455	27.5900	35.4040	42.523	49.32	21.8686	9.6778	6.25	49.32
FINE10	0													
COARSE15	72	3.48	5.4235	6.655	8.0025	11.090	14.4750	24.1000	30.294	55.89	13.285	8.3106	3.48	55.89
COARSE10	0													

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

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SITE=334680011A07 NAME=NY CITY (GREEN POINT)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	121	23.3594	39.097	45.262	58.9800	69.330	90.82	113.500	134.79	159.426	75.8686	19.78	163.1	
SSI	20	34.9600	35.048	37.250	46.2975	57.675	77.30	103.143	123.200	63.0730	23.1741	34.96	123.2	
DICHOT15	0	.	.	.	.	.	.	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.
SITE=334680079A07 NAME=NY CITY (INT SCH #45)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	66	31.57	37.599	46.271	55.0650	69.545	83.4025	106.990	120.315	144.70	71.2529	22.5843	31.57	144.70
SSI	4	59.77	59.770	59.770	61.4525	67.415	69.2475	96.220	96.22	72.7050	16.1029	59.77	96.22	
DICHOT15	53	10.99	13.361	15.538	23.0600	34.530	43.3100	56.802	63.196	88.76	34.9877	15.4268	10.99	88.76
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	53	7.39	9.313	9.896	14.5800	22.890	30.0700	39.384	53.300	71.00	24.2140	12.9493	7.39	71.00
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	53	0.37	1.373	4.628	6.3100	9.230	15.0250	19.656	23.870	25.49	10.7740	5.9962	0.37	25.49
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.
SITE=340700010A07 NAME=CHARLOTTE														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	94	25.70	30.6950	36.520	42.7375	59.080	73.4025	89.770	97.9275	108.10	60.2541	19.7319	25.70	108.10
SSI	33	20.75	23.6620	26.776	34.1850	49.130	68.0750	72.748	78.7660	80.53	50.0379	17.6812	20.75	80.53
DICHOT15	90	12.59	17.6830	19.176	23.6075	34.950	46.6325	58.369	66.6590	82.75	37.0531	15.7410	12.59	82.75
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	90	9.25	10.5040	12.062	15.7475	22.355	29.9100	39.395	43.9740	53.27	24.1214	10.2306	9.25	53.27
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	90	0.26	0.8985	1.806	5.2225	11.135	16.8925	25.140	32.2005	48.51	12.9314	9.3694	0.26	48.51
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.
SITE=341160006A07 NAME=DURHAM (CAHED BLDG)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	45	8.448	27.5630	33.210	44.6600	56.690	67.5300	86.984	103.935	111.70	58.0046	21.0882	8.448	111.70
SSI	42	18.650	21.495	22.514	30.4900	42.670	54.6000	64.562	92.691	100.20	44.4507	16.1227	18.650	100.20
DICHOT15	38	11.000	14.1730	15.888	20.4800	35.550	48.0150	55.912	68.188	83.73	35.7276	16.6609	11.000	83.73
DICHOT10	8	14.090	16.0900	14.090	20.7675	25.710	38.9975	52.900	52.900	52.90	29.3112	12.5306	14.090	52.90
FINE15	38	8.930	9.2080	9.840	13.0050	23.230	32.0275	37.877	49.878	66.37	23.8789	12.6023	8.980	66.37
FINE10	8	10.490	10.490	10.490	17.9575	19.675	29.7150	39.790	39.790	39.79	22.6725	9.1376	10.490	39.79
COARSE15	38	1.060	2.2495	5.702	7.8275	11.545	15.9000	20.035	22.090	22.48	11.8487	5.4127	1.060	22.48
COARSE10	8	1.570	1.570	1.570	4.0500	6.160	9.5050	13.110	13.110	13.110	6.6400	3.6569	1.570	13.110

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

NAME=DURHAM(CAHED BLDG COL)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	30	8.9860	18.7342	29.2150	39.3075	60.450	74.3500	88.596	98.5415	106.50	58.8025	22.7175	8.9860	106.50
SSI	34	4.1950	14.3462	21.790	28.9625	40.600	57.1100	70.190	80.3270	93.00	43.6899	19.7978	4.1950	101.00
DICHOT15	14	0.7715	8.4707	17.7475	29.505	47.2400	66.960	73.6300	78.03	33.9387	19.5986	6.7715	73.63	32.05
DICHOT10	3	13.4200	13.4200	13.4200	13.4200	18.470	32.0500	32.0500	32.0500	32.0500	21.3133	9.6350	13.4200	32.05
FINE15	14	0.0453	0.0453	5.3976	15.0775	20.995	36.4825	46.770	51.6400	51.84	24.4204	14.2771	0.0453	51.84
FINE10	3	9.6300	9.6300	9.6300	9.6300	16.300	25.3100	25.3100	25.3100	25.3100	17.0800	7.6690	9.6300	25.31
COARSE15	14	0.7262	0.7262	1.3781	5.2100	8.015	12.9675	20.190	21.9900	21.99	9.5176	6.0570	0.7262	21.99
COARSE10	3	2.1700	2.1700	2.1700	2.1700	3.790	6.7400	6.7400	6.7400	6.7400	4.2333	2.3170	2.1700	6.74
----- SITE=34116006457 NAME=RES TRIANGLE PK (BEAUNITI) -----														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	102	13.4285	19.7685	21.787	26.3100	37.505	50.4600	65.812	73.8600	86.357	40.1913	16.0379	13.340	86.49
SSI	98	16.4100	16.3270	19.666	24.0100	33.035	42.4250	54.286	65.7775	73.270	35.0919	13.5610	16.410	73.27
DICHOT15	92	9.5100	11.0530	12.620	15.7925	23.030	30.0825	37.243	41.5750	115.400	24.5704	13.1187	9.510	115.40
DICHOT10	0													
FINE15	92	4.6620	6.4475	7.724	11.1375	16.135	21.3550	27.6667	29.6650	114.400	17.6697	12.3267	4.662	114.40
FINE10	0													
COARSE15	92	0.9200	1.6170	2.339	3.4675	5.315	9.1625	12.917	16.8025	27.960	6.6814	4.7622	0.920	27.96
COARSE10	0													
----- SITE=341160101A57 NAME=RES TRI PK(BEAUNITI COL) -----														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	0													
SSI	0													
DICHOT15	55	11.82	12.626	14.650	19.03	24.14	34.80	43.466	57.0019	60.66	28.1458	14.0850	11.82	80.66
DICHOT10	0													
FINE15	55	6.94	8.664	9.646	11.69	16.43	23.74	31.166	41.1599	67.79	19.7273	11.8008	6.94	67.79
FINE10	0													
COARSE15	55	2.08	3.500	3.866	5.10	6.76	10.83	13.926	20.0220	24.91	6.4187	4.6331	2.08	24.91
COARSE10	0													
----- SITE=341160102A07 NAME=RES TRIANGLE PK (RTI) -----														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	36	16.400	16.4765	19.9600	25.1350	35.700	48.3100	56.0700	64.8915	67.11	37.2967	13.5520	16.400	67.11
SSI	43	13.730	15.3080	18.2300	22.5100	30.140	41.4500	54.0200	64.1359	69.82	33.7460	13.7957	13.730	69.82
DICHOT15	19	11.600	12.2200	14.600	20.2600	28.490	31.1700	46.6200	56.5596	60.56	26.9442	11.3034	11.600	60.56
DICHOT10	22	8.435	6.7642	10.7080	12.4625	18.680	26.7975	37.1780	39.1795	39.34	20.7680	9.3466	8.435	39.34
FINE15	19	7.690	7.6900	8.0100	10.6200	15.210	22.8000	25.5500	26.3900	26.39	16.3537	6.3484	7.690	26.39
FINE10	22	8.328	6.4828	9.3220	10.3950	16.190	25.6000	33.8080	38.2375	38.98	18.8131	9.0080	8.328	38.98
COARSE15	19	1.600	1.6000	2.7800	4.6500	8.340	14.0000	23.4799	40.3897	40.39	9.1912	1.600	40.39	
COARSE10	22	0.100	0.1010	0.1439	0.5000	1.215	2.8625	5.8380	7.4600	7.67	1.9340	2.0908	0.100	7.67

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

NAME=AKRON (MORLEY HEALTH CTR)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	94	21.0700	28.2525	36.870	45.6975	64.885	87.945	105.400	115.225	125.000	67.8112	26.4723	21.070	125.00
SSI	107	16.3148	23.2580	29.900	37.0800	52.270	65.710	80.986	90.196	104.838	53.6532	19.7364	16.290	105.80
DICHOT15	185	9.8749	15.8290	22.2668	30.5450	44.330	58.065	73.888	83.146	110.092	46.1354	20.5533	8.431	116.80
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	165	4.3774	8.4390	10.922	16.0500	24.600	33.850	42.956	47.093	67.514	25.9864	12.9775	1.290	93.40
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COURSE15	165	3.9373	5.3960	8.048	11.8550	18.290	27.425	33.906	41.156	54.296	20.1481	10.9778	3.552	58.82
COURSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
NAME=CINCINNATI (DRAKE MEM)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	66	15.6800	19.2415	26.681	42.02	56.305	75.7725	85.859	99.4059	119.700	57.5659	23.3867	15.680	119.70
SSI	85	16.6300	27.7430	31.154	38.82	50.240	59.050	78.948	83.0610	96.280	51.4578	17.0298	16.630	96.28
DICHOT15	159	4.3974	16.6400	21.190	29.30	39.570	51.8900	65.150	71.8100	90.279	41.0723	17.0534	1.626	90.70
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	159	3.2504	7.7630	11.420	15.95	23.120	30.9600	43.700	50.1400	67.610	29.9979	12.4563	0.338	74.24
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COURSE15	159	0.9478	4.9000	7.330	9.39	14.400	20.5700	27.120	33.0400	56.646	16.0751	9.1969	0.790	63.12
COURSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
NAME=CLEVELAND (APCD HQ)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	119	36.2420	49.570	64.450	86.3200	122.600	169.600	213.20	234.800	293.800	130.804	57.2081	35.8220	295.7
SSI	26	21.0100	26.197	38.049	52.1500	91.410	118.750	143.93	156.270	162.500	88.6778	38.8729	21.010	162.5
DICHOT15	108	2.1091	18.109	24.613	38.6675	59.815	89.647	131.29	142.940	239.604	70.083	42.3196	1.209	244.6
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	108	1.2013	6.369	9.219	15.1375	26.995	39.860	51.25	61.483	196.603	31.433	25.4631	0.791	201.7
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COURSE15	108	0.9087	7.155	10.876	19.6575	31.765	56.420	75.13	93.315	132.614	38.655	25.7186	0.418	135.8
COURSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
NAME=CLEVELAND (RHODES HS)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	31	28.510	28.6300	29.880	39.5200	48.940	73.4300	89.5799	91.6080	92.52	55.4506	19.6017	28.510	92.52
SSI	17	10.630	10.8300	15.670	34.4050	40.630	60.2600	73.7100	84.4300	84.43	45.4535	20.105	10.630	64.43
DICHOT15	28	7.938	10.9674	15.183	22.7400	32.345	53.5875	64.8430	71.8674	75.31	38.4999	16.3531	7.938	75.31
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	28	5.162	6.8576	9.218	16.3425	22.855	36.0900	50.6490	57.5969	61.89	26.2466	14.4835	5.162	61.89
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COURSE15	28	2.775	3.3577	4.610	6.1925	12.325	15.8250	22.0800	24.6624	26.26	12.2509	6.1332	2.775	26.26
COURSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA: PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

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NAME=CLEVELAND (WASHINGTON PK)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	98	40.41	46.0405	53.958	63.2400	80.965	95.7850	114.260	133.150	156.30
SSI	39	35.53	39.2300	41.650	49.9400	58.880	74.2100	80.710	84.880	111.90
DICHOT15	62	14.76	17.6010	23.664	27.4425	45.195	57.7800	71.774	83.774	86.61
DICHOT10	0	.	.	.	.	.	.	.	.	.
FINE15	62	6.81	9.0210	10.694	15.0700	22.985	31.1325	42.546	47.279	59.85
FINE10	0	.	.	.	.	.	.	.	.	.
COARSE15	62	4.54	6.6550	8.800	12.7700	17.795	25.1975	34.656	41.679	62.28
COARSE10	0	.	.	.	.	.	.	.	.	.

NAME=COLUMBUS (S WASHINGTON)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	72	32.56	42.5105	44.804	52.0750	61.575	74.7675	93.5690	107.455	129.6
SSI	54	23.54	30.8650	35.030	39.9275	48.145	60.1350	78.8749	88.830	101.6
DICHOT15	0	.	.	.	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.	.	.	.

NAME=DAYTON (E MONUMENT)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	81	23.59	34.798	40.824	50.250	61.91	76.890	104.020	112.860	138.90
SSI	9	37.76	37.760	37.760	41.795	54.57	67.320	90.810	90.810	90.81
DICHOT15	77	12.09	14.224	16.810	25.705	33.64	42.555	55.400	74.285	79.50
DICHOT10	0	.	.	.	.	.	.	.	.	.
FINE15	77	5.92	7.374	9.522	14.560	18.84	25.670	35.070	48.664	55.93
FINE10	0	.	.	.	.	.	.	.	.	.
COARSE15	77	3.73	4.965	6.268	8.375	13.26	19.780	27.904	29.710	48.42
COARSE10	0	.	.	.	.	.	.	.	.	.

NAME=IRONTON (HOSPITAL)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	60	25.9200	39.6775	41.868	56.1625	70.870	86.6900	111.470	127.130	176.70
SSI	40	21.8300	23.9815	35.624	41.6075	49.895	66.0850	85.158	117.415	121.90
DICHOT15	74	0.9628	15.5325	20.465	29.3750	39.545	50.1975	63.455	80.057	124.40
DICHOT10	0	.	.	.	.	.	.	.	.	.
FINE15	74	0.1413	8.8525	11.150	15.9650	21.440	25.9475	40.425	49.040	75.54
FINE10	0	.	.	.	.	.	.	.	.	.
COARSE15	74	0.8215	3.0200	6.720	11.3250	16.550	22.6200	29.400	36.662	75.30
COARSE10	0	.	.	.	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

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NAME=MEDINA (W LIBERTY)												
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD
HIVOL	44	12.570	15.4125	22.320	32.9600	51.570	60.6075	76.9399	88.0749	106.50	48.9784	20.8874
SSI	35	1.036	5.9440	16.022	21.5900	41.070	58.6500	69.3079	80.9160	81.10	42.0848	20.5559
DICHOT15	32	7.781	11.2513	13.668	20.8175	33.175	44.0675	48.1440	63.7251	89.16	33.6125	15.7367
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.
FINE15	32	5.860	6.9780	8.541	11.3550	19.275	22.3800	37.7250	43.9384	49.99	20.1650	10.2542
FINE10	0	.	.	.	.	.	.	.	.	.	.	.
COARSE15	32	1.921	2.2323	3.896	5.4225	10.790	16.6950	27.6100	32.6569	39.17	13.4457	9.2103
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.

NAME=MIDDLE TOWN(BRENTWOOD)												
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD
HIVOL	130	35.4035	40.4170	47.297	57.335	61.635	113.175	153.070	176.185	227.837	90.6561	41.7512
SSI	78	27.1400	31.3895	34.920	42.195	56.430	78.230	96.902	131.705	153.500	62.1697	27.2833
DICHOT15	39	17.5700	18.3100	19.910	32.120	47.180	61.740	82.050	92.780	94.230	49.3862	21.6639
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.
FINE15	39	7.2000	8.1700	9.790	17.160	23.750	33.150	48.780	51.710	61.330	26.1497	13.3661
FINE10	0	.	.	.	.	.	.	.	.	.	.	.
COARSE15	39	8.1500	9.4900	10.140	12.010	20.670	29.540	40.600	44.930	61.080	23.2379	11.9824
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.

NAME=MIDDLE TOWNS(CANCELLED)*****												
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD
HIVOL	1	44.52	46.52	44.52	44.52	44.52	44.52	44.52	44.52	44.52	44.52	44.52
SSI	0	.	.	.	.	.	.	.	.	.	.	.
DICHOT15	0	.	.	.	.	.	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.

NAME=STEUBENVILLE (WASHINGTON)												
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD
HIVOL	79	18.500	35.9500	49.090	70.6700	100.000	150.200	182.100	209.800	218.000	110.538	50.3958
SSI	99	16.940	22.8200	28.590	49.5300	78.200	115.200	129.900	146.600	210.499	80.962	39.5702
DICHOT15	52	8.012	14.7420	16.766	31.3400	46.115	73.907	118.070	132.965	148.000	55.980	34.1606
DICHOT10	29	13.460	15.420	23.2700	36.920	58.805	86.380	108.235	90.510	61.178	22.4307	13.480
FINE15	52	7.312	9.0615	11.346	18.9125	26.585	48.745	61.947	82.785	90.800	33.926	20.6970
FINE10	29	8.370	8.5650	10.510	16.2700	23.600	37.970	45.360	47.500	49.400	25.568	12.6105
COARSE15	52	0.700	2.7170	4.710	10.8850	17.355	29.827	43.777	55.710	68.600	22.057	16.5917
COARSE10	29	3.6650	4.770	6.8450	10.910	20.315	34.990	45.420	46.760	46.610	11.3356	2.880

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

NAME=STEUBENVILLE(WSNGTN) COL															
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX	
HIVOL	0	.	.	.	.	.	.	.	.	.	.	.	.	.
SSI	0	15.26	17.366	19.348	29.12	44.96	60.35	84.3399	109.692	145.20	46.7352	26.9116	15.26	145.20	
DICHOT15	31	0	15.26	17.366	19.348	29.12	44.96	60.35	84.3399	109.692	145.20	46.7352	26.9116	15.26	145.20
DICHOT10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FINE15	31	0.60	9.776	13.340	17.43	23.63	36.86	57.1076	80.732	111.80	29.4084	20.2320	0.60	111.80	
FINE10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
COARSE15	31	4.63	5.554	6.822	9.29	14.81	24.19	32.4620	35.404	38.41	17.2474	9.2287	4.63	38.41	
COARSE10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
NAME=YOUNGSTOWN (FIRE STA)															
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX	
HIVOL	129	24.2530	39.9050	50.880	62.1550	65.700	108.000	141.600	165.300	242.670	90.3376	38.4085	24.130	249.20	
SSI	65	25.5400	28.4810	34.484	49.3650	59.610	75.480	100.178	134.890	164.200	65.5122	28.1823	25.540	164.20	
DICHOT15	114	10.6508	17.8975	20.980	29.4050	43.045	56.562	72.325	88.690	124.955	46.0467	22.0133	9.998	126.00	
DICHOT10	6	30.8000	30.8000	30.8000	34.2875	46.215	53.130	67.830	67.830	67.830	67.830	67.830	67.830	67.83	
FINE15	114	6.0790	8.5025	10.950	12.9825	20.235	29.427	37.535	46.697	77.675	22.904	12.2239	6.030	79.10	
FINE10	6	22.3400	22.3400	22.3400	22.3550	28.570	36.187	43.440	43.440	43.440	29.8417	8.0686	22.340	43.44	
COARSE15	114	3.6661	7.1725	9.670	13.5725	20.445	28.542	42.355	49.200	75.250	23.1054	13.4187	3.600	76.30	
COARSE10	6	1.5600	1.5600	1.5600	3.7200	13.360	24.462	45.470	45.470	15.9483	15.6629	1.560	45.47	45.47	
NAME=OKLAHOMA CITY (FIRE STA)															
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX	
HIVOL	65	21.12	29.620	38.772	49.9050	63.230	80.6100	94.464	100.137	132.70	65.4011	22.0115	21.12	132.70	
SSI	30	17.94	19.777	22.293	35.9325	50.365	65.9225	74.062	99.329	101.70	52.0317	21.3776	17.94	101.70	
DICHOT15	6	13.37	13.370	13.370	37.1475	47.175	51.7175	54.790	54.790	54.790	42.6912	13.4519	13.37	54.79	
DICHOT10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FINE15	6	6.93	6.930	6.930	14.2950	17.630	21.5325	30.240	30.240	30.24	17.9825	6.7223	6.93	30.24	
FINE10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
COARSE15	6	6.44	6.440	6.440	19.0700	24.765	32.8375	37.150	37.15	24.7087	9.6320	6.44	37.15	37.15	
COARSE10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
NAME=SAVVIE ISLAND															
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX	
HIVOL	80	6.0110	10.5240	12.515	19.8625	28.94	46.600	65.3520	77.1400	167.800	35.3596	25.9104	6.011	167.80	
SSI	65	7.0720	14.3490	17.828	20.7500	29.32	41.200	55.4780	64.0670	81.320	32.6616	15.2920	7.072	81.32	
DICHOT15	149	2.9775	6.6345	8.101	12.2700	19.76	29.450	47.8000	61.4299	89.980	24.0821	16.7978	2.959	90.09	
DICHOT10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FINE15	149	1.6940	2.9100	3.031	6.1200	9.28	16.300	25.8199	38.0950	54.635	12.4191	10.1635	1.687	62.67	
FINE10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
COARSE15	149	0.9720	2.0760	2.580	4.6270	8.58	13.675	24.1700	33.1500	68.210	11.6628	11.2086	0.763	72.32	
COARSE10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

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NAME=EUGENE (LANE COLLEGE)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	68	7.178	15.4905	17.9980	29.5950	45.715	65.785	87.542	97.0834	124.7	49.6715	25.6505	7.178	124.7
SSI	71	11.930	13.2260	15.2300	22.8000	37.020	53.160	72.716	81.4120	111.7	39.0749	21.4478	11.930	111.7
DICHOT15	86	3.865	7.7466	10.2029	15.5475	27.720	38.220	56.473	70.7609	101.8	30.6986	19.6719	3.865	101.8
DICHOT10	0													
FINE15	66	2.238	4.0891	4.8140	7.3575	14.820	23.870	35.767	41.6360	65.5	17.1653	12.4902	2.238	65.5
FINE10	0													
COARSE15	66	1.484	2.8539	3.7020	6.4775	10.970	16.675	24.970	36.3935	79.1	13.5334	11.7175	1.484	79.1
COARSE10	0													
NAME=PORTLAND (CTRL FIRE STA)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	89	20.9100	26.5850	28.710	43.100	62.920	102.200	133.900	154.100	216.000	75.3306	42.6009	20.910	216.00
SSI	98	15.9700	20.5345	23.473	32.280	46.270	70.217	93.620	116.265	177.100	55.3779	32.3338	15.970	177.10
DICHOT15	170	7.5786	12.0065	15.028	21.965	38.015	58.922	90.409	134.080	195.463	47.6604	37.4779	5.308	200.20
DICHOT10	1	53.2600	53.2600	53.260	53.260	53.260	53.260	53.260	53.260	53.260	53.260	53.260	53.260	53.260
FINE15	170	3.2815	5.7805	6.910	10.085	14.660	25.782	38.028	50.134	90.093	19.8023	15.2206	2.722	91.30
FINE10	1	33.4400	33.2400	33.240	33.240	33.240	33.240	33.240	33.240	33.240	33.240	33.240	33.240	33.240
COARSE15	170	2.8089	4.3492	5.818	10.505	18.485	32.887	55.283	100.055	158.195	27.6826	28.9433	2.586	169.0
COARSE10	1	20.0200	20.0200	20.0200	20.0200	20.0200	20.0200	20.0200	20.0200	20.0200	20.0200	20.0200	20.0200	20.0200
NAME=PITT (S ALLEGHENY HIGH S)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	79	30.61	32.7200	37.920	48.670	59.070	80.7300	107.700	128.600	210.80	68.4069	32.7162	30.61	210.80
SSI	20	23.10	23.1445	24.158	37.615	55.395	83.8125	134.930	149.975	150.70	67.6620	37.1958	23.10	150.70
DICHOT15	52	10.76	16.6320	19.931	26.750	38.160	49.1825	59.833	68.367	91.77	40.0562	16.2620	10.76	91.77
DICHOT10	0													
FINE15	52	7.71	10.0230	11.346	16.850	22.120	31.0250	38.705	46.367	76.33	24.7454	12.1472	7.71	76.33
FINE10	0													
COARSE15	52	3.05	4.8110	7.087	10.075	13.725	16.7125	29.532	33.194	37.77	15.3110	7.9269	3.05	37.77
COARSE10	0													
NAME=PITT(W ALLEGHENY CO HIGH)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	27	21.01	23.726	28.776	38.75	57.37	76.150	95.14	128.40	143.80	60.1704	26.8842	21.01	143.80
SSI	0													
DICHOT15	5	17.66	17.660	20.05	24.63	29.030	29.20	29.20	29.20	29.20	24.5580	4.7992	17.66	29.20
DICHOT10	0													
FINE15	5	11.83	11.830	11.830	12.48	16.67	20.545	23.71	23.71	23.71	16.5440	4.6353	11.83	23.71
FINE10	0													
COARSE15	5	5.49	5.490	5.66	7.96	10.395	11.48	11.48	11.48	11.48	8.0140	2.4910	5.49	11.48
COARSE10	0													

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

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SITE=390400002A07 NAME=PITTSBURGH (AVALON)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	44	14.060	25.4725	45.735	53.4375	74.410	119.900	141.450	152.90	162.4	84.9300	37.3448	14.060	162.4
SSI	49	7.612	19.4375	38.630	47.5450	77.330	99.030	125.200	128.15	136.2	75.7179	32.5586	7.612	136.2
DICHOT15	18	28.310	28.3100	28.733	36.2850	45.165	77.237	130.759	213.20	213.2	64.6783	47.3925	28.310	213.2
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	18	14.540	14.5400	16.070	18.8100	22.910	32.570	73.300	103.00	103.0	31.1928	22.3110	14.540	103.0
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	18	7.200	7.2000	8.820	12.5225	16.215	37.692	93.479	177.90	177.9	33.6856	41.0173	7.200	177.9
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.

SITE=390780725A07 NAME=BETHLEHEM														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	126	20.7405	29.2655	35.257	45.185	60.625	85.9375	103.490	118.625	163.251	66.5377	28.5147	20.160	168.30
SSI	49	15.7100	19.2650	25.440	36.425	49.540	68.1600	83.010	90.580	106.100	52.9914	21.1199	15.710	106.10
DICHOT15	75	6.7440	10.9104	15.320	20.330	30.700	41.7900	57.196	60.202	63.700	32.3601	14.5525	6.744	63.70
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	75	4.1010	6.1936	7.772	11.580	17.040	22.9900	36.888	38.856	45.160	19.1360	10.0968	4.103	45.16
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	75	2.6410	4.2528	5.850	8.520	11.450	16.1400	21.342	32.038	38.060	13.2444	7.4137	2.641	38.06
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.

SITE=396620001A07 NAME=PIITT (NORTH BRADDOCK)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	67	31.36	44.1860	53.500	61.3300	81.410	123.800	178.260	198.540	255.70	98.9889	49.9054	31.36	255.70
SSI	64	24.67	31.6300	36.825	43.6400	64.690	87.950	127.900	146.475	162.30	71.1432	33.9890	24.67	162.30
DICHOT15	48	14.70	20.919	32.295	47.177	58.382	60.927	124.10	17.9044	14.70	124.10	.	.	.
DICHOT10	44	10.63	16.5850	17.270	24.4450	33.470	45.480	57.520	62.985	127.20	37.0945	19.3138	10.63	127.20
FINE15	48	7.86	8.7355	10.519	14.2750	19.165	25.297	35.725	42.227	94.20	22.0298	13.5122	7.86	94.20
FINE10	44	6.63	10.4325	11.805	16.1750	21.230	28.045	39.315	48.080	105.0	24.4895	15.2823	6.63	105.00
COARSE15	48	6.33	7.1190	8.276	9.7575	14.085	21.707	29.597	29.891	37.51	16.0979	7.5687	6.33	37.51
COARSE10	44	3.06	3.5800	5.325	7.3925	10.205	16.222	24.045	25.460	36.56	12.6070	7.3334	3.06	36.56

SITE=397140003A07 NAME=PHILA(500 S BROAD STREET)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	229	19.1180	28.3350	34.300	47.3650	58.930	79.8800	98.9600	115.950	145.870	64.0732	26.0041	18.46	172.10
SSI	531	15.7824	22.0820	27.460	36.4400	48.470	66.1200	82.7259	92.966	114.152	52.5197	21.8773	11.81	151.70
DICHOT15	107	11.6912	18.5300	22.676	29.3600	39.920	50.2100	66.0460	75.4492	112.466	42.0201	17.4055	11.26	113.60
DICHOT10	36	16.4955	21.653	25.4400	31.225	42.6375	51.1049	66.353	66.600	74.7661	12.8930	13.24	66.60	.
FINE15	107	5.6428	10.7000	11.432	16.6200	22.760	29.5300	38.5320	41.046	68.122	24.0924	10.7773	5.47	69.30
FINE10	36	7.500	10.4470	13.341	15.8900	22.790	29.5575	42.7590	50.139	50.870	24.0761	10.6770	7.54	50.87
COARSE15	107	3.7132	6.0900	7.460	10.5800	15.410	23.0400	28.0920	43.162	47.996	17.9276	9.8682	3.63	48.30
COARSE10	36	3.9800	4.2235	5.175	7.7525	10.355	13.2175	16.7070	20.150	20.150	4.2008	3.96	20.15	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

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NAME=PHILA(500 S BROAD ST COL)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	77	16.74	24.4320	30.106	43.205	55.860	70.095	95.9200	107.320	131.70
SSI	60	22.04	25.9955	30.458	51.195	73.695	88.050	104.850	129.00	156.3255
DICHOT15	61	21.60	23.7630	24.678	38.390	39.380	47.745	54.1900	68.440	72.80
DICHOT10	27	16.39	19.2860	21.574	25.770	30.790	36.170	52.6460	61.734	65.99
FINE15	61	6.72	9.9150	12.104	15.455	21.890	26.700	37.5959	42.306	48.76
FINE10	27	10.11	11.4780	13.634	15.840	21.550	26.490	41.8220	47.752	49.86
COARSE15	61	6.03	7.2940	8.460	11.460	16.580	20.410	29.6200	32.422	35.81
COARSE10	27	1.39	2.7500	4.918	7.440	10.760	12.940	16.3400	17.244	17.26
NAME=PHILA (ALLEGHENY)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	165	23.7536	46.7220	51.256	67.9000	96.920	125.400	177.160	192.280	220.930
SSI	162	22.3963	35.4875	38.312	47.3625	60.865	84.452	108.450	121.695	176.381
DICHOT15	91	14.9300	22.1560	27.858	36.0300	52.120	67.140	97.602	116.020	128.300
DICHOT10	0									
FINE15	91	5.0200	10.3400	12.300	16.2600	20.790	26.010	37.112	45.370	79.400
FINE10	0									
COARSE15	91	6.0600	9.5020	10.804	16.3400	26.730	45.130	61.212	85.660	95.900
COARSE10	0									
NAME=PHILA (BELMONT FILTER PL)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	36	16.890	18.8790	21.485	30.5275	50.335	58.9075	65.2479	76.1365	77.449
SSI	0									
DICHOT15	36	2.389	10.6518	19.830	27.5950	42.265	51.8800	55.2580	61.0264	69.62
DICHOT10	0									
FINE15	36	1.125	6.1167	9.761	16.1100	25.075	32.5775	38.4020	43.9690	45.72
FINE10	0									
COARSE15	36	1.265	4.5332	7.463	10.2425	14.625	20.0050	22.7770	24.3710	25.51
COARSE10	0									
NAME=PHILA (SE WATER TREAT PL)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	33	21.55	28.970	38.532	56.8500	71.670	89.7500	126.30	144.97	167.20
SSI	31	16.96	22.978	33.822	39.2800	53.440	58.7800	82.13	116.24	116.60
DICHOT15	6	42.29	42.290	42.290	48.5075	59.450	66.6375	77.79	77.79	58.7467
DICHOT10	0									
FINE15	6	21.23	21.230	21.230	26.4050	32.165	36.6825	40.57	40.57	31.5633
FINE10	0									
COARSE15	6	21.06	21.060	21.060	22.1100	26.460	31.3925	37.22	37.22	27.1850
COARSE10	0									

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

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NAME=PHILA (NORTHEAST AIRPORT)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	162	11.4470	15.9855	20.616	30.145	44.935	63.8475	78.697	87.5765	135.913
SSI	82	17.7400	24.8105	25.790	31.525	46.875	64.2700	77.672	88.8310	133.500
DICHOT15	230	3.2724	12.4615	15.084	21.645	32.150	46.1450	60.254	80.4175	154.755
DICHOT10	0	.	.	.	.	.	.	.	.	.
FINE15	230	1.4142	6.9581	8.581	12.130	19.310	27.7875	40.216	51.9230	82.354
FINE10	0	.	.	.	.	.	.	.	.	.
COARSE15	230	1.4023	3.2900	4.322	7.445	12.160	18.0525	23.217	31.1800	106.140
COARSE10	0	.	.	.	.	.	.	.	.	.

NAME=PHILA (GRATZ COLLEGE)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	37	16.47	17.611	22.292	31.980	46.040	58.2450	72.634	81.8639	87.48
SSI	31	17.10	17.358	18.576	25.810	42.370	48.6900	57.650	65.4780	66.13
DICHOT15	6	30.75	30.750	30.750	40.065	43.780	57.9100	57.940	57.940	57.94
DICHOT10	0	.	.	.	.	.	.	.	.	.
FINE15	6	14.72	14.720	14.720	16.075	26.405	33.9700	34.990	34.990	34.99
FINE10	0	.	.	.	.	.	.	.	.	.
COARSE15	6	16.03	16.030	16.030	16.540	20.410	23.3575	24.310	24.3100	26.31
COARSE10	0	.	.	.	.	.	.	.	.	.

NAME=PHILA (PRESBYTERIAN HOME)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	164	12.7740	21.6250	26.375	36.3250	52.990	68.6975	91.170	101.275	148.090
SSI	80	17.4500	24.6900	29.730	36.1625	47.245	67.5025	81.901	89.175	125.100
DICHOT15	162	12.5131	17.5890	20.714	25.9275	36.425	53.2250	72.392	86.174	135.104
DICHOT10	0	.	.	.	.	.	.	.	.	.
FINE15	162	6.5941	8.9495	11.218	14.6825	23.300	33.5700	46.620	60.817	114.102
FINE10	0	.	.	.	.	.	.	.	.	.
COARSE15	162	2.7289	4.6100	6.411	10.1375	15.190	19.5375	27.175	31.611	42.115
COARSE10	0	.	.	.	.	.	.	.	.	.

NAME=PHILA (TEMPLE UNIVERSITY)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	40	16.01	20.3205	23.727	34.4950	52.675	60.2400	61.6029	66.6635	103.60
SSI	0	.	.	.	.	.	.	.	.	.
DICHOT15	38	19.36	20.5285	23.916	31.2075	47.520	56.9075	69.1540	76.8964	85.95
DICHOT10	0	.	.	.	.	.	.	.	.	.
FINE15	38	10.15	10.3115	11.365	17.4325	29.085	36.8425	45.3240	52.1965	52.89
FINE10	0	.	.	.	.	.	.	.	.	.
COARSE15	38	5.20	6.2070	9.121	12.1550	16.040	21.2225	23.9360	33.7393	46.65
COARSE10	0	.	.	.	.	.	.	.	.	.

INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

NAME=PHILA(Temple Univ Col)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	0	.	.	.	.	.	.	.	.	.	.	.	.	.
SSI	0	.	.	.	.	.	.	.	.	.	.	.	.	.
DICHOT15	13	4.216	4.216	10.8976	24.415	36.25	52.275	53.812	54.32	54.32	36.7935	15.8291	4.216	54.32
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	13	1.908	1.908	5.2528	11.720	19.62	32.800	36.546	36.59	36.59	21.5122	11.3340	1.908	36.59
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	13	2.308	2.308	4.0648	12.300	16.62	19.415	21.000	21.16	21.16	15.2814	5.6523	2.308	21.16
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
----- SITE=397140038A07 NAME=PHILA (ST JOHN CAUNTIUS) -----														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	172	22.6505	25.4060	31.034	42.5150	55.830	81.2600	101.400	119.040	171.496	64.2967	30.6092	21.30	189.6
SSI	179	12.5100	20.7300	24.900	36.7200	49.000	69.8500	93.650	113.100	155.060	56.0651	28.2462	12.31	165.7
DICHOT15	66	13.2900	16.2730	21.953	26.475	33.695	51.4625	70.686	95.137	132.900	44.9258	38.2699	13.29	323.9
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	86	7.1700	10.3775	11.382	15.3175	19.825	27.1950	41.220	49.893	140.500	24.4470	18.0912	7.17	140.5
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	86	0.9000	5.5300	6.413	9.8950	14.665	22.1175	30.986	45.545	308.500	20.4783	33.2053	0.90	308.5
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
----- SITE=397260021A07 NAME=PITT (HAZELWOOD #2) -----														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	108	26.8230	44.1415	50.803	65.5250	75.670	110.825	142.900	156.070	343.196	91.2123	44.1537	26.49	354.7
SSI	0	.	.	.	.	.	.	.	.	.	.	.	.	.
DICHOT15	142	14.2165	26.0465	29.875	39.0625	53.730	69.367	87.513	110.545	168.802	57.1342	26.8045	10.54	181.1
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	142	7.2702	14.8410	18.438	22.8650	31.075	42.622	54.792	64.251	107.224	36.3022	16.4516	7.21	121.5
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	142	3.7428	6.0970	7.606	13.0725	18.305	30.532	39.262	48.214	84.701	22.0307	14.3669	3.33	88.7
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
----- SITE=410300012A07 NAME=PROVIDENCE(ROCKEFF LIB) -----														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	0	.	.	.	.	.	.	.	.	.	.	.	.	.
SSI	27	18.110	16.3260	19.4660	26.0300	31.490	40.620	52.634	61.5119	66.70	34.2207	11.9523	18.110	66.70
DICHOT15	74	6.720	10.7700	12.0950	16.8475	22.625	32.395	38.760	52.3824	65.94	25.1492	11.8046	6.720	65.94
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	74	4.660	4.9217	6.5700	8.8275	13.215	18.995	25.485	27.9999	41.53	14.5818	7.3657	4.660	41.53
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	74	1.883	3.4525	4.7305	6.4375	9.445	12.095	17.875	26.2074	35.57	10.5676	6.5170	1.883	35.57
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

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NAME=CHARLESTON SC (FIRE STA)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	0	28.410	28.4100	28.410	31.6925	34.675	49.0800	55.460	55.4600	55.46	39.0537	9.84100	28.410	55.46
SSI	8	6.567	13.0000	15.565	19.8775	26.730	33.9425	40.150	41.6200	43.59	26.7433	8.88747	6.567	43.59
DICHOT15	54	4.290	6.0535	7.310	9.3175	15.345	19.3625	22.270	29.5075	32.65	15.0836	6.37528	4.290	32.65
DICHOT10	0	1.163	3.8000	5.530	8.1825	10.965	15.7175	18.795	19.7700	20.58	11.6597	4.01072	1.163	20.58
FINE10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COARSE15	54	3.25	3.2500	3.250	3.2500	12.480	14.900	14.900	14.900	14.90	10.2100	6.1478	3.25	14.90
COARSE10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NAME=CHATTANOOGA (WDEF STA)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	32	38.19	39.0350	42.941	56.6150	62.535	100.115	108.430	135.319	172.50	79.7812	28.1024	38.19	172.50
SSI	30	26.91	26.3345	30.939	39.5775	55.760	72.572	80.134	106.223	137.70	57.8463	22.8831	26.91	137.70
DICHOT15	3	24.12	24.1200	24.120	24.1200	25.050	36.190	36.190	36.190	36.19	28.4533	6.7763	24.12	36.19
DICHOT10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FINE15	3	9.22	9.2200	9.220	9.2200	21.800	23.710	23.710	23.710	23.71	16.2433	7.6726	9.22	23.71
FINE10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COARSE15	3	3.25	3.2500	3.250	3.2500	12.480	14.900	14.900	14.900	14.90	10.2100	6.1478	3.25	14.90
COARSE10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NAME=440380006A07														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	91	25.55	38.290	46.016	55.860	70.31	93.23	110.320	122.140	139.20	75.2157	24.1621	25.55	139.20
SSI	49	14.51	29.525	36.690	47.505	58.25	68.31	84.640	88.360	92.72	58.2278	16.9203	14.51	92.72
DICHOT15	63	10.55	13.860	19.804	25.940	34.98	46.52	61.664	63.746	75.78	36.8992	15.5275	10.55	75.78
DICHOT10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FINE15	63	5.58	8.364	9.624	14.530	19.47	26.57	38.040	47.602	52.83	21.8944	10.7930	5.58	52.83
FINE10	0	0	1.908	2.262	8.190	12.66	21.58	30.028	35.156	54.83	15.0049	10.9473	1.51	54.83
COARSE15	63	1.51	1.908	2.262	8.190	12.66	21.58	30.028	35.156	54.83	15.0049	10.9473	1.51	54.83
COARSE10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NAME=442540006A07														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	91	25.55	38.290	46.016	55.860	70.31	93.23	110.320	122.140	139.20	75.2157	24.1621	25.55	139.20
SSI	49	14.51	29.525	36.690	47.505	58.25	68.31	84.640	88.360	92.72	58.2278	16.9203	14.51	92.72
DICHOT15	63	10.55	13.860	19.804	25.940	34.98	46.52	61.664	63.746	75.78	36.8992	15.5275	10.55	75.78
DICHOT10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FINE15	63	5.58	8.364	9.624	14.530	19.47	26.57	38.040	47.602	52.83	21.8944	10.7930	5.58	52.83
FINE10	0	0	1.908	2.262	8.190	12.66	21.58	30.028	35.156	54.83	15.0049	10.9473	1.51	54.83
COARSE15	63	1.51	1.908	2.262	8.190	12.66	21.58	30.028	35.156	54.83	15.0049	10.9473	1.51	54.83
COARSE10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NAME=451310050A07														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD	MIN	MAX
HIVOL	105	19.3510	34.1070	40.982	57.6300	70.250	80.4800	111.980	127.490	144.235	75.9445	47.2768	19.230	458.80
SSI	90	10.5500	21.5775	31.112	41.9875	53.270	65.5625	82.373	96.402	104.400	57.8864	34.1261	10.550	304.40
DICHOT15	132	10.8628	17.3210	20.642	28.5525	34.740	44.5750	57.090	61.767	90.341	37.2097	14.3147	9.096	92.08
DICHOT10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FINE15	132	6.0351	8.3330	10.685	12.9025	16.485	23.0500	30.218	33.646	56.217	18.7594	8.5235	5.880	60.91
FINE10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COARSE15	132	1.3182	5.0210	6.670	10.7795	17.085	23.6275	31.174	35.531	68.458	18.4502	10.6466	0.810	74.94
COARSE10	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ENVIRONMENTAL PROTECTION AGENCY

INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

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NAME=EL PASO (TILLMAN CIR)																
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AVERAGE	STD	MIN	MAX		
HIVOL	76	30.13	54.45	60.127	82.19	117.75	162.30	216.79	239.79	333.6	128.056	60.6644	30.13	333.6		
SSI	67	26.20	34.92	39.68	52.45	65.60	128.60	175.94	244.88	260.9	98.706	57.4000	26.20	260.9		
DICHOT15	90	16.91	24.88	30.06	38.11	57.13	85.08	128.18	145.88	297.6	69.005	45.4747	16.91	297.6		
DICHOT10	5	11.79	11.79	11.79	16.32	65.40	96.83	121.30	121.30	121.3	58.342	44.1079	11.79	121.3		
FINE15	90	4.88	6.78	6.78	11.02	15.58	24.30	49.60	59.01	147.7	22.539	21.3363	4.88	147.7		
FINE10	5	6.47	6.47	6.47	7.30	30.76	46.45	47.80	47.80	47.8	27.652	19.6839	6.47	47.8		
COARSE15	90	4.82	10.72	15.51	25.29	40.87	61.24	80.46	94.97	211.5	46.469	31.4214	4.82	211.5		
COARSE10	5	3.66	3.66	3.66	9.02	27.26	54.02	73.40	73.40	73.4	30.67	26.6825	3.66	73.4		
----- SITE=451710004A07 NAME=EL PASO (CLINT) -----																
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AVERAGE	STD	MIN	MAX		
HIVOL	140	11.24	39	28.34	36.93	49.80	71.51	104.05	147.06	185.77	250.74	83.8057	46.7220	6.403	259.4	
SSI	0															
DICHOT15	140	7.05	80	15.97	20.50	35	45.41	63.82	89.88	108.16	163.75	51.8665	29.1638	6.058	181.3	
DICHOT10	0															
FINE15	140	2.36	75	4.33	7	6.31	8.41	12.04	16.17	22.97	27.56	33.61	13.2784	6.5881	2.340	34.0
FINE10	0															
COARSE15	140	2.24	56	8.01	16	12.30	20.53	33.43	51.32	73.12	79.43	141.07	38.5888	26.1443	1.770	150.3
COARSE10	0															
----- SITE=452330024A07 NAME=HOUSTON (CAMS-0) -----																
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AVERAGE	STD	MIN	MAX		
HIVOL	59	5.21	2	20.61	30.29	46.17	63.98	76.55	94.16	99.11	115.00	125.80	63.7066	25.4750	5.212	125.80
SSI	0															
DICHOT15	41	7.24	40	14.10	19.07	26.18	35.56	41.11	62.11	63.75	66.48	74.60	36.5246	15.0838	7.240	74.60
DICHOT10	0															
FINE15	41	4.86	3	6.27	7.60	11.62	16.24	20.57	25.87	30.99	39.97	16.8989	7.3071	4.863	39.97	
FINE10	0															
COARSE15	41	2.37	77	4.15	6.27	10.44	18.65	25.72	36.14	42.97	59.69	19.6253	11.8857	2.377	59.69	
COARSE10	0															
----- SITE=452560034A07 NAME=HOUSTON (CAMS-1) -----																
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AVERAGE	STD	MIN	MAX		
HIVOL	07	30.09	46.65	50.59	55.91	72.81	92.71	125.40	152.74	157.50	203.40	99.2163	36.1416	30.09	203.40	
SSI	80	26.68	36.41	42.59	43.59	56.86	71.31	91.82	112.50	118.24	140.70	74.9887	25.1468	26.68	140.70	
DICHOT15	13	25.39	25.39	25.48	32.93	40.47	53.17	82.03	88.57	88.57	45.8646	18.2411	25.39	88.57		
DICHOT10	16	24.74	24.74	24.74	26.35	30.69	33.72	46.31	57.84	61.48	37.67	10.5752	24.74	61.48		
FINE15	13	9.58	9.58	9.58	10.37	13.20	15.07	17.39	59.23	78.44	10.3466	16.1541	9.58	78.44		
FINE10	16	4.54	4.54	4.54	6.71	11.23	16.90	20.14	28.96	33.47	16.2881	7.0784	4.54	33.47		
COARSE15	13	10.03	10.03	10.03	16.93	26.84	33.38	42.51	42.51	42.99	25.5000	10.8579	10.03	42.99		
COARSE10	16	10.09	10.09	10.09	12.68	16.19	19.84	28.94	32.56	33.73	21.3831	7.2363	10.09	33.73		

APPENDIX B

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

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NAME=HOUSTON (SEABROOK)												
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD
HIVOL	64	15.08	25.015	26.980	39.950	53.055	79.0875	112.600	132.275	171.90	62.2014	32.8693
SSI	6	24.45	24.450	24.450	26.325	45.795	59.5750	70.100	70.100	70.10	44.8025	16.6880
DICHOT15	55	12.58	13.664	17.712	24.270	32.580	41.8200	59.820	73.362	80.98	35.1627	16.0024
DICHOT10	0											
FINE15	55	4.74	5.946	7.890	10.030	14.040	19.6300	36.306	41.358	44.54	16.5111	9.6983
FINE10	0											
COARSE15	55	4.77	6.094	7.356	12.090	16.010	21.7400	30.696	42.390	54.02	18.6516	10.4926
COARSE10	0											

NAME=MAGNA (BROCKBANK JR HS)												
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD
HIVOL	121	16.9742	27.1220	33.470	43.0500	57.640	79.1950	108.580	130.870	260.886	67.2394	30.3620
SSI	75	16.1100	25.1780	27.824	34.6000	44.520	60.5700	96.614	124.460	213.900	56.5586	33.3769
DICHOT15	46	11.9800	12.8725	14.556	20.3725	28.705	49.8200	69.375	92.458	96.560	36.3620	21.4810
DICHOT10	5	12.1600	12.1800	12.180	15.6650	16.090	50.4350	51.360	51.360	34.1380	17.6310	12.18
FINE15	46	3.8600	4.0980	5.223	8.0975	10.080	15.4575	34.188	59.788	79.030	15.4265	7.903
FINE10	5	7.5000	7.5000	7.500	8.0050	27.670	33.9200	34.440	34.440	34.440	22.3040	13.3101
COARSE15	46	6.1700	7.5195	8.200	10.1500	17.470	30.1175	36.262	42.264	59.990	20.8340	7.50
COARSE10	5	3.6700	3.6700	3.670	7.0450	12.050	16.5150	17.940	17.940	11.8340	5.3987	3.67

NAME=SALT LAKE CITY(6 9 200 E)												
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD
HIVOL	127	23.4876	36.034	40.188	48.5700	67.950	87.9900	119.460	139.680	248.896	75.4173	38.6250
SSI	71	27.1500	32.1136	36.518	45.3300	62.310	84.6100	108.840	158.660	207.600	69.6396	36.2693
DICHOT15	62	15.5700	16.538	22.984	28.6800	34.655	43.5525	56.995	78.801	97.170	39.1019	15.9770
DICHOT10	3	19.7400	19.740	19.740	33.390	79.2800	79.280	79.280	44.1367	31.1909	19.74	79.28
FINE15	62	5.9300	6.617	9.154	12.1575	16.7225	33.370	39.870	52.980	17.4992	9.4525	5.93
FINE10	3	13.3000	13.300	13.300	23.410	59.3600	59.360	59.360	32.0233	24.2079	13.30	59.36
COARSE15	62	6.3400	7.146	9.874	14.7750	20.810	25.9475	32.318	43.780	68.890	21.6026	10.7197
COARSE10	3	6.4400	6.440	6.440	6.4400	9.980	19.9200	19.920	19.920	19.920	12.1133	6.44

NAME=ARLINGTON (COMIN BLDG)												
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	A MEAN	STD
HIVOL	72	20.76	24.604	30.920	39.1200	52.270	63.3625	80.263	88.9695	103.0	53.2967	18.4520
SSI	62	16.32	19.073	22.852	34.7125	42.265	49.9825	71.878	83.1530	110.2	44.8774	17.9635
DICHOT15	0											
DICHOT10	0											
FINE15	0											
FINE10	0											
COARSE15	0											
COARSE10	0											

APPENDIX B

ENVIRONMENTAL PROTECTION AGENCY

INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

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NAME=HAMPTON (VIRGINIA SCHOOL)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AHEAN	STD	MIN	MAX
HIVOL	67	21.57	24.190	28.006	34.28	47.31	61.38	84.930	95.6979	106.90	51.2549	20.665	21.57	106.90
SSI	67	16.43	19.294	21.754	25.95	36.77	48.42	70.054	79.1979	96.04	40.3370	17.859	16.43	94.04
DICHOT15	0	.	.	.	.	.	.	.	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
NAME=HOPEWELL (NEWS BLDG)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AHEAN	STD	MIN	MAX
HIVOL	122	26.2394	35.1755	42.002	52.0025	62.050	90.9275	110.100	120.695	145.682	70.0369	25.6832	25.60	149.70
SSI	46	22.2700	26.5425	30.965	39.1625	47.955	69.050	88.661	96.70	102.400	54.0367	20.4712	22.27	102.40
DICHOT15	122	13.2827	17.7580	20.448	26.6375	35.560	47.8225	62.482	71.523	116.125	38.9171	17.3304	12.71	126.40
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	122	6.9830	8.7470	10.013	13.1050	18.095	25.8600	31.615	44.442	96.098	20.8599	12.7192	6.96	108.90
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	122	2.5860	5.8680	7.706	11.3275	16.355	24.1350	31.123	33.550	61.715	16.0578	9.8043	2.31	66.12
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
NAME=NORFOLK (OLD DOMINION U)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AHEAN	STD	MIN	MAX
HIVOL	123	23.714	31.2380	33.242	39.8300	54.110	70.4200	91.7380	104.220	127.32	58.4980	22.3138	23.27	128.40
SSI	43	19.510	23.7340	26.132	35.4400	44.060	62.4600	80.0659	106.203	117.50	49.8451	22.5644	19.51	117.50
DICHOT15	78	12.540	17.4155	19.263	23.8075	30.255	42.5950	56.3780	67.879	87.64	34.8124	14.6312	12.54	87.64
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	78	5.630	5.8155	8.167	13.3325	16.915	25.0675	33.3990	38.597	45.02	19.5500	9.3013	5.63	45.02
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	78	0.610	4.9590	6.094	8.9500	12.805	19.4575	25.5190	35.132	68.48	15.2627	9.9341	0.61	68.48
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
NAME=FAIRFAX (GREAT FALLS)														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AHEAN	STD	MIN	MAX
HIVOL	114	16.6095	24.630	27.035	35.3025	43.29	51.960	62.960	71.3325	79.1125	44.0743	13.4277	18.560	79.33
SSI	31	21.8100	25.6224	31.438	35.1700	39.68	50.260	69.3999	78.5840	81.3200	44.2365	14.1196	21.810	81.32
DICHOT15	109	9.3643	12.600	14.420	19.2850	26.01	34.055	45.3900	53.5150	65.6780	28.1021	12.0059	9.237	66.28
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	109	5.5812	7.3300	8.710	12.2650	17.34	24.255	35.9000	40.1100	49.5090	19.5425	10.0501	5.548	49.60
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	109	1.5690	2.965	3.689	5.5300	7.60	10.545	15.1700	17.5650	23.6280	8.5587	4.4482	1.490	23.93
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

SITE=48266002A07 NAME=RICHMOND VA (HEALTH DEPT)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	24	36.23	36.995	39.455	43.925	53.755	65.60	66.8545	113.200	116.60
SSI	22	23.45	23.543	25.267	30.710	42.435	50.42	73.9069	86.017	86.74
DICHOT15	0	.	.	.	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.	.	.	.

SITE=491640057A07 NAME=SEATTLE (DUWAMISH PUMP 1)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	121	29.2376	44.639	50.3680	65.75	80.160	112.500	161.300	169.400	181.640
SSI	16	34.4000	34.400	34.6100	37.42	44.010	62.322	97.892	100.300	100.300
DICHOT15	111	9.3986	15.556	19.1000	24.27	32.690	49.350	72.032	84.440	116.681
DICHOT10	2	.	.	.	.	.	.	.	.	39.8265
FINE15	111	6.4689	5.742	6.8936	8.36	11.710	16.730	31.280	50.320	90.320
FINE10	2	12.6100	12.610	12.8100	12.61	42.875	72.940	72.940	72.940	72.940
COARSE15	111	2.7996	7.644	9.5960	14.04	19.870	30.230	48.750	56.656	86.848
COARSE10	2	10.2300	10.230	10.2300	10.23	13.805	17.380	17.380	17.380	17.380

SITE=491840057A57 NAME=SEATTLE (DUWAMISH COL)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	0	.	.	.	.	.	.	.	.	.
SSI	6	26.20	26.20	26.20	38.5975	47.735	61.155	62.05	82.0500	82.05
DICHOT15	79	11.14	14.56	17.99	23.9900	31.270	45.560	62.96	79.2999	98.05
DICHOT10	3	17.39	17.39	17.39	17.3900	25.670	58.310	58.31	58.3100	58.31
FINE15	79	4.30	6.54	6.96	8.8600	12.610	16.880	27.31	35.7800	52.73
FINE10	3	10.68	10.88	10.88	10.8800	17.970	51.280	51.28	51.2800	51.28
COARSE15	79	4.08	5.77	8.72	12.5100	18.710	26.550	42.54	49.2599	61.59
COARSE10	3	6.51	6.51	6.51	6.5100	7.030	7.700	7.70	7.7000	7.70

SITE=491840073A07 NAME=SEATTLE (CITY LIGHT CO)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	95	9.26700	14.5900	21.0860	28.80	39.02	56.22	71.226	86.3320	110.100
SSI	0	.	.	.	.	.	.	.	.	43.7171
DICHOT15	143	3.60748	5.8644	6.8630	11.40	17.41	26.92	34.374	47.4940	71.912
DICHOT10	0	.	.	.	.	.	.	.	.	20.2465
FINE15	143	3.10048	4.5936	5.7028	7.67	11.57	17.96	26.926	38.3019	50.080
FINE10	0	.	.	.	.	.	.	.	.	14.4772
COARSE15	143	0.21500	0.4832	0.7224	1.25	2.66	8.30	16.672	19.2140	24.868
COARSE10	0	.	.	.	.	.	.	.	.	5.7688

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK

IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
VALUES IN MICROGRAMS PER CUBIC METER

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NAME=SPOKANE (BODNE ST) ----														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	73	14.550	30.0150	40.172	51.4500	60.850	110.600	154.020	196.300	247.90	89.1262	47.5455	14.550	247.90
SSI	25	7.374	12.6718	27.746	37.3250	61.020	96.445	113.660	151.020	166.80	68.0870	36.8191	7.374	166.80
DICHOT15	96	5.490	10.5104	15.883	25.0800	35.460	53.972	77.717	101.735	120.70	41.7349	24.7642	5.490	120.70
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	96	2.070	3.1220	4.172	5.9425	9.305	15.550	33.927	41.213	53.32	13.5411	11.5526	2.070	53.32
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	96	3.280	4.8029	6.025	13.7050	24.830	36.275	53.783	76.763	103.00	28.1949	20.7939	3.280	103.00
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
SITE=500280004A07 NAME=CHARLESTON WV (E WASHGTN) -----														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	0	.	.	.	.	.	.	.	.	.	.	.	.	.
SSI	0	.	.	.	.	.	.	.	.	.	.	.	.	.
DICHOT15	61	16.37	18.556	20.196	26.71	37.60	48.585	58.806	67.187	76.30	39.2267	13.9447	16.37	76.30
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	61	7.20	8.060	9.898	13.47	20.33	29.010	35.082	41.663	52.72	21.9511	10.0584	7.20	52.72
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	61	7.62	8.080	8.970	11.15	14.49	22.040	29.376	34.505	42.37	17.2751	8.0305	7.62	42.37
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
SITE=502000002A07 NAME=WEIRTON -----														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	70	36.13	42.2715	49.898	66.4950	92.335	116.250	140.020	179.310	197.40	94.0151	37.1215	36.13	197.40
SSI	0	.	.	.	.	.	.	.	.	.	.	.	.	.
DICHOT15	66	11.16	15.9860	21.481	29.5825	46.180	57.790	70.422	76.734	130.00	45.5749	20.4712	11.16	130.00
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	68	6.13	7.7930	10.360	15.9400	21.985	32.847	41.264	47.153	94.30	24.9328	13.6899	6.13	94.30
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	68	2.76	6.3725	8.812	12.4150	17.980	27.712	35.313	45.756	54.63	20.6425	10.9485	2.76	54.63
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
SITE=502120002A07 NAME=WHEELING -----														
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99	AMEAN	STD	MIN	MAX
HIVOL	66	29.12	31.6365	38.476	55.820	70.745	92.4675	112.130	116.320	164.10	74.2714	27.3159	29.12	164.10
SSI	41	15.60	21.1030	30.848	42.315	52.390	66.3850	80.282	97.321	103.60	55.722	19.8236	15.60	103.60
DICHOT15	49	13.90	15.5200	18.390	33.125	46.410	55.2350	70.550	89.335	108.50	46.0053	19.9989	13.90	108.50
DICHOT10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
FINE15	49	5.25	7.1000	11.090	17.050	24.730	28.5900	35.420	38.475	50.82	23.6014	9.2281	5.25	50.82
FINE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.
COARSE15	49	6.71	6.8800	8.630	12.510	20.770	29.1050	35.360	51.285	70.70	22.4035	13.3735	6.71	70.70
COARSE10	0	.	.	.	.	.	.	.	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
 INHALABLE PARTICULATE NETWORK
 IPN DATA, PERCENTILE RANK FREQUENCY DISTRIBUTIONS
 VALUES IN MICROGRAMS PER CUBIC METER

NAME=BELOIT (FIRE STATION)										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	84	16.740	30.4475	38.5900	53.215	66.085	87.0400	120.400	137.100	169.70
SSI	20	29.810	29.9935	33.6390	37.375	54.945	73.5925	92.243	109.865	110.70
DICHOT15	63	8.737	10.3580	16.0860	22.460	36.000	46.1000	58.216	72.684	92.76
DICHOT10	0	.	.	.	.	.	.	.	.	.
FINE15	63	3.623	5.0420	6.9520	11.650	16.720	27.6600	36.114	39.708	61.12
FINE10	0	.	.	.	.	.	.	.	.	.
COARSE15	63	2.070	4.7460	5.1696	7.960	12.720	21.5100	32.232	37.682	46.29
COARSE10	0	.	.	.	.	.	.	.	.	.

NAME=GREEN BAY										
SAMPLER	N	P1	P5	P10	P25	P50	P75	P90	P95	P99
HIVOL	77	30.16	35.144	44.958	56.7350	67.92	86.88	104.280	116.720	242.20
SSI	28	11.75	17.456	26.844	33.7775	52.23	64.40	86.069	92.365	93.07
DICHOT15	39	10.30	19.360	28.350	32.7000	40.26	57.60	67.400	99.210	133.10
DICHOT10	0	.	.	.	.	.	.	.	.	.
FINE15	39	7.43	7.690	8.700	13.2800	22.39	27.90	38.660	49.400	53.67
FINE10	0	.	.	.	.	.	.	.	.	.
COARSE15	39	2.61	8.080	8.790	13.7200	18.98	33.39	44.030	60.550	81.70
COARSE10	0	.	.	.	.	.	.	.	.	.

APPENDIX C

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

		SITE=010380003A07		NAME=SOUTH BIRMINGHAM			
SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	80	74.2151	36.0512	20.95	242.10	790801	810317
SSI	38	61.1068	17.4928	25.19	93.52	810323	811124
DICHOT15	0	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

		SITE=010380023A07		NAME=NORTH BIRMINGHAM (S 20TH)			
SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	178	109.613	63.4217	25.9200	368.600	790708	821231
SSI	146	84.313	43.0757	27.7200	238.200	800421	821231
DICHOT15	147	57.914	32.2247	13.3900	182.300	790708	821231
FINE15	147	28.675	13.5179	6.8900	73.900	790708	821231
COARSE15	147	29.236	22.6011	2.8600	125.100	790708	821231
RATIO15	136	0.557	0.1263	0.1554	0.848	.	.
DICHOT10	41	53.247	35.4951	15.7100	172.500	820324	821231
FINE10	41	30.410	17.2730	7.7800	79.800	820324	821231
COARSE10	41	22.838	20.3282	4.5300	100.000	820324	821231
RATIO10	40	0.515	0.1208	0.2854	0.939	.	.

		SITE=010380023A57		NAME=NORTH BIRMINGHAM (COL)			
SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	40	116.739	61.7199	37.2900	276.000	810317	811218
SSI	38	86.909	43.7502	29.1200	205.200	810311	811124
DICHOT15	89	64.430	36.8960	18.4300	187.800	810323	821231
FINE15	89	28.989	14.1894	7.9300	71.500	810323	821231
COARSE15	89	35.442	27.3802	1.0000	147.200	810323	821231
RATIO15	33	0.632	0.0912	0.4987	0.879	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=010380026A07 NAME=INGLENOOK -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	74	97.9834	53.1816	25.74	306.3	790726	810510
SSI	32	65.5609	27.0276	24.22	141.9	810516	811124
DICHOT15	0	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=010570001A07 NAME=HUFFMAN -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	89	60.1009	19.8754	20.7900	132.800	800503	811031
SSI	90	49.0081	15.3273	19.3300	95.940	800503	811031
DICHOT15	84	43.0185	18.3638	12.9200	95.190	800509	811031
FINE15	84	23.6720	9.8021	6.6100	51.460	800509	811031
COARSE15	84	19.3462	12.6506	3.2900	58.140	800509	811031
RATIO15	82	0.7050	0.1954	0.3767	1.544	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=012380029A07 NAME=MOBILE (WKRG STA TOWER) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	0	.	.	.	.	.	.
SSI	0	.	.	.	.	.	.
DICHOT15	60	39.2513	16.2769	16.45	86.05	810907	821231
FINE15	60	20.3378	10.0071	6.58	47.57	810907	821231
COARSE15	60	18.9138	10.5015	5.18	56.88	810907	821231
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=030440006A07 NAME=CAREFREE AIRPORT -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	116	41.3222	17.7390	10.2400	98.2600	790813	821014
SSI	41	30.9524	12.1812	10.8900	67.6400	801205	811130
DICHOT15	82	23.9704	11.2229	3.4030	68.1700	810504	821014
FINE15	82	7.3344	3.0555	1.2080	16.5500	810504	821014
COARSE15	82	16.6365	9.8213	1.6250	57.4900	810504	821014
RATIO15	68	0.5035	0.1008	0.2684	0.8563	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=030600002A07 NAME=PHOENIX (ROOSEVELT ST) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	146	114.879	43.5056	28.8800	270.900	790831	821231
SSI	96	80.294	32.5482	22.5500	179.100	800720	821231
DICHOT15	95	66.479	30.8640	12.3900	148.400	801223	821225
FINE15	95	24.158	18.0797	6.0900	106.900	801223	821225
COARSE15	95	42.322	19.5586	5.5800	106.000	801223	821225
RATIO15	90	0.584	0.1839	0.2995	1.528	.	.
DICHOT10	49	39.229	17.8777	12.8100	99.540	820129	821225
FINE10	49	15.264	9.7582	5.5300	66.910	820129	821225
COARSE10	49	23.965	11.1009	3.2300	51.340	820129	821225
RATIO10	47	0.383	0.0823	0.1899	0.577	.	.

----- SITE=030600004A07 NAME=NORTH PHOENIX -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	71	110.158	43.0318	24.78	239.3	790813	810504
SSI	75	74.795	28.8708	28.17	155.7	800316	811124
DICHOT15	50	53.652	21.2844	14.06	112.9	810603	820511
FINE15	50	15.852	8.7184	4.86	37.0	810603	820511
COARSE15	50	37.799	17.0454	5.65	75.9	810603	820511
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=030600004A57 NAME=NORTH PHOENIX (COL) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	0	.	.	.	.	.	.
SSI	24	70.8133	26.6832	38.61	127.7	810703	811124
DICHOT15	0	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=041440001A07 NAME=LITTLE ROCK -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	114	62.3267	22.4546	27.6500	133.900	801129	821231
SSI	63	52.2378	19.1933	20.3000	124.100	801123	811212
DICHOT15	32	34.9144	13.4013	10.0400	69.320	820523	821207
FINE15	32	18.6606	8.5927	5.0600	41.100	820523	821207
COARSE15	32	16.2537	6.9797	3.8400	32.820	820523	821207
RATIO15	31	0.5791	0.1194	0.3109	0.829	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=050500002A07 NAME=AZUSA (LOREN AVE) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	113	126.717	49.9182	20.3500	273.600	790813	810925
SSI	68	98.411	41.7206	15.8800	216.300	790813	811118
DICHOT15	92	57.189	39.8249	3.8450	303.600	791018	821107
FINE15	92	28.765	19.1999	2.0240	90.800	791018	821107
COARSE15	92	28.426	31.9222	1.0000	283.600	791018	821107
RATIO15	52	0.535	0.1988	0.2148	1.312	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=012540001A07 NAME=MTN BROOK -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	84	51.5505	20.3411	12.1600	138.400	790726	810510
SSI	33	44.6270	14.0137	24.0500	73.140	810516	811124
DICHOT15	126	28.0009	11.4076	8.7020	64.650	790726	820312
FINE15	126	19.0584	8.5956	4.7460	51.040	790726	820312
COARSE15	126	8.9423	6.2113	0.6700	41.240	790726	820312
RATIO15	83	0.5630	0.1308	0.3272	1.055	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=013200001A07 NAME=TARRANT (PINSON ST) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	92	120.169	51.2384	28.74	324.60	790720	810516
SSI	92	84.368	31.9175	22.10	173.50	800421	811124
DICHOT15	5	29.294	11.3451	18.26	45.32	821201	821231
FINE15	5	14.890	9.3585	7.58	29.78	821201	821231
COARSE15	5	14.404	3.5746	10.59	19.10	821201	821231
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=020040003A07 NAME=ANCHORAGE -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	85	56.1208	47.2029	5.321	260.30	800831	820722
SSI	49	38.2945	27.1213	8.263	118.40	800831	811118
DICHOT15	11	20.8199	27.6299	7.156	103.10	821002	821231
FINE15	11	8.2345	3.8746	2.590	15.68	821002	821231
COARSE15	11	12.5743	26.7941	1.121	92.70	821002	821231
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=030440006A07 NAME=CAREFREE AIRPORT -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	116	41.3222	17.7390	10.2400	98.2600	790813	821014
SSI	41	30.9524	12.1812	10.8900	67.6400	801205	811130
DICHOT15	82	23.9704	11.2229	3.4030	68.1700	810504	821014
FINE15	82	7.3344	3.0555	1.2080	16.5500	810504	821014
COARSE15	82	16.6365	9.8213	1.6250	57.4900	810504	821014
RATIO15	68	0.5035	0.1008	0.2684	0.8563	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=030600002A07 NAME=PHOENIX (ROOSEVELT ST) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	146	114.879	43.5056	28.8800	270.900	790831	821231
SSI	96	80.294	32.5482	22.5500	179.100	800720	821231
DICHOT15	95	66.479	30.8640	12.3900	148.400	801223	821225
FINE15	95	24.158	18.0797	6.0900	106.900	801223	821225
COARSE15	95	42.322	19.5586	5.5800	106.000	801223	821225
RATIO15	90	0.584	0.1839	0.2995	1.528	.	.
DICHOT10	49	39.229	17.8777	12.8100	99.540	820129	821225
FINE10	49	15.264	9.7582	5.5300	66.910	820129	821225
COARSE10	49	23.965	11.1009	3.2300	51.340	820129	821225
RATIO10	47	0.383	0.0823	0.1899	0.577	.	.

----- SITE=030600004A07 NAME=NORTH PHOENIX -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	71	110.158	43.0318	24.78	239.3	790813	810504
SSI	75	74.795	28.8708	28.17	155.7	800316	811124
DICHOT15	50	53.652	21.2844	14.06	112.9	810603	820511
FINE15	50	15.852	8.7184	4.86	37.0	810603	820511
COARSE15	50	37.799	17.0454	5.65	75.9	810603	820511
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=030600004A57 NAME=NORTH PHOENIX (COL) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	0						
SSI	24	70.8133	26.6832	38.61	127.7	810703	811124
DICHOT15	0	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=041440001A07 NAME=LITTLE ROCK -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	114	62.3267	22.4546	27.6500	133.900	801129	821231
SSI	63	52.2378	19.1933	20.3000	124.100	801123	8111212
DICHOT15	32	34.9144	13.4013	10.0400	69.320	820523	821207
FINE15	32	18.6606	8.5927	5.0600	41.100	820523	821207
COARSE15	32	16.2537	6.9797	3.8400	32.820	820523	821207
RATIO15	31	0.5791	0.1194	0.3109	0.829	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=050500002A07 NAME=AZUSA (LOREN AVE) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	113	126.717	49.9182	20.3500	273.600	790813	810925
SSI	68	98.411	41.7206	15.8800	216.300	790813	811118
DICHOT15	92	57.189	39.8249	3.8450	303.600	791018	821107
FINE15	92	28.765	19.1999	2.0240	90.800	791018	821107
COARSE15	92	28.426	31.9222	1.0000	283.600	791018	821107
RATIO15	52	0.535	0.1988	0.2148	1.312	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=050520004A07 NAME=BAKERSFIELD (CHESTER AVE) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	61	123.285	56.1972	40.8400	356.000	800924	821231
SSI	40	113.370	56.1752	27.0800	372.200	800918	810907
DICHOT15	53	64.036	38.9251	14.5500	195.100	801117	821201
FINE15	53	30.803	29.1900	7.4300	140.800	801117	821201
COARSE15	53	33.224	18.5061	5.5100	110.400	801117	821201
RATIO15	40	0.552	0.1644	0.3312	0.991	.	.
DICHOT10	5	69.550	8.2054	57.6700	79.920	821207	821231
FINE10	5	49.524	6.2518	43.1400	58.480	821207	821231
COARSE10	5	20.026	3.4830	14.5300	24.000	821207	821231
RATIO10	3	0.550	0.0421	0.5130	0.596	.	.

----- SITE=051260002A07 NAME=CHICO -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	116	57.0921	26.3039	16.1600	176.500	800831	821231
SSI	49	47.7724	25.6639	12.9000	147.800	800912	811130
DICHOT15	25	27.6988	11.9557	10.5300	47.360	820324	820815
FINE15	25	9.9920	4.0733	4.6400	24.220	820324	820815
COARSE15	25	17.7064	9.3564	3.1600	34.340	820324	820815
RATIO15	23	0.5236	0.0719	0.3654	0.644	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=052220003A07 NAME=SAN DIEGO (EL CAJON) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	58	57.6379	19.9620	13.2700	99.580	811218	821231
SSI	0	.	.	.	.	.	.
DICHOT15	66	39.4053	19.3135	7.3780	113.500	810925	821231
FINE15	66	19.8732	13.9289	4.9900	92.300	810925	821231
COARSE15	66	19.5286	12.4189	1.9770	76.500	810925	821231
RATIO15	51	0.6190	0.0876	0.3712	0.891	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=052800005A07 NAME=FRESNO (E OLIVE) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	64	117.759	50.1014	24.73	262.60	800825	820216
SSI	52	100.769	52.2639	17.64	254.00	800825	811118
DICHOT15	2	42.060	7.2408	36.94	47.18	820914	820920
FINE15	2	10.315	0.7283	9.80	10.83	820914	820920
COARSE15	2	31.745	6.5125	27.14	36.35	820914	820920
RATIO15	0	.	.	.	.	.	.
DICHOT10	1	47.900	.	47.90	47.90	821207	821207
FINE10	1	35.050	.	35.05	35.05	821207	821207
COARSE10	1	12.850	.	12.85	12.85	821207	821207
RATIO10	0	.	.	.	.	.	.

----- SITE=052820002A07 NAME=FIVE POINTS -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	84	86.4383	66.1273	4.49000	307.800	790930	810510
SSI	88	71.1741	50.6819	3.96700	253.500	800209	811025
DICHOT15	153	40.9786	30.9271	2.28200	218.900	790930	821020
FINE15	153	18.4784	17.5346	1.00200	98.500	790930	821020
COARSE15	153	22.5012	23.1011	0.13000	145.300	790930	821020
RATIO15	73	0.5444	0.3027	0.16743	1.465	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=054020002A07 NAME=LIVERMORE (RAILROAD AVE) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	52	77.6740	41.7611	18.5900	233.700	790924	801217
SSI	0	.	.	.	.	.	.
DICHOT15	58	45.0462	27.2728	8.0380	138.800	790924	801217
FINE15	58	17.3978	15.5469	2.2400	62.630	790924	801217
COARSE15	58	27.6483	19.3722	4.7540	125.700	790924	801217
RATIO15	48	0.5463	0.1505	0.1696	1.019	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=054020003A07 NAME=LIVERMORE (OLD FIRST ST) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	11	52.1745	14.3394	37.2500	83.0300	810329	810528
SSI	2	69.8550	18.5333	56.7500	82.9600	810603	810627
DICHOT15	82	30.5166	14.1457	8.3200	89.3700	810329	820821
FINE15	82	12.2595	8.6539	3.4200	63.6600	810329	820821
COARSE15	82	18.2577	11.1382	3.5330	76.0700	810329	820821
RATIO15	10	0.5116	0.1284	0.3659	0.8031	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=054080002A07 NAME=LOMPOC -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	126	64.4717	19.4104	15.5000	109.800	800813	821231
SSI	60	43.6602	15.4183	15.3000	81.940	800813	810826
DICHOT15	91	36.0798	12.4420	9.1550	64.730	810329	821231
FINE15	91	10.6314	4.6488	3.2700	30.150	810329	821231
COARSE15	91	25.4486	11.1804	3.0860	56.640	810329	821231
RATIO15	77	0.5678	0.0910	0.4022	0.928	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=054180103A07 NAME=WEST LOS ANGELES -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	77	78.7738	30.2078	31.8300	167.700	790708	810227
SSI	95	67.8715	23.8499	18.0400	154.000	800215	811118
DICHOT15	147	46.5464	20.9216	14.2400	165.000	790708	821014
FINE15	147	26.7518	18.6665	5.3300	156.900	790708	821014
COARSE15	147	19.7947	8.6847	1.0000	59.290	790708	821014
RATIO15	69	0.6471	0.1767	0.3446	1.124	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=055760004A07 NAME=PASADENA -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	76	98.2570	38.2147	26.0400	239.300	790714	810516
SSI	89	74.1772	27.1999	18.7600	156.000	800122	811130
DICHOT15	28	58.8882	24.8345	16.6700	117.400	791018	811212
FINE15	28	34.1743	16.8566	9.1600	75.400	791018	811212
COARSE15	28	24.7143	13.4513	6.7300	61.200	791018	811212
RATIO15	12	0.7456	0.1765	0.3955	1.072	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=056300003A07 NAME=RICHMOND CA -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	88	54.8750	20.0637	24.8100	130.000	790924	810516
SSI	76	41.2408	19.1956	15.0600	118.400	800304	810721
DICHOT15	167	28.3060	14.1891	7.8850	98.470	790924	821014
FINE15	167	13.9197	11.3327	3.2170	76.850	790924	821014
COARSE15	167	14.3864	7.4735	1.9300	41.640	790924	821014
RATIO15	75	0.5370	0.1898	0.2413	1.259	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=056535001A07 NAME=RUBIDOUX (MISSION BLVD) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	129	148.024	75.9261	18.1700	464.800	790825	821231
SSI	128	121.691	64.1864	10.3600	387.200	800316	821231
DICHOT15	127	98.427	46.9345	14.0300	267.600	790819	821231
FINE15	127	43.337	28.6691	1.8200	163.800	790819	821231
COARSE15	127	55.087	27.8492	3.5700	125.800	790819	821231
RATIO15	89	0.693	0.1180	0.4539	1.071	.	.
DICHOT10	47	76.646	35.8944	16.8100	199.100	820204	821231
FINE10	47	43.111	28.4797	4.1600	154.700	820204	821231
COARSE10	47	33.531	16.6410	5.8800	62.360	820204	821231
RATIO10	42	0.570	0.1490	0.3702	1.268	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=056860003A07 NAME=SAN FRANCISCO EAST -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	112	58.7240	25.2010	23.200	165.600	791116	820914
SSI	0	.	.	.	.	.	.
DICHOT15	115	31.3246	17.0434	9.234	112.300	791122	820914
FINE15	115	16.3522	12.6762	3.580	75.500	791122	820914
COARSE15	115	14.9725	8.2520	1.330	48.880	791122	820914
RATIO15	103	0.5304	0.1451	0.154	1.116	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=056980004A07 NAME=SAN JOSE -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	100	87.5341	44.7166	20.9300	262.50	790930	810528
SSI	10	62.7570	9.0441	52.6900	85.13	810603	810727
DICHOT15	174	38.5684	20.7284	10.6600	122.60	790930	821014
FINE15	174	17.7884	16.4867	3.7200	111.60	790930	821014
COARSE15	174	20.7786	9.2942	4.5200	52.68	790930	821014
RATIO15	90	0.4787	0.1413	0.2885	1.00	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=060080003A07 NAME=DENVER (BUCKLEY FIELD) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	104	37.2538	16.8759	6.54400	107.700	800714	821207
SSI	57	28.5635	10.6650	9.16100	51.720	800714	811031
DICHOT15	4	13.2717	3.6535	8.14700	15.940	821101	821207
FINE15	4	5.4420	0.6721	4.84800	6.300	821101	821207
COARSE15	4	7.8297	3.5103	3.29900	10.970	821101	821207
RATIO15	3	0.5988	0.1436	0.43544	0.705	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
 INHALABLE PARTICULATE NETWORK
 NETWORK DATA SUMMARY
 RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=060580001A07 NAME=DENVER (14TH STREET) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	132	102.596	46.7513	14.4200	284.600	800714	821219
SSI	76	70.608	35.9391	27.5800	235.600	800714	811218
DICHOT15	10	55.535	20.6897	20.7400	88.580	820622	821207
FINE15	10	18.884	9.2774	8.9000	41.010	820622	821207
COARSE15	10	36.651	16.2108	11.8400	66.910	820622	821207
RATIO15	10	0.504	0.1114	0.3907	0.754	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=061260001A07 NAME=DENVER (LAKEWOOD) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	67	66.0773	36.2274	26.9200	258.80	800720	820611
SSI	37	49.8438	25.2766	19.8700	140.50	800720	810910
DICHOT15	27	33.0752	15.3134	16.9900	72.38	810721	820611
FINE15	27	11.2352	8.7104	3.2800	44.89	810721	820611
COARSE15	27	21.8404	10.4447	7.3000	52.49	810721	820611
RATIO15	25	0.5204	0.0913	0.3533	0.70	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=061260001A57 NAME=DENVER (LAKEWOOD COL) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	0	.	.	.	.	.	.
SSI	15	40.2333	13.8200	23.48	77.84	810727	811130
DICHOT15	27	33.7644	21.4184	14.22	97.42	810727	820616
FINE15	27	12.3115	9.8586	3.41	41.88	810727	820616
COARSE15	27	21.4541	14.5678	4.85	56.68	810727	820616
RATIO15	0
DICHOT10	0
FINE10	0
COARSE10	0
RATIO10	0

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ENVIRONMENTAL PROTECTION AGENCY
 INHALABLE PARTICULATE NETWORK
 NETWORK DATA SUMMARY
 RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=061820001A07 NAME=PUEBLO (CENTRAL MAIN ST) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	2	83.4300	40.8283	54.5600	112.300	821225	821231
SSI	12	59.7092	28.3377	22.2500	102.000	810721	811218
DICHOT15	8	26.5312	10.6679	15.4000	44.580	811025	821119
FINE15	8	11.5037	2.0421	9.3000	14.960	811025	821119
COARSE15	8	15.0287	10.9545	2.0200	35.170	811025	821119
RATIO15	0	.	.	.	.	.	.
DICHOT10	5	34.5460	15.7045	18.9700	57.840	821207	821231
FINE10	5	17.0520	9.3398	8.4600	32.530	821207	821231
COARSE10	5	17.4920	7.3613	7.0700	25.310	821207	821231
RATIO10	2	0.4632	0.0734	0.4113	0.515	.	.

----- SITE=062220101A07 NAME=FORT COLLINS -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	63	25.9420	13.3776	5.1790	65.640	810215	821231
SSI	19	18.0846	10.4793	6.5640	43.960	810311	810715
DICHOT15	25	43.2368	38.2665	13.5200	208.400	820511	821213
FINE15	25	13.2876	12.8662	4.3400	46.420	820511	821213
COARSE15	25	29.9484	33.2007	3.6300	175.800	820511	821213
RATIO15	15	1.0776	0.4135	0.4341	2.029	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=070420003A07 NAME=HARTFORD (PUBLIC LIB) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	98	60.1315	26.6885	16.2100	199.500	800110	811130
SSI	94	45.3822	21.0856	9.7290	144.500	800110	811130
DICHOT15	139	33.3637	16.3647	10.9000	120.300	800203	820622
FINE15	139	18.3949	10.9911	4.2900	58.600	800203	820622
COARSE15	139	14.9686	8.2470	2.2600	61.600	800203	820622
RATIO15	93	0.5352	0.1085	0.3555	0.971	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

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----- SITE=070478001A07 NAME=MORRIS DAM(LITCHFIELD CO) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	70	33.0549	13.4015	8.54500	67.9900	791211	821101
SSI	0	.	.	.	.	.	.
DICHOT15	54	19.0769	15.9952	2.58600	74.9900	791211	821119
FINE15	54	11.6502	11.6703	0.95000	55.8600	791211	821119
COARSE15	54	7.4277	7.0694	1.17700	51.8200	791211	821119
RATIO15	40	0.4911	0.3054	0.11873	1.1416	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=080020001A07 NAME=DOVER (POLICE STA) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	50	46.1448	24.8246	10.970	108.200	790831	810711
SSI	0	.	.	.	.	.	.
DICHOT15	80	35.6619	17.4175	11.270	97.490	790912	811230
FINE15	80	19.5280	11.6806	5.570	64.500	790912	811230
COARSE15	80	16.1339	8.9181	4.580	50.100	790912	811230
RATIO15	34	0.8148	0.3043	0.419	1.664	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=080180001A07 NAME=WILMINGTON DE (CLAYMONT) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	118	51.7469	17.9857	20.9400	107.900	800912	821225
SSI	75	41.7167	15.1144	13.0700	84.810	800918	820228
DICHOT15	35	33.4034	13.2490	12.6700	67.980	820405	821201
FINE15	35	20.3743	10.1231	6.7200	48.230	820405	821201
COARSE15	35	13.0300	6.3696	4.5300	29.120	820405	821201
RATIO15	26	0.6204	0.0953	0.4718	0.809	.	.
DICHOT10	0
FINE10	0
COARSE10	0
RATIO10	0

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ENVIRONMENTAL PROTECTION AGENCY
 INHALABLE PARTICULATE NETWORK
 NETWORK DATA SUMMARY
 RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=090020017A07 NAME=WASHINGTON (L STREET) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	94	70.8597	27.0568	27.6800	186.900	790912	811118
SSI	31	50.4974	19.1904	24.3300	88.430	800602	810311
DICHOT15	116	43.2061	21.4916	11.9300	121.100	790906	821014
FINE15	116	26.8322	14.7533	4.9700	86.600	790906	821014
COARSE15	116	16.3740	10.6490	2.0900	60.200	790906	821014
RATIO15	79	0.6275	0.2544	0.1919	1.594	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=090020019A07 NAME=WASHINGTON (GARRISON SCH) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	47	65.9506	28.6001	22.390	155.000	800807	811224
SSI	39	52.4046	22.2475	21.100	120.900	800801	810528
DICHOT15	19	33.8428	18.0001	6.403	79.470	810820	811224
FINE15	19	20.4137	11.7577	3.850	49.100	810820	811224
COARSE15	19	13.4286	15.1914	2.553	73.260	810820	811224
RATIO15	10	0.5108	0.1008	0.286	0.677	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=104360035A07 NAME=TAMPA (DAVIS ISLAND) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	0	.	.	.	.	.	.
SSI	0	.	.	.	.	.	.
DICHOT15	78	35.6841	13.6176	12.16	83.52	810820	821231
FINE15	78	13.7337	6.9098	4.64	47.63	810820	821231
COARSE15	78	21.9496	10.3012	5.34	66.16	810820	821231
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

APPENDIX C

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=110200001A07 NAME=ATLANTA (BUTLER STREET) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	105	58.3878	20.4002	21.1300	121.000	800726	821219
SSI	42	50.9874	16.5209	25.9900	92.840	800720	810826
DICHOT15	102	35.7465	14.7480	11.6500	77.140	800726	821231
FINE15	102	22.1232	9.5788	6.4600	58.360	800726	821231
COARSE15	102	13.6228	8.4371	1.9700	62.780	800726	821231
RATIO15	88	0.5931	0.0895	0.4168	0.946	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=110200039A07 NAME=ATLANTA (MARIETTA BLVD) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	61	76.8887	31.1948	29.5000	165.800	800726	820312
SSI	25	65.6760	23.5914	31.2100	120.900	800801	810802
DICHOT15	54	40.4713	20.2231	10.8900	94.310	800726	820312
FINE15	54	23.4106	10.8555	9.2500	60.510	800726	820312
COARSE15	54	17.0606	13.1732	1.3900	59.440	800726	820312
RATIO15	50	0.4989	0.1077	0.2954	0.755	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=114500017A07 NAME=SAVANNAH (SCOTT MID SCH) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	0	.	.	.	.	.	.
SSI	0	.	.	.	.	.	.
DICHOT15	75	41.1187	19.2027	9.169	90.95	810820	821125
FINE15	75	17.8127	9.2414	6.114	55.51	810820	821125
COARSE15	75	23.3066	14.3478	1.400	64.20	810820	821125
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

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----- SITE=120370004A07 NAME=PEARL CITY (HI) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	75	34.0871	8.59821	16.2700	70.1100	790930	810522
SSI	109	22.5296	5.99244	5.4510	50.1100	790930	811224
DICHOT15	156	16.0729	6.62291	6.7400	56.4400	790930	821008
FINE15	156	5.5579	4.82660	2.0910	55.1200	790930	821008
COARSE15	156	10.5154	4.89363	1.3200	37.0500	790930	821008
RATIO15	69	0.4775	0.17599	0.2642	1.5168	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=130220003A07 NAME=BOISE (FIRE STATION #6) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	104	90.3296	49.2999	12.2200	294.500	800825	821231
SSI	14	67.0679	35.9070	24.4900	129.500	810116	810416
DICHOT15	92	37.9085	21.9680	8.7620	113.000	800825	821125
FINE15	92	18.0052	15.2809	1.7600	75.700	800825	821125
COARSE15	92	19.9043	13.7253	1.0600	71.600	800825	821125
RATIO15	77	0.4178	0.1258	0.1942	0.803	.	.
DICHOT10	5	52.4640	23.0055	15.8400	77.600	821201	821231
FINE10	5	41.1160	19.3883	8.8500	58.950	821201	821231
COARSE10	5	11.3460	4.7330	7.0000	18.650	821201	821231
RATIO10	4	1.9117	2.9593	0.3800	6.350	.	.

----- SITE=141220014A07 NAME=CHICAGO (FARR DORMITORY) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	28	71.1064	26.1455	32.700	149.600	791030	82083
SSI	42	56.0086	33.1192	24.160	224.700	810215	81110
DICHOT15	40	39.1557	20.6144	11.560	90.360	810209	82062
FINE15	40	19.9560	12.1371	4.650	67.760	810209	82062
COARSE15	40	19.1982	14.9754	4.440	60.950	810209	82062
RATIO15	12	0.4424	0.1059	0.272	0.604	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
 INHALABLE PARTICULATE NETWORK
 NETWORK DATA SUMMARY
 RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=141220022A07 NAME=CHICAGO (WASHINGTON HS) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	34	104.139	38.2550	40.080	201.500	810203	820610
SSI	29	90.746	52.5663	29.980	286.700	810218	810911
DICHOT15	58	54.558	24.6199	14.270	116.500	810203	821219
FINE15	58	25.772	12.7936	6.230	60.140	810203	821219
COARSE15	58	28.784	16.8194	3.330	73.600	810203	821219
RATIO15	22	0.596	0.1690	0.356	1.257	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=142360010A07 NAME=CHICAGO (EVANSTON) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	55	53.0584	23.5680	21.4800	114.100	810721	821231
SSI	1	35.7700	.	35.7700	35.770	811130	811130
DICHOT15	32	28.8593	16.6517	7.9600	65.380	810721	821207
FINE15	32	27.9905	16.4775	7.3340	64.380	810721	821207
COARSE15	32	0.8695	0.5511	0.0170	2.970	810721	821207
RATIO15	22	0.4943	0.0960	0.3302	0.744	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=148320007A07 NAME=CHICAGO (BRAIDWOOD) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	87	61.8728	34.5683	10.7200	170.900	790918	811118
SSI	32	43.6691	14.4880	24.0200	84.760	800813	811212
DICHOT15	59	28.1989	17.9552	8.5430	88.120	790918	820926
FINE15	59	17.1851	9.8387	2.9700	37.580	790918	820926
COARSE15	59	11.0138	11.6250	0.2900	56.790	790918	820926
RATIO15	43	0.5177	0.2823	0.1628	1.349	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

1

----- SITE=151520016A07 NAME=GARY (FEDERAL BLDG) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	31	122.716	70.0487	39.0500	371.00	810504	820105
SSI	21	84.100	39.9038	47.4500	223.60	810504	811124
DICHOT15	34	60.376	28.7440	18.9200	152.80	810522	820105
FINE15	34	27.519	11.4360	9.9000	51.30	810522	820105
COARSE15	34	32.862	23.5754	2.0800	101.50	810522	820105
RATIO15	29	0.540	0.0951	0.4084	0.71	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=152040021A07 NAME=INDIANAPOLIS(MICHIGAN ST) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	69	65.8303	27.6469	29.4400	163.500	801024	821225
SSI	40	52.0592	16.6862	25.4400	94.800	801018	811130
DICHOT15	41	42.7248	24.4804	1.5350	99.720	820411	821225
FINE15	41	23.0925	14.6218	1.0520	60.850	820411	821225
COARSE15	41	19.6323	13.3687	0.4840	63.610	820411	821225
RATIO15	34	0.6045	0.1873	0.0219	1.315	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=152160002A07 NAME=JEFFERSONVILLE (LIBRARY) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	54	75.2919	21.3769	33.98	119.70	801129	820306
SSI	41	63.0337	18.3377	25.77	99.45	801129	811206
DICHOT15	0	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
 INHALABLE PARTICULATE NETWORK
 NETWORK DATA SUMMARY
 RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=162500003A07 NAME=MARSHALLTOWN (CITY HALL) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	91	71.8529	27.7463	26.2700	150.10	800813	821014
SSI	57	54.0282	21.0254	12.4500	92.85	800813	811118
DICHOT15	95	40.0168	18.4777	0.8839	89.06	800924	821014
FINE15	95	14.1798	8.1196	0.1239	42.08	800924	821014
COARSE15	95	25.8375	13.8214	0.7600	66.46	800924	821014
RATIO15	74	0.5633	0.1721	0.2899	1.75	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=162500004A07 NAME=MARSHALLTOWN (FISHER SCH) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	89	47.0811	19.2461	8.2080	123.700	800825	821107
SSI	40	38.3941	16.4156	8.4050	82.310	800918	811118
DICHOT15	102	29.8501	16.1255	7.1450	80.470	800819	821231
FINE15	102	13.6821	7.6301	0.4040	37.770	800819	821231
COARSE15	102	16.1680	12.8983	3.6500	62.070	800819	821231
RATIO15	76	0.6498	0.1941	0.2259	1.363	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=171800011A07 NAME=KANSAS CITY KS (FAIRFAX) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	128	95.5305	34.9183	34.71	225.4	800203	820417
SSI	0	.	.	.	.	.	.
DICHOT15	0	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=173560007A07 NAME=TOPEKA (QUINCY SCHOOL) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	120	70.7816	28.0506	22.9000	159.30	800720	821101
SSI	67	56.4293	21.7479	18.6800	106.90	800720	810919
DICHOT15	71	29.7087	13.3024	12.2800	80.74	810814	821231
FINE15	71	11.5973	5.6631	3.1100	31.82	810814	821231
COARSE15	71	18.1118	11.0854	3.4700	61.19	810814	821231
RATIO15	54	0.4909	0.1102	0.2694	0.87	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=173740012A07 NAME=WICHITA (SEDWICK AVE) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	0	.	.	.	.	.	.
SSI	0	.	.	.	.	.	.
DICHOT15	47	40.3438	22.5294	10.13	103.10	810814	821231
FINE15	47	13.5883	6.2412	3.13	30.25	810814	821231
COARSE15	47	26.7549	19.5395	5.78	78.10	810814	821231
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=180080002A07 NAME=ASHLAND (OIL REFINERY) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	22	106.255	57.5436	31.7800	256.600	801012	811106
SSI	9	53.814	23.5638	28.2100	95.990	801012	810522
DICHOT15	11	77.235	37.6349	23.8800	159.200	810802	811106
FINE15	11	37.770	16.6270	12.4500	60.000	810802	811106
COARSE15	11	39.465	23.2327	11.4300	99.200	810802	811106
RATIO15	6	0.557	0.0989	0.3869	0.645	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
 INHALABLE PARTICULATE NETWORK
 NETWORK DATA SUMMARY
 RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

2

----- SITE=183090001A07 NAME=LOUISVILLE (OKOLONA) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	74	83.6945	29.9507	36.0000	234.50	801229	821231
SSI	52	58.9271	19.8841	27.7300	136.50	801117	811112
DICHOT15	35	42.6160	16.6173	11.7400	83.56	820411	821231
FINE15	35	24.2134	12.0140	6.4000	53.59	820411	821231
COARSE15	35	18.4029	8.0913	5.3400	41.82	820411	821231
RATIO15	22	0.5545	0.0793	0.4133	0.70	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=210120001A07 NAME=BALTIMORE (FIRE DEPT HQ) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	59	65.8546	27.0200	22.7500	141.90	800819	811218
SSI	13	63.2823	16.4637	38.6600	91.99	800819	810814
DICHOT15	52	38.8227	17.8519	4.7140	83.70	810820	821231
FINE15	52	22.7354	9.9404	0.7100	49.24	810820	821231
COARSE15	52	16.0867	11.3720	2.4950	47.29	810820	821231
RATIO15	18	0.5483	0.0820	0.3822	0.68	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=210120008A07 NAME=BALTIMORE (SE POLICE STA) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	35	70.3454	35.7739	24.7300	163.300	801223	811218
SSI	19	82.4195	27.9840	43.0800	145.400	810329	810814
DICHOT15	20	32.8235	18.7443	12.0900	85.660	810820	811218
FINE15	20	18.9720	10.8032	6.1300	50.980	810820	811218
COARSE15	20	13.8520	10.5653	4.2000	50.710	810820	811218
RATIO15	10	0.5396	0.0835	0.4152	0.674	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
 INHALABLE PARTICULATE NETWORK
 NETWORK DATA SUMMARY
 RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=210120009A07 NAME=BALTIMORE (SW POLICE STA) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	78	55.8869	21.3490	20.4900	129.100	790831	821231
SSI	40	52.9522	22.7028	16.7800	119.900	800819	810814
DICHOT15	105	34.5223	18.0910	8.0630	91.580	790906	821213
FINE15	105	21.4899	12.4928	5.0100	60.920	790906	821213
COARSE15	105	13.0328	8.8995	0.4900	54.820	790906	821213
RATIO15	64	0.6486	0.1994	0.3845	1.512	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=211380002A07 NAME=ROCKVILLE (CITY HALL) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	12	53.3075	20.3587	30.690	100.300	801105	810820
SSI	14	39.2571	15.6431	22.450	78.670	801012	810422
DICHOT15	1	29.1600	.	29.160	29.160	810820	810820
FINE15	1	11.2700	.	11.270	11.270	810820	810820
COARSE15	1	17.8900	.	17.890	17.890	810820	810820
RATIO15	1	0.4810	.	0.481	0.481	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=211380007A07 NAME=ROCKVILLE (MARYVALE SCH) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	46	51.7057	16.4390	23.0400	105.600	811001	821225
SSI	0	.	.	.	.	.	.
DICHOT15	57	29.7561	11.2594	7.3720	55.810	810901	821225
FINE15	57	19.6894	9.1048	6.6440	42.600	810901	821225
COARSE15	57	10.0678	5.8058	0.2500	29.700	810901	821225
RATIO15	38	0.5910	0.1509	0.2791	1.081	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=220240012A07 NAME=BOSTON (FIRE HQ) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	117	60.2476	21.2297	22.8800	124.700	791205	821207
SSI	79	46.1576	18.3089	9.7040	105.400	791211	811001
DICHOT15	125	33.4932	17.4185	8.8530	140.600	791205	821026
FINE15	125	18.3777	9.9266	4.1160	54.280	791205	821026
COARSE15	125	15.1155	11.2815	2.4620	105.900	791205	821026
RATIO15	102	0.5500	0.1510	0.2513	1.128	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=220240013A07 NAME=BOSTON (E BOSTON SOC CTR) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	81	54.8154	16.3887	16.7200	96.4400	791211	811118
SSI	15	37.8440	11.2068	18.1300	63.6400	810621	811007
DICHOT15	89	32.6363	14.0355	10.8600	80.7800	791211	811230
FINE15	89	17.5507	9.6153	4.3700	48.6300	791211	811230
COARSE15	89	15.0860	8.6546	0.9400	64.3700	791211	811230
RATIO15	69	0.5834	0.1946	0.3114	1.4616	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=222160011A07 NAME=SPRINGFIELD(HOWARD ST) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	0	.	.	.	.	.	.
SSI	3	49.8867	25.1775	25.84	76.06	810703	810907
DICHOT15	59	29.6002	12.2999	10.99	68.62	810627	820902
FINE15	59	17.7317	9.1993	5.51	42.56	810627	820902
COARSE15	59	11.8681	5.9679	3.48	30.02	810627	820902
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=222160011A57 NAME=SPRINGFIELD COLOCATED -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	0	.	.	.	.	.	.
SSI	2	29.5700	6.9579	24.65	34.49	810709	810721
DICHOT15	7	23.4071	10.8486	11.56	39.02	810627	811025
FINE15	7	16.1900	9.1845	7.00	29.21	810627	811025
COARSE15	7	7.2186	2.5664	4.49	10.09	810627	811025
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=222640016A07 NAME=WORCESTER (YMCA BLDG) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	0	.	.	.	.	.	.
SSI	14	44.8179	10.7004	22.110	59.37	810609	810919
DICHOT15	60	32.7175	14.3412	7.542	78.01	810609	820815
FINE15	60	16.5327	7.9306	5.060	35.23	810609	820815
COARSE15	60	16.1841	10.4727	1.960	51.36	810609	820815
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=222640016A57 NAME=WORCESTER(YMCA COL) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	0	.	.	.	.	.	.
SSI	0	.	.	.	.	.	.
DICHOT15	43	33.3748	16.2171	8.738	78.71	811031	820815
FINE15	43	15.8894	7.3218	4.950	35.83	811031	820815
COARSE15	43	17.4845	13.3109	2.543	64.16	811031	820815
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=231180015A07 NAME=DETROIT (SOUTHWEST HS) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	54	95.9763	41.7213	26.41	219.4	800825	811130
SSI	30	76.7267	37.4312	19.63	171.9	800825	810727
DICHOT15	0	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=231180020A07 NAME=DETROIT (APC HQ BLDG) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	44	80.4300	25.1442	40.96	136.8	800813	811224
SSI	43	58.0505	22.4574	18.55	101.2	800912	811118
DICHOT15	0	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=241040025A07 NAME=DULUTH (ELLIOT MEATS) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	64	66.6805	36.0385	18.80	182.4	800930	811230
SSI	47	46.7879	24.4933	15.76	110.5	800930	811130
DICHOT15	0	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=241620007A07 NAME=INT FALLS (CUSTOM BLDG) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	25	56.9584	26.5519	11.17	133.50	800924	811007
SSI	24	39.9279	16.1445	14.68	75.08	800924	811007
DICHOT15	0	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=242260049A07 NAME=MINNEAPOLIS (REGINA HS) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	84	49.1860	22.5144	15.6500	124.600	790924	810305
SSI	0	.	.	.	.	.	.
DICHOT15	128	27.9039	12.7117	7.6220	86.960	790924	820105
FINE15	128	14.4630	8.3889	3.2850	60.920	790924	820105
COARSE15	128	13.4408	8.2666	1.6100	45.730	790924	820105
RATIO15	79	0.6246	0.2038	0.3438	1.348	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=242260051A07 NAME=MINNEAPOLIS (NICOLLET) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	73	73.0471	35.0693	24.1600	220.400	791105	810323
SSI	77	50.8023	19.3431	15.1500	128.700	800515	811130
DICHOT15	144	36.0523	17.6692	10.3700	143.900	791105	821201
FINE15	144	16.5850	13.2637	3.4300	142.900	791105	821201
COARSE15	144	19.4670	11.9624	0.9000	78.300	791105	821201
RATIO15	66	0.5889	0.2425	0.3098	1.548	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
 INHALABLE PARTICULATE NETWORK
 NETWORK DATA SUMMARY
 RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

2

----- SITE=243300003A07 NAME=ST PAUL (FIRE STA) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	111	69.2670	24.3544	24.1000	160.70	800930	821225
SSI	56	52.5609	22.3581	14.5300	139.70	800930	811112
DICHOT15	32	24.0316	11.6926	7.6810	60.61	820330	821201
FINE15	32	14.0759	7.6750	5.3900	35.62	820330	821201
COARSE15	32	9.9560	6.2103	1.6820	30.48	820330	821201
RATIO15	31	0.3203	0.1148	0.1725	0.68	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=251260003A07 NAME=JACKSON(SUN & SAND MOTEL) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	0	.	.	.	.	.	.
SSI	0	.	.	.	.	.	.
DICHOT15	70	36.8231	16.1977	15.15	82.00	810814	821213
FINE15	70	18.1339	9.0510	6.79	53.70	810814	821213
COARSE15	70	18.6897	12.5392	3.57	67.54	810814	821213
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=260030001A07 NAME=ST LOUIS (AFTON) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	74	66.0005	23.5811	27.090	137.600	800128	811111
SSI	29	43.0076	12.1063	20.360	68.430	800726	811021
DICHOT15	75	35.8226	19.4712	3.529	85.400	800203	821223
FINE15	75	17.9849	10.9329	0.739	48.440	800203	821223
COARSE15	75	17.8381	11.6118	2.668	46.530	800203	821223
RATIO15	43	0.6428	0.1694	0.295	1.084	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=262380002A07 NAME=KANSAS CITY MO (FIRE STA) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	103	85.4416	28.4298	29.830	161.000	800209	820423
SSI	62	64.6663	20.3429	28.380	121.700	800209	810410
DICHOT15	128	42.8073	18.2346	10.410	92.030	800209	821231
FINE15	128	17.0630	9.1738	4.710	56.040	800209	821231
COARSE15	128	25.7439	13.6113	3.090	61.580	800209	821231
RATIO15	91	0.5323	0.0950	0.349	0.937	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=264280007A07 NAME=ST LOUIS (S BROADWAY) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	53	89.5632	32.5263	32.80	199.20	800427	811212
SSI	52	68.5117	21.6745	17.53	124.70	800427	811106
DICHOT15	19	48.6321	22.6593	17.23	106.10	820417	821125
FINE15	19	22.7295	9.4058	7.62	41.97	820417	821125
COARSE15	19	25.9032	18.1033	8.27	76.70	820417	821125
RATIO15	0	.	.	.	.	.	.
DICHOT10	1	29.0600	.	29.06	29.06	821207	821207
FINE10	1	17.1700	.	17.17	17.17	821207	821207
COARSE10	1	11.8900	.	11.89	11.89	821207	821207
RATIO10	0	.	.	.	.	.	.

----- SITE=270160005A07 NAME=BUTTE (GREELY SCHOOL) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	0	.	.	.	.	.	.
SSI	0	.	.	.	.	.	.
DICHOT15	13	26.5546	19.4535	10.13	80.71	820222	820530
FINE15	13	8.9715	6.1682	3.55	25.86	820222	820530
COARSE15	13	17.5823	14.1554	3.82	54.85	820222	820530
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=271100020A07 NAME=MISSOULA (ROSELAWN PK) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	0	.	.	.	.	.	.
SSI	0	.	.	.	.	.	.
DICHOT15	2	29.97	16.8150	18.08	41.86	820412	821219
FINE15	2	13.83	8.4004	7.89	19.77	820412	821219
COARSE15	2	16.14	8.4146	10.19	22.09	820412	821219
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=281880028A07 NAME=OMAHA (O STREET) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	125	66.5054	21.6748	27.6800	131.500	800726	821231
SSI	73	52.3593	17.7535	16.4000	104.300	800726	811130
DICHOT15	30	43.9803	17.0358	21.6700	91.730	820529	821201
FINE15	30	15.2760	8.0878	7.2100	45.570	820529	821201
COARSE15	30	28.7057	12.6672	9.5400	72.680	820529	821201
RATIO15	27	0.6675	0.1107	0.5021	0.942	.	.
DICHOT10	2	36.6300	0.8061	36.0600	37.200	821207	821213
FINE10	2	11.7650	0.8132	11.1900	12.340	821207	821213
COARSE10	2	24.8700	0.0141	24.8600	24.880	821207	821213
RATIO10	2	0.8319	0.1161	0.7498	0.914	.	.

----- SITE=290480001A07 NAME=RENO (KIRMAN ST) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	123	85.3645	47.6322	23.2300	312.000	800825	821231
SSI	66	65.8103	47.8706	14.8100	262.700	800825	811130
DICHOT15	19	34.0911	15.0020	12.8600	72.420	820622	821125
FINE15	19	13.1184	7.6266	3.3700	31.590	820622	821125
COARSE15	19	20.9721	9.1474	9.0600	40.830	820622	821125
RATIO15	18	0.4962	0.1173	0.1656	0.727	.	.
DICHOT10	5	49.9640	20.7611	27.9700	75.080	821201	821231
FINE10	5	29.5280	15.1312	11.4000	42.610	821201	821231
COARSE10	5	20.4340	8.0315	14.4700	33.810	821201	821231
RATIO10	5	0.4831	0.1179	0.3618	0.667	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=290580001A07 NAME=WINNEMUCCA -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	113	53.7317	31.7011	12.9100	267.30	790930	821002
SSI	0	.	.	.	.	.	.
DICHOT15	105	28.9727	20.5586	5.0650	158.80	790930	820920
FINE15	105	8.3378	6.4339	2.4700	52.87	790930	820920
COARSE15	105	20.6354	19.6804	0.2100	137.40	790930	820920
RATIO15	78	0.5590	0.2087	0.1638	1.19	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=310720005A07 NAME=CAMDEN -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	123	67.3548	24.2149	24.4800	152.200	800918	821101
SSI	51	54.7733	21.9726	22.5500	105.600	800918	810814
DICHOT15	72	36.0277	16.3349	8.6100	87.370	810826	821213
FINE15	72	20.6529	10.3978	3.7650	61.250	810826	821213
COARSE15	72	15.3751	9.8758	4.4100	70.050	810826	821213
RATIO15	63	0.5338	0.1299	0.3016	1.368	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=311380001A07 NAME=LIVINGSTON -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	122	44.2846	17.5462	11.2100	100.90	800801	821020
SSI	62	38.2929	15.6008	11.4500	88.01	801211	820111
DICHOT15	116	26.9250	14.0050	5.7730	71.81	800801	821020
FINE15	116	16.4775	10.9794	3.0320	58.53	800801	821020
COARSE15	116	10.4475	6.6946	2.4250	43.89	800801	821020
RATIO15	111	0.5932	0.1976	0.3352	1.67	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=312320005A07 NAME=JERSEY CITY (BAY STREET) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	96	74.6031	23.5042	38.2000	152.700	800924	821101
SSI	43	55.3428	20.6278	23.5100	108.600	800924	810814
DICHOT15	58	33.6091	13.0065	15.2400	86.620	810820	821026
FINE15	58	19.8609	10.1495	7.4500	67.080	810820	821026
COARSE15	58	13.7481	5.4641	6.0100	26.810	810820	821026
RATIO15	54	0.4696	0.0592	0.3216	0.613	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=320040001A07 NAME=ALBUQUERQUE (YMCA) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	95	88.4602	42.0067	34.9400	228.200	801123	821008
SSI	36	60.4831	26.7067	22.3900	115.600	801123	810703
DICHOT15	96	36.6908	21.5507	9.6800	124.400	810329	821225
FINE15	96	12.0147	9.5300	3.5100	51.300	810329	821225
COARSE15	96	24.6750	14.8705	5.3540	83.000	810329	821225
RATIO15	78	0.4431	0.1244	0.2212	1.211	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=320090001A07 NAME=BAYARD (COBRE SCHOOL) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	110	116.274	45.9839	27.3200	251.00	801211	821231
SSI	48	75.378	27.2031	14.9300	122.30	801229	811130
DICHOT15	102	73.806	37.0823	7.5800	265.30	801217	821231
FINE15	102	14.594	9.0977	5.1000	72.30	801217	821231
COARSE15	102	59.212	33.7353	1.9850	236.50	801217	821231
RATIO15	92	0.632	0.1998	0.2253	1.53	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=330660003A07 NAME=BUFFALO (PS #26) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	75	85.2175	38.3430	25.1400	160.400	790825	810227
SSI	24	70.3829	27.3887	22.6400	136.600	810528	811019
DICHOT15	115	66.1270	30.5594	17.1500	143.700	790831	820129
FINE15	115	39.8904	20.9262	6.3400	104.100	790831	820129
COARSE15	115	26.2372	15.7148	4.9900	73.000	790831	820129
RATIO15	65	0.7315	0.2309	0.3724	1.641	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=330660010A07 NAME=BUFFALO (PS #28) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	116	85.2124	35.8358	24.4200	191.100	790831	821231
SSI	70	56.8447	23.1515	15.8400	137.900	810603	821231
DICHOT15	164	44.4356	20.6879	9.5200	106.700	790825	821231
FINE15	164	24.4691	11.8448	2.7590	58.140	790825	821231
COARSE15	164	19.9671	13.8953	1.2800	69.100	790825	821231
RATIO15	97	0.5182	0.1615	0.2090	1.344	.	.
DICHOT10	37	34.9665	17.6147	10.2000	80.080	820318	821231
FINE10	37	19.9614	9.3905	5.9600	50.270	820318	821231
COARSE10	37	15.0038	10.9943	2.9900	50.370	820318	821231
RATIO10	33	0.4748	0.1050	0.2838	0.786	.	.

----- SITE=330660010A57 NAME=BUFFALO(PS #28 COL) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DAT
TSP	0	.	.	.	.	.	.
SSI	0	.	.	.	.	.	.
DICHOT15	74	46.3204	23.2546	13.64	129.80	810522	821231
FINE15	74	21.8078	11.1357	2.71	55.01	810522	821231
COARSE15	74	24.5126	15.6987	3.45	86.40	810522	821231
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=332000003A07 NAME=ANGOLA (BIG SISTER STP) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	76	37.9521	18.4760	5.9390	84.640	790825	810317
SSI	26	40.7573	17.9716	11.8100	78.390	810522	811031
DICHOT15	141	41.1334	33.1529	1.4640	171.100	790825	821002
FINE15	141	20.4571	12.8742	0.1750	68.500	790825	821002
COARSE15	141	20.6773	24.9688	0.2400	134.800	790825	821002
RATIO15	64	1.1874	0.8963	0.2081	3.991	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=333520001A07 NAME=BUFFALO(WILMUTH PUMP STA) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	72	119.347	53.3069	20.4900	300.400	790918	810522
SSI	80	76.367	36.4593	24.5700	204.800	800503	811031
DICHOT15	74	44.103	38.7418	0.6921	198.600	791030	821201
FINE15	74	22.010	12.8690	0.5819	59.940	791030	821201
COARSE15	74	22.094	30.0980	0.1102	149.600	791030	821201
RATIO15	9	0.376	0.3025	0.1490	1.082	.	.
DICHOT10	4	23.512	5.9624	16.2500	29.190	821207	821231
FINE10	4	13.402	3.4034	10.0800	16.610	821207	821231
COARSE10	4	10.107	2.7858	6.1800	12.570	821207	821231
RATIO10	0	.	.	.	.	.	.

----- SITE=333520001A57 NAME=WILMUTH PUMP STATION COL -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	0	.	.	.	.	.	.
SSI	25	85.6196	46.1220	42.20	229.90	810528	811031
DICHOT15	0	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.
RATIO15	0	.	.	.	.	.	.
DICHOT10	3	24.1933	6.2674	17.05	28.77	821207	821231
FINE10	3	14.0667	3.3054	10.26	16.21	821207	821231
COARSE10	3	10.1267	2.9892	6.79	12.56	821207	821231
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=334680005A07 NAME=NY CITY (CENTRAL PARK) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	62	62.1744	22.6360	28.6100	135.000	810221	820517
SSI	28	60.3386	19.3043	28.7000	99.660	810227	810820
DICHOT15	72	35.1569	14.5516	14.4000	82.860	810221	820517
FINE15	72	21.8686	9.6778	6.2500	49.320	810221	820517
COARSE15	72	13.2885	8.3106	3.4800	55.890	810221	820517
RATIO15	58	0.5662	0.1228	0.3626	1.226	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=334680011A07 NAME=NY CITY (GREEN POINT) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	121	75.8486	26.4596	19.78	163.1	800614	821026
SSI	20	63.0730	23.1741	34.96	123.2	810221	810820
DICHOT15	0	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=334680079A07 NAME=NY CITY (INT SCH #45) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	66	71.2529	22.5843	31.5700	144.700	810802	821231
SSI	4	72.7050	16.1029	59.7700	96.220	810802	810820
DICHOT15	53	34.9877	15.4268	10.9900	88.760	810802	821201
FINE15	53	24.2140	12.9493	7.3900	71.000	810802	821201
COARSE15	53	10.7740	5.9962	0.3700	25.490	810802	821201
RATIO15	48	0.4617	0.0791	0.2502	0.626	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=340700010A07 NAME=CHARLOTTE -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	94	60.2541	19.7319	25.70	108.100	810504	821231
SSI	33	50.0379	17.6812	20.75	80.530	810504	811130
DICHOT15	90	37.0531	15.7410	12.59	82.750	810504	821231
FINE15	90	24.1214	10.2306	9.25	53.270	810504	821231
COARSE15	90	12.9314	9.3894	0.26	48.510	810504	821231
RATIO15	84	0.6186	0.2141	0.29	2.072	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=341160006A07 NAME=DURHAM (CAMEO BLDG) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	45	58.0046	21.0882	8.4480	111.700	800503	821213
SSI	42	44.4507	18.1227	18.6500	100.200	800515	821213
DICHOT15	38	35.7276	16.6609	11.0000	83.730	801123	821231
FINE15	38	23.8789	12.6023	8.9800	66.370	801123	821231
COARSE15	38	11.8487	5.4127	1.0600	22.480	801123	821231
RATIO15	32	0.6405	0.1094	0.4239	0.861	.	.
DICHOT10	8	29.3112	12.5306	14.0900	52.900	821002	821231
FINE10	8	22.6725	9.1376	10.4900	39.790	821002	821231
COARSE10	8	6.6400	3.6569	1.5700	13.110	821002	821231
RATIO10	7	0.5766	0.1235	0.4004	0.752	.	.

----- SITE=341160006A57 NAME=DURHAM(CAMEO BLDG COL) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	30	58.8025	22.7175	8.9860	106.500	801117	811031
SSI	34	43.6899	19.7978	4.1950	101.000	801117	811031
DICHOT15	14	33.9387	19.5986	0.7715	73.830	801117	821231
FINE15	14	24.4204	14.2771	0.0453	51.840	801117	821231
COARSE15	14	9.5176	6.0570	0.7262	21.990	801117	821231
RATIO15	4	0.4621	0.2815	0.0859	0.719	.	.
DICHOT10	3	21.3133	9.6350	13.4200	32.050	821201	821231
FINE10	3	17.0800	7.8690	9.6300	25.310	821201	821231
COARSE10	3	4.2333	2.3170	2.1700	6.740	821201	821231
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=341160101A07 NAME=RES TRIANGLE PK (BEAUNIT) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	102	40.1913	16.8379	13.3400	86.490	790726	811230
SSI	98	35.0419	13.5610	16.4100	73.270	790726	811230
DICHOT15	92	24.5704	13.1187	9.5100	115.400	790726	811230
FINE15	92	17.6897	12.3267	4.6620	114.400	790726	811230
COARSE15	92	6.8814	4.7622	0.9200	27.960	790726	811230
RATIO15	87	0.6377	0.2785	0.2033	2.541	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=341160101A57 NAME=RES TRI PK(BEAUNIT COL) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	0	.	.	.	.	.	.
SSI	0	.	.	.	.	.	.
DICHOT15	55	28.1458	14.0850	11.82	80.66	810311	820628
FINE15	55	19.7273	11.8008	6.94	67.79	810311	820628
COARSE15	55	8.4187	4.6331	2.08	24.91	810311	820628
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=341160102A07 NAME=RES TRIANGLE PK (RTI) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	36	37.2967	13.5520	16.4000	67.1100	820105	820926
SSI	43	33.7460	13.7957	13.7300	69.8200	820105	820926
DICHOT15	19	26.9442	11.0334	11.6000	60.5600	820105	820622
FINE15	19	16.3537	6.3484	7.6900	26.3900	820105	820622
COARSE15	19	10.5911	9.1912	1.6000	40.3900	820105	820622
RATIO15	15	0.7343	0.1415	0.5158	1.0760	.	.
DICHOT10	22	20.7480	9.3486	8.4350	39.3400	820517	820926
FINE10	22	18.8131	9.0080	8.3280	38.9800	820517	820926
COARSE10	22	1.9340	2.0908	0.1000	7.6700	820517	820926
RATIO10	17	0.5348	0.1342	0.2696	0.7099	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=360060014A07 NAME=AKRON (MORLEY HEALTH CTR) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	94	67.8112	26.4723	21.0700	125.000	790708	810227
SSI	107	53.6532	19.7364	16.2900	105.800	790702	811124
DICHOT15	185	46.1354	20.5533	8.4310	116.800	790608	821014
FINE15	185	25.9864	12.9775	1.2900	93.400	790608	821014
COARSE15	185	20.1481	10.9778	3.5520	58.820	790608	821014
RATIO15	90	0.7041	0.1483	0.3259	1.213	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=361220020A07 NAME=CINCINNATI (DRAKE MEM) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	86	57.5659	23.3867	15.6800	119.700	790807	810221
SSI	85	51.4578	17.0298	16.6300	96.280	800509	811206
DICHOT15	159	41.0723	17.0534	1.6260	90.700	790807	821201
FINE15	159	24.9979	12.4583	0.3380	74.240	790807	821201
COARSE15	159	16.0751	9.1969	0.7900	63.120	790807	821201
RATIO15	71	0.7286	0.1980	0.3167	1.365	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=361300013A07 NAME=CLEVELAND (APCD HQ) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	119	130.804	57.2081	35.820	295.700	790726	821231
SSI	26	88.678	38.8729	21.010	162.500	800608	811031
DICHOT15	108	70.083	42.3196	1.209	244.600	790714	821207
FINE15	108	31.433	25.4631	0.791	201.700	790714	821207
COARSE15	108	38.655	25.7186	0.418	135.800	790714	821207
RATIO15	86	0.549	0.1577	0.170	1.258	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=361300021A07 NAME=CLEVELAND (RHODES HS) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	31	55.4506	19.6017	28.510	92.5200	800203	820306
SSI	17	45.4535	20.1005	10.830	84.4300	810802	811106
DICHOT15	28	38.4999	18.3531	7.938	75.3100	800203	820306
FINE15	28	26.2486	14.4835	5.162	61.8900	800203	820306
COARSE15	28	12.2509	6.1332	2.775	26.2600	800203	820306
RATIO15	22	0.7344	0.2898	0.479	1.6649	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=361300041A07 NAME=CLEVELAND (WASHINGTON PK) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	98	82.5370	24.6925	40.4100	156.300	800209	821101
SSI	39	61.8344	15.6819	35.5300	111.900	800215	810907
DICHOT15	62	44.3373	18.8341	14.7600	86.610	810227	821201
FINE15	62	24.1266	11.7072	6.8100	59.850	810227	821201
COARSE15	62	20.2092	11.1407	4.5400	62.280	810227	821201
RATIO15	53	0.5440	0.1022	0.3475	0.906	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=361460001A07 NAME=COLUMBUS (S WASHINGTON) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	72	66.1536	19.5274	32.56	129.6	801205	820306
SSI	54	51.7048	17.1420	23.54	101.6	801205	811212
DICHOT15	0
FINE15	0
COARSE15	0
RATIO15	0
DICHOT10	0
FINE10	0
COARSE10	0
RATIO10	0

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ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=361660014A07 NAME=DAYTON (E MONUMENT) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	81	65.9064	22.5836	23.5900	138.900	801205	821002
SSI	9	61.6489	21.8224	37.7600	90.810	810227	810715
DICHOT15	77	36.2321	15.5217	12.0900	79.500	810802	821231
FINE15	77	21.1960	10.8670	5.9200	55.930	810802	821231
COARSE15	77	15.0366	8.5447	3.7300	48.420	810802	821231
RATIO15	58	0.5510	0.1003	0.3468	0.843	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=363080010A07 NAME=IRONTON (HOSPITAL) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	60	73.6277	27.7747	25.9200	176.700	801018	820324
SSI	40	57.0032	22.1772	21.8300	121.900	801018	810721
DICHOT15	74	40.8057	19.0255	0.9628	124.400	801024	820324
FINE15	74	22.8718	11.8640	0.1413	75.540	801024	820324
COARSE15	74	17.9348	10.8161	0.8215	75.300	801024	820324
RATIO15	50	0.5830	0.1731	0.3651	1.479	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=364140002A07 NAME=MEDINA (W LIBERTY) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	44	48.9784	20.8874	12.5700	106.500	800122	820222
SSI	35	42.0848	20.5559	1.8360	81.100	800421	811130
DICHOT15	32	33.6125	15.7367	7.7810	89.160	800421	811001
FINE15	32	20.1650	10.2542	5.8600	49.990	800421	811001
COARSE15	32	13.4457	9.2103	1.9210	39.170	800421	811001
RATIO15	24	0.6569	0.1584	0.2479	0.973	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=364340005A07 NAME=MIDDLETOWN(BRENTWOOD) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	130	90.6561	41.7512	34.5200	230.10	800912	821225
SSI	78	62.1697	27.2833	27.1400	153.50	800912	811212
DICHOT15	39	49.3882	21.6839	17.5700	94.23	810820	821207
FINE15	39	26.1497	13.3881	7.2000	61.33	810820	821207
COARSE15	39	23.2379	11.9854	8.1500	61.08	810820	821207
RATIO15	38	0.5126	0.0793	0.3426	0.68	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=364340005A57 NAME=MIDDLETOWN(CANCELLED)**** -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	1	44.52	.	44.52	44.52	801117	801117
SSI	0	.	.	.	.	.	.
DICHOT15	0	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=366420012A07 NAME=STEUBENVILLE (WASHINGTON) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	79	110.538	50.3958	18.5000	218.000	790521	821219
SSI	99	80.962	39.5762	16.9400	210.500	790527	821219
DICHOT15	52	55.980	34.1606	8.0120	148.000	790831	821219
FINE15	52	33.926	20.6970	7.3120	90.800	790831	821219
COARSE15	52	22.057	16.5917	0.7000	88.600	790831	821219
RATIO15	21	0.567	0.2382	0.0765	0.905	.	.
DICHOT10	29	41.178	22.4307	13.4800	90.510	820117	821219
FINE10	29	25.568	12.6105	8.3700	49.400	820117	821219
COARSE10	29	15.610	11.3356	2.8800	46.760	820117	821219
RATIO10	6	0.305	0.1726	0.0824	0.520	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=366420012A57 NAME=STEUBENVILLE(WSNGTN) COL -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	0	.	.	.	.	.	.
SSI	0	.	.	.	.	.	.
DICHOT15	31	46.7352	26.9118	15.26	145.20	820117	821219
FINE15	31	29.4884	20.2320	8.60	111.80	820117	821219
COARSE15	31	17.2474	9.2287	4.63	38.41	820117	821219
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=367760002A07 NAME=YOUNGSTOWN (FIRE STA) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	129	90.3378	38.4085	24.1300	249.200	801018	821231
SSI	65	65.5122	28.1823	25.5400	164.200	801024	811212
DICHOT15	114	46.0467	22.0133	9.9980	126.000	801018	821125
FINE15	114	22.9404	12.2239	6.0300	79.100	801018	821125
COARSE15	114	23.1054	13.4187	3.6000	76.300	801018	821125
RATIO15	109	0.5007	0.0839	0.2783	0.723	.	.
DICHOT10	6	45.7900	12.8580	30.8000	67.830	821201	821231
FINE10	6	29.8417	8.0686	22.3400	43.440	821201	821231
COARSE10	6	15.9483	15.6629	1.5600	45.470	821201	821231
RATIO10	6	0.8735	0.5204	0.4930	1.834	.	.

----- SITE=372200035A07 NAME=OKLAHOMA CITY (FIRE STA) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	65	65.4011	22.0115	21.1200	132.700	810221	820604
SSI	30	52.0317	21.3776	17.9400	101.700	810221	811130
DICHOT15	8	42.6912	13.4519	13.3700	54.790	810814	820222
FINE15	8	17.9825	6.7223	6.9300	30.240	810814	820222
COARSE15	8	24.7087	9.6320	6.4400	37.150	810814	820222
RATIO15	6	0.6002	0.1800	0.3783	0.907	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=380500104A07 NAME=SAUVIE ISLAND -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	80	35.3596	25.9104	8.01100	167.800	790924	810516
SSI	65	32.6616	15.2920	7.07200	81.320	800726	811212
DICHOT15	149	24.0821	16.7978	2.95900	90.090	791006	821020
FINE15	149	12.4191	10.1635	1.68700	62.670	791006	821020
COARSE15	149	11.6628	11.2086	0.76300	72.320	791006	821020
RATIO15	63	0.9192	0.5131	0.38303	2.831	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=380560013A07 NAME=EUGENE (LANE COLLEGE) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	88	49.6715	25.6505	7.178	124.700	800825	820306
SSI	71	39.9749	21.4478	11.930	111.700	800825	811212
DICHOT15	86	30.6988	19.6719	3.865	101.800	800825	820204
FINE15	86	17.1653	12.4902	2.238	65.500	800825	820204
COARSE15	86	13.5334	11.7175	1.484	79.100	800825	820204
RATIO15	81	0.6169	0.3035	0.374	2.932	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=381460015A07 NAME=PORTLAND (CTRL FIRE STA) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	89	75.3306	42.6009	20.9100	216.000	790924	810516
SSI	98	55.9779	32.3338	15.9700	177.100	800221	811212
DICHOT15	170	47.6848	37.4779	5.3080	200.200	790924	821201
FINE15	170	19.8023	15.2206	2.7220	91.300	790924	821201
COARSE15	170	27.8826	28.9433	2.5860	169.200	790924	821201
RATIO15	82	0.7505	0.4007	0.3572	2.445	.	.
DICHOT10	1	53.2600	.	53.2600	53.260	821207	821207
FINE10	1	33.2400	.	33.2400	33.240	821207	821207
COARSE10	1	20.0200	.	20.0200	20.020	821207	821207
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=390100064A07 NAME=PITT (S ALLEGHENY HIGH S) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	79	68.4089	32.7162	30.6100	210.800	810808	821231
SSI	20	67.6620	37.1958	23.1000	150.700	810808	811212
DICHOT15	52	40.0562	16.2620	10.7600	91.770	811106	821225
FINE15	52	24.7454	12.1472	7.7100	76.330	811106	821225
COARSE15	52	15.3110	7.9269	3.0500	37.770	811106	821225
RATIO15	51	0.5995	0.0839	0.3515	0.774	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=390100068A07 NAME=PITT(W ALLEGHENY CO HIGH) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	27	60.1704	26.8842	21.01	143.80	790819	810609
SSI	0	.	.	.	.	.	.
DICHOT15	5	24.5580	4.7992	17.66	29.20	790826	821219
FINE15	5	16.5440	4.6353	11.83	23.71	790826	821219
COARSE15	5	8.0140	2.4918	5.49	11.48	790826	821219
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=390400002A07 NAME=PITTSBURGH (AVALON) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	44	84.9300	37.3448	14.060	162.4	800924	820417
SSI	49	75.7179	32.5586	7.612	136.2	800924	810919
DICHOT15	18	64.8783	47.3925	28.310	213.2	820129	821213
FINE15	18	31.1928	22.3118	14.540	103.0	820129	821213
COARSE15	18	33.6856	41.0173	7.200	177.9	820129	821213
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=390780725A07 NAME=BETHLEHEM -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	126	66.5377	28.5147	20.1600	168.300	801030	821231
SSI	49	52.9914	21.1199	15.7100	106.100	801030	810826
DICHOT15	75	32.3801	14.5525	6.7440	63.700	810901	821231
FINE15	75	19.1360	10.0968	4.1030	45.160	810901	821231
COARSE15	75	13.2444	7.4137	2.6410	38.060	810901	821231
RATIO15	70	0.5447	0.1288	0.2882	1.129	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=396620001A07 NAME=PITT (NORTH BRADDOCK) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DA
TSP	87	98.9889	49.9054	31.3600	255.70	790813	820111
SSI	84	71.1432	33.9890	24.6700	162.30	800714	820517
DICHOT15	48	38.1283	17.9044	14.7000	124.10	811031	821011
FINE15	48	22.0298	13.5122	7.8600	94.20	811031	821011
COARSE15	48	16.0979	7.5687	6.3300	37.51	811031	821011
RATIO15	12	0.4934	0.0948	0.3109	0.62	.	.
DICHOT10	44	37.0945	19.3138	10.6300	127.20	820123	82123
FINE10	44	24.4895	15.2823	6.6300	105.00	820123	82123
COARSE10	44	12.6070	7.3334	3.0600	36.56	820123	82123
RATIO10	0	.	.	.	.	.	.

----- SITE=397140003A07 NAME=PHILA(500 S BROAD STREET) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	229	64.0732	26.0041	18.4600	172.100	790424	821201
SSI	531	52.5197	21.8773	11.8100	151.700	790424	821201
DICHOT15	107	42.0201	17.4055	11.2600	113.800	790424	821201
FINE15	107	24.0924	10.7773	5.4700	69.300	790424	821201
COARSE15	107	17.9276	9.8482	3.6300	48.300	790424	821201
RATIO15	70	0.6575	0.1944	0.1923	1.295	.	.
DICHOT10	36	34.7661	12.8830	13.2400	66.600	820306	821125
FINE10	36	24.0761	10.6770	7.5400	50.870	820306	821125
COARSE10	36	10.6906	4.2008	3.9600	20.150	820306	821125
RATIO10	35	0.4964	0.0902	0.3654	0.757	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

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----- SITE=397140003A57 NAME=PHILA(500 S BROAD ST COL) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	77	58.9213	24.0211	16.7400	131.70	790804	810227
SSI	60	56.3255	24.7122	22.0400	129.00	800608	810727
DICHOT15	61	39.7495	12.6963	21.6000	72.80	800510	821020
FINE15	61	22.6802	9.2448	6.7200	48.76	800510	821020
COARSE15	61	17.0689	7.1762	6.0300	35.81	800510	821020
RATIO15	4	0.5491	0.0851	0.4832	0.67	.	.
DICHOT10	27	33.2389	10.9477	18.3900	65.99	820306	821020
FINE10	27	22.9381	9.6397	10.1100	49.86	820306	821020
COARSE10	27	10.3000	3.9554	1.3900	17.26	820306	821020
RATIO10	0	.	.	.	.	.	.

----- SITE=397140019A07 NAME=PHILA (ALLEGHENY) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	165	102.850	45.8658	17.1800	231.300	790503	810227
SSI	162	68.088	28.7181	12.3100	207.000	790503	810615
DICHOT15	91	55.862	26.6761	14.9300	128.300	790825	821101
FINE15	91	22.925	11.2859	5.0200	79.400	790825	821101
COARSE15	91	32.936	21.6809	6.0600	95.900	790825	821101
RATIO15	23	0.534	0.2302	0.1382	0.985	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=397140020A07 NAME=PHILA (BELMONT FILTER PL) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	36	46.4897	16.4976	16.890	77.4900	790608	791000
SSI	0	.	.	.	.	.	.
DICHOT15	36	39.6108	14.8334	2.389	69.6200	790614	791000
FINE15	36	24.4307	10.6616	1.125	45.7200	790614	791000
COARSE15	36	15.1796	5.9931	1.265	25.5100	790614	791000
RATIO15	33	0.8923	0.1168	0.677	1.1586	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=397140023A07 NAME=PHILA (SE WATER TREAT PL) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	33	77.3027	31.4462	21.5500	167.200	790614	790930
SSI	31	53.9748	21.7376	16.9600	116.600	790626	791003
DICHOT15	6	58.7467	11.9919	42.2900	77.790	790825	790909
FINE15	6	31.5633	6.5805	21.2300	40.570	790825	790909
COARSE15	6	27.1850	6.0075	21.0600	37.220	790825	790909
RATIO15	6	1.0650	0.1400	0.8915	1.315	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=397140024A07 NAME=PHILA (NORTHEAST AIRPORT) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	162	48.4799	24.0529	10.8800	139.000	790503	810227
SSI	82	49.7796	22.1363	17.7400	133.500	800611	810727
DICHOT15	230	37.2296	24.1537	1.2060	166.000	790527	821020
FINE15	230	22.5610	14.8581	0.7870	99.400	790527	821020
COARSE15	230	14.6677	13.4408	0.4190	111.800	790527	821020
RATIO15	152	0.7891	0.2343	0.1917	2.261	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=397140032A07 NAME=PHILA (GRATZ COLLEGE) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	37	46.7224	18.2161	14.4700	87.4800	790509	791009
SSI	31	40.4839	13.7457	17.1000	68.1300	790509	791009
DICHOT15	6	46.2200	10.3419	30.7500	57.9400	790825	790909
FINE15	6	26.0683	7.7736	14.7200	34.9900	790825	790909
COARSE15	6	20.1517	3.6634	16.0300	24.3100	790825	790909
RATIO15	5	1.2721	0.2917	0.9613	1.7121	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
 INHALABLE PARTICULATE NETWORK
 NETWORK DATA SUMMARY
 RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=397140036A07 NAME=PHILA (PRESBYTERIAN HOME) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	164	56.6906	25.2107	11.1100	152.900	790521	810228
SSI	80	52.6752	21.2627	17.4500	125.400	800611	810727
DICHOT15	162	42.8086	22.0695	11.6500	140.900	790521	820123
FINE15	162	27.0371	17.9600	5.2900	123.300	790521	820123
COARSE15	162	15.7710	7.9406	0.8200	45.120	790521	820123
RATIO15	114	0.7407	0.1749	0.3616	1.355	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=397140037A07 NAME=PHILA (TEMPLE UNIVERSITY) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	40	51.2712	19.6064	18.0100	103.600	790515	790930
SSI	0	.	.	.	.	.	.
DICHOT15	38	45.7813	16.2191	19.3600	85.950	790515	790930
FINE15	38	28.8089	12.4245	10.1500	52.890	790515	790930
COARSE15	38	16.9737	7.5851	5.2000	46.650	790515	790930
RATIO15	37	0.8999	0.1084	0.6738	1.151	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=397140037A57 NAME=PHILA(TEMPLE UNIV COL) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	0	.	.	.	.	.	.
SSI	0	.	.	.	.	.	.
DICHOT15	13	36.7935	15.8291	4.216	54.32	790602	790930
FINE15	13	21.5122	11.3340	1.908	36.59	790602	790930
COARSE15	13	15.2814	5.6523	2.308	21.18	790602	790930
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=397140038A07 NAME=PHILA (ST JOHN CAUNTIUS) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	172	64.2967	30.6092	21.3000	189.600	790527	810227
SSI	179	56.0651	28.2462	12.3100	165.700	790527	810615
DICHOT15	86	44.9258	38.2699	13.2900	323.900	790825	821101
FINE15	86	24.4470	18.0912	7.1700	140.500	790825	821101
COARSE15	86	20.4783	33.2053	0.9000	308.500	790825	821101
RATIO15	19	0.8092	0.1085	0.6239	1.078	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=397260021A07 NAME=PITT (HAZELWOOD #2) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	108	91.2123	44.1537	26.4900	354.700	791111	821231
SSI	0	.	.	.	.	.	.
DICHOT15	142	57.1342	26.8045	10.5400	181.100	790813	821225
FINE15	142	34.3022	16.4516	7.2100	121.500	790813	821225
COARSE15	142	22.8307	14.3469	3.3300	88.700	790813	821225
RATIO15	94	0.6053	0.1228	0.3491	1.175	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=410300012A07 NAME=PROVIDENCE(ROCKEFF LIB) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	0	.	.	.	.	.	.
SSI	27	34.2307	11.9523	18.110	66.70	810709	811224
DICHOT15	74	25.1492	11.8046	6.720	65.94	810715	821219
FINE15	74	14.5818	7.3657	4.660	41.53	810715	821219
COARSE15	74	10.5676	6.5170	1.883	35.57	810715	821219
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=420560003A07 NAME=CHARLESTON SC (FIRE STA) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	0	.	.	.	.	.	.
SSI	8	39.0537	9.84100	28.410	55.46	811025	811206
DICHOT15	54	26.7433	8.88747	6.567	43.59	811019	821207
FINE15	54	15.0836	6.37528	4.290	32.65	811019	821207
COARSE15	54	11.6597	4.81072	1.163	20.58	811019	821207
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=440380006A07 NAME=CHATTANOOGA (WDEF STA) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	32	79.7812	28.1024	38.1900	172.500	800924	811025
SSI	30	57.8463	22.8831	26.9100	137.700	800924	810428
DICHOT15	3	28.4533	6.7163	24.1200	36.190	811013	811025
FINE15	3	18.2433	7.8726	9.2200	23.710	811013	811025
COARSE15	3	10.2100	6.1478	3.2500	14.900	811013	811025
RATIO15	3	0.5620	0.1203	0.4235	0.641	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=442540006A07 NAME=NASHVILLE (8TH AVENUE) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	91	75.2157	24.1621	25.5500	139.200	800930	821225
SSI	49	58.2278	16.9203	14.5100	92.720	800930	810913
DICHOT15	63	36.8992	15.5275	10.5500	75.780	811001	821231
FINE15	63	21.8944	10.7930	5.5800	52.830	811001	821231
COARSE15	63	15.0049	10.9473	1.5100	54.830	811001	821231
RATIO15	41	0.4790	0.1145	0.1762	0.675	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=451310050A07 NAME=DALLAS (CONVENTION CTR) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	105	75.9445	47.2768	19.2300	458.800	800116	820505
SSI	90	57.8864	34.1261	10.5500	304.400	800116	811019
DICHOT15	132	37.2097	14.3147	9.0960	92.080	800116	821026
FINE15	132	18.7594	8.3235	5.8800	60.910	800116	821026
COARSE15	132	18.4502	10.6466	0.8100	74.940	800116	821026
RATIO15	82	0.5320	0.1495	0.2509	1.255	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=451700002A07 NAME=EL PASO (TILLMAN CTR) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	76	128.056	60.6644	30.1300	333.600	791123	821231
SSI	67	98.706	57.4000	26.2000	260.900	791123	811212
DICHOT15	90	69.005	45.4747	16.9100	297.600	791205	821125
FINE15	90	22.539	21.3363	4.8800	147.700	791205	821125
COARSE15	90	46.469	31.4214	4.8200	211.500	791205	821125
RATIO15	49	0.535	0.2081	0.1496	1.361	.	.
DICHOT10	5	58.342	44.1079	11.7900	121.300	821201	821231
FINE10	5	27.652	19.6839	6.4700	47.800	821201	821231
COARSE10	5	30.670	26.6825	3.6600	73.400	821201	821231
RATIO10	5	0.432	0.0829	0.3314	0.550	.	.

----- SITE=451710004A07 NAME=EL PASO (CLINT) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	140	83.8057	46.7220	6.40300	259.40	791117	821008
SSI	0	.	.	.	.	.	.
DICHOT15	140	51.8665	29.1638	6.05800	181.30	791117	820920
FINE15	140	13.2784	6.5881	2.34000	34.00	791117	820920
COARSE15	140	38.5888	26.1443	1.77000	150.30	791117	820920
RATIO15	129	0.6307	0.1558	0.14982	1.38	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=452330024A07 NAME=HOUSTON (CAMS-8) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	59	63.7066	25.4750	5.21200	125.800	791205	820312
SSI	0	.	.	.	.	.	.
DICHOT15	41	36.5246	15.0838	7.24000	74.600	791211	820312
FINE15	41	16.8989	7.3071	4.86300	39.970	791211	820312
COARSE15	41	19.6253	11.8857	2.37700	59.690	791211	820312
RATIO15	36	0.5982	0.2699	0.31829	1.501	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=452560034A07 NAME=HOUSTON (CAMS-1) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	87	99.2163	36.1416	30.0900	203.400	791123	821231
SSI	80	74.9887	25.1468	26.6800	140.700	791129	821231
DICHOT15	13	45.8646	18.2411	25.3900	88.570	820324	820914
FINE15	13	20.3646	18.1541	9.5800	78.440	820324	820914
COARSE15	13	25.5000	10.8579	10.0300	42.990	820324	820914
RATIO15	10	0.4710	0.0697	0.3473	0.573	.	.
DICHOT10	16	37.6700	10.5752	24.7400	61.480	820324	820902
FINE10	16	16.2881	7.0784	4.5400	33.470	820324	820902
COARSE10	16	21.3831	7.2363	10.0900	33.730	820324	820902
RATIO10	13	0.3940	0.0850	0.2342	0.525	.	.

----- SITE=454715001A07 NAME=HOUSTON (SEABROOK) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	64	62.2014	32.8293	15.0800	171.900	791129	821231
SSI	8	44.8025	18.6880	24.4500	70.100	810609	810820
DICHOT15	55	35.1627	16.0624	12.5800	80.980	791129	821219
FINE15	55	16.5111	9.6983	4.7400	44.540	791129	821219
COARSE15	55	18.6516	10.4026	4.7700	54.020	791129	821219
RATIO15	41	0.5962	0.2147	0.2292	1.135	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=460520001A07 NAME=MAGNA (BROCKBANK JR HS) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	121	67.2394	38.3620	18.7300	262.800	800714	821231
SSI	75	56.5584	33.3769	18.1100	213.900	800714	811212
DICHOT15	46	36.3620	21.4810	11.9800	96.560	810913	821119
FINE15	46	15.5265	15.4139	3.8600	79.030	810913	821119
COARSE15	46	20.8348	11.9440	6.1700	59.990	810913	821119
RATIO15	38	0.6157	0.1227	0.3738	1.078	.	.
DICHOT10	5	34.1380	17.6310	12.1800	51.340	821125	821219
FINE10	5	22.3040	13.3101	7.5000	34.440	821125	821219
COARSE10	5	11.8340	5.3987	3.6700	17.940	821125	821219
RATIO10	5	0.5631	0.1211	0.4235	0.665	.	.

----- SITE=460920001A07 NAME=SALT LAKE CITY(6 S 200 E) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	127	75.4173	38.6250	22.8100	255.000	800714	821213
SSI	71	69.6396	36.2693	27.1500	207.600	800714	811212
DICHOT15	62	39.1019	15.9770	15.5700	97.170	810721	821119
FINE15	62	17.4992	9.4525	5.9300	52.980	810721	821119
COARSE15	62	21.6026	10.7197	6.3400	68.890	810721	821119
RATIO15	59	0.6121	0.1023	0.2083	0.797	.	.
DICHOT10	3	44.1367	31.1909	19.7400	79.280	821125	821225
FINE10	3	32.0233	24.2079	13.3000	59.360	821125	821225
COARSE10	3	12.1133	6.9886	6.4400	19.920	821125	821225
RATIO10	2	0.6704	0.1383	0.5727	0.768	.	.

----- SITE=480200020A07 NAME=ARLINGTON (COMM BLDG) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	72	53.2967	18.4520	20.76	103.0	800831	811230
SSI	62	44.8774	17.9635	18.32	110.2	800831	811130
DICHOT15	0	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=481440005A07 NAME=HAMPTON (VIRGINIA SCHOOL) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	67	51.2549	20.665	21.57	106.90	800924	811212
SSI	67	40.3370	17.859	16.43	94.04	800924	811130
DICHOT15	0	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=481560002A07 NAME=HOPEWELL (NEWS BLDG) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	122	70.0369	25.6832	25.6000	149.700	800831	821020
SSI	46	54.0367	20.4712	22.2700	102.400	800831	810721
DICHOT15	122	38.9171	17.3304	12.7100	126.400	800831	821014
FINE15	122	20.8599	12.7192	6.9600	108.900	800831	821014
COARSE15	122	18.0578	9.8043	2.3100	66.120	800831	821014
RATIO15	113	0.5565	0.1186	0.3301	1.193	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=482140007A07 NAME=NORFOLK (OLD DOMINION U) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	123	58.4980	22.3138	23.270	128.400	800924	821231
SSI	43	49.8451	22.5644	19.510	117.500	800924	810721
DICHOT15	78	34.8124	14.6312	12.540	87.640	810814	821231
FINE15	78	19.5500	9.3013	5.630	45.020	810814	821231
COARSE15	78	15.2627	9.9341	0.610	68.480	810814	821231
RATIO15	66	0.6008	0.1057	0.315	0.965	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=482630001A07 NAME=FAIRFAX (GREAT FALLS) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	114	44.0743	13.4277	18.5600	79.3300	800831	821101
SSI	31	44.2365	14.1196	21.8100	81.3200	800831	810814
DICHOT15	109	28.1021	12.0059	9.2370	66.2800	800831	821231
FINE15	109	19.5425	10.0501	5.5480	49.6000	800831	821231
COARSE15	109	8.5587	4.4482	1.4900	23.9300	800831	821231
RATIO15	100	0.6096	0.1062	0.3405	0.9676	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=482660002A07 NAME=RICHMOND VA (HEALTH DEPT) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	24	57.1817	19.3338	36.23	116.60	800906	810209
SSI	22	43.7655	16.4336	23.45	86.74	800831	810209
DICHOT15	0	.	.	.	.	.	.
FINE15	0	.	.	.	.	.	.
COARSE15	0	.	.	.	.	.	.
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=491840057A07 NAME=SEATTLE (DUWAMISH PUMP) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	121	96.6955	52.5771	28.0100	408.900	801217	821231
SSI	16	57.1800	24.9435	34.4000	100.300	810203	810709
DICHOT15	111	39.8265	21.4984	9.3540	119.300	801217	821213
FINE15	111	15.4980	10.2881	4.4510	53.650	801217	821213
COARSE15	111	24.3290	15.0926	2.4620	89.500	801217	821213
RATIO15	108	0.4094	0.0796	0.2138	0.615	.	.
DICHOT10	2	56.6800	47.5741	23.0400	90.320	821219	821231
FINE10	2	42.8750	42.5183	12.8100	72.940	821219	821231
COARSE10	2	13.8050	5.0558	10.2300	17.380	821219	821231
RATIO10	2	0.8222	0.4773	0.4847	1.160	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=491840057A57 NAME=SEATTLE(DUWAMISH COL) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	0	.	.	.	.	.	.
SSI	6	50.1067	18.4129	26.20	82.05	810627	810727
DICHOT15	79	36.7344	18.8889	11.14	98.05	810627	821213
FINE15	79	14.8762	8.9137	4.30	52.73	810627	821213
COARSE15	79	21.8586	13.2840	4.08	61.59	810627	821213
RATIO15	0	.	.	.	.	.	.
DICHOT10	3	33.7900	21.6347	17.39	58.31	821219	821231
FINE10	3	26.7100	21.5715	10.88	51.28	821219	821231
COARSE10	3	7.0800	0.5966	6.51	7.70	821219	821231
RATIO10	0	.	.	.	.	.	.

----- SITE=491840073A07 NAME=SEATTLE (CITY LIGHT CO) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	95	43.7171	20.9732	9.26700	110.100	790930	810528
SSI	0	.	.	.	.	.	.
DICHOT15	143	20.2465	12.5577	3.58900	72.510	790930	820330
FINE15	143	14.4772	10.0691	3.09300	50.120	790930	820330
COARSE15	143	5.7688	6.2721	0.10500	25.370	790930	820330
RATIO15	92	0.5441	0.2177	0.13147	1.204	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=492040013A07 NAME=SPOKANE (BOONE ST) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	73	89.1262	47.5455	14.5500	247.900	800831	821219
SSI	25	68.0870	36.8191	7.3740	166.800	800831	810227
DICHOT15	96	41.7349	24.7642	5.4900	120.700	801105	821219
FINE15	96	13.5411	11.5526	2.0700	53.320	801105	821219
COARSE15	96	28.1949	20.7939	3.2800	103.000	801105	821219
RATIO15	53	0.5130	0.1968	0.3077	1.727	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=500280004A07 NAME=CHARLESTON WV (E WASHGTON) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	0	.	.	.	.	.	.
SSI	0	.	.	.	.	.	.
DICHOT15	61	39.2267	13.9447	16.37	76.30	810808	820908
FINE15	61	21.9511	10.0584	7.20	52.72	810808	820908
COARSE15	61	17.2751	8.0305	7.82	42.37	810808	820908
RATIO15	0	.	.	.	.	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=502000002A07 NAME=WEIRTON -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	70	94.0151	37.1215	36.1300	197.400	810802	821225
SSI	0	.	.	.	.	.	.
DICHOT15	68	45.5749	20.4712	11.1800	130.000	810802	821225
FINE15	68	24.9328	13.6899	6.1300	94.300	810802	821225
COARSE15	68	20.6425	10.9485	2.7600	54.630	810802	821225
RATIO15	60	0.4970	0.1098	0.2075	1.015	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=502120002A07 NAME=WHEELING -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	86	74.2714	27.3159	29.1200	164.100	800918	821107
SSI	41	55.7122	19.8236	15.6000	103.600	800918	810721
DICHOT15	49	46.0053	19.9989	13.9000	108.500	810802	821213
FINE15	49	23.6014	9.2281	5.2500	50.820	810802	821213
COARSE15	49	22.4035	13.3735	6.7100	70.700	810802	821213
RATIO15	35	0.6105	0.1183	0.2051	0.888	.	.
DICHOT10	0
FINE10	0
COARSE10	0
RATIO10	0

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ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK DATA SUMMARY
RATIO15=DICHOT15/HIVOL RATIO10=DICHOT10/HIVOL

----- SITE=510240002A07 NAME=BELoit (FIRE STATION) -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	84	72.8224	32.0633	18.7400	169.700	810221	821113
SSI	20	58.4220	22.0580	29.8100	110.700	810310	810907
DICHOT15	63	36.3467	17.4749	8.7370	92.760	810907	821225
FINE15	63	20.6018	12.0189	3.8230	61.120	810907	821225
COARSE15	63	15.7460	10.3128	2.0700	46.290	810907	821225
RATIO15	48	0.5177	0.0952	0.3119	0.797	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

----- SITE=511180009A07 NAME=GREEN BAY -----

SAMPLER	N	MEAN	STD	MIN	MAX	STARTED	END_DATE
TSP	77	73.4213	29.7914	30.1800	242.200	810209	821113
SSI	28	51.8636	21.2566	11.7500	93.070	810209	810727
DICHOT15	39	45.9082	22.2080	10.3000	133.100	810919	821231
FINE15	39	22.0523	10.9189	7.4300	53.670	810919	821231
COARSE15	39	23.8564	15.9246	2.6100	83.700	810919	821231
RATIO15	23	0.5989	0.1364	0.4386	1.054	.	.
DICHOT10	0	.	.	.	.	.	.
FINE10	0	.	.	.	.	.	.
COARSE10	0	.	.	.	.	.	.
RATIO10	0	.	.	.	.	.	.

APPENDIX D

ENVIRONMENTAL PROTECTION AGENCY INHALABLE PARTICULATE NETWORK

***** AN "X" INDICATES SAMPLER HISTORY AT THE SITE *****

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK SITE DESCRIPTICN

16:01 TUESDAY, MAY 22, 1984 2

*** AN "X" INDICATES SAMPLER HISTORY AT THE SITE ***

		C	C	D	C	O	C	L	L	E
R	E	S	G	T	N	O	I	O	A	H
S	I	T	A	A	A	L	L	C	L	L
I	T	O	T	M	A	H	L	H	A	O
E	E	N	E	E	E	O	O	O	E	V
05530003A07	9	CA	RICHMOND CA	X	X	X	X	X	SUBURBAN	COMMERCIAL
05535001A07	9	CA	RUBIDOUX (MISSION BLVD)	X	X	X	X	X	SUBURBAN	COMMERCIAL
056860003A07	9	CA	SAN FRANCISCO EAST	X	X	X	X	X	CENTER CITY	COMMERCIAL
056980006A07	9	CA	SAN JOSE	X	X	X	X	X	CENTER CITY	COMMERCIAL
060080003A07	6	CO	DENVER (BUCKLEY FIELD)	X	X	X	X	X	RURAL	RESIDENTIAL
060580001A07	6	CO	DENVER (14TH STREET)	X	X	X	X	X	CENTER CITY	COMMERCIAL
061260001A07	6	CO	DENVER (LAKEWOOD)	X	X	X	X	X	SUBURBAN	COMMERCIAL
061820001A07	6	CO	PUEBLO (CENTRAL MAIN ST)	X	X	X	X	X	CENTER CITY	COMMERCIAL
062220101A07	6	CO	FORT COLLINS	X	X	X	X	X	REMOTE	PASTURE
070420003A07	1	CT	HARTFORD (PUBLIC LIB)	X	X	X	X	X	CENTER CITY	COMMERCIAL
070478001A07	1	CT	MORRIS DAH(LITCHFIELD CO)	X	X	X	X	X	REMOTE	FOREST
080020001A07	3	DE	DOVER (POLICE STA)	X	X	X	X	X	CENTER CITY	COMMERCIAL
080180001A07	3	DE	WILMINGTON DE (CLAYMONT)	X	X	X	X	X	SUBURBAN	RESIDENTIAL
090020017A07	3	DC	WASHINGTON (L STREET)	X	X	X	X	X	SUBURBAN	RESIDENTIAL
090020019A07	3	DC	WASHINGTON (GARRISON SCH)	X	X	X	X	X	CENTER CITY	RESIDENTIAL
104360035A07	4	FL	TAMPA (DAVIS ISLAND)	X	X	X	X	X	SUBURBAN	RESIDENTIAL
110200001A07	4	GA	ATLANTA (BUTLER STREET)	X	X	X	X	X	CENTER CITY	COMMERCIAL
110200039A07	4	GA	ATLANTA (MARIETTA BLVD)	X	X	X	X	X	CENTER CITY	COMMERCIAL
114500017A07	4	GA	SAVANNAH (SCOTT MID SCH)	X	X	X	X	X	SUBURBAN	COMMERCIAL
120370004A07	9	HI	PEARL CITY (HI)	X	X	X	X	X	SUBURBAN	RESIDENTIAL
130220003A07	10	ID	BOISE (FIRE STATION #6)	X	X	X	X	X	SUBURBAN	RESIDENTIAL
141220014A07	5	IL	CHICAGO (FARR DORMITORY)	X	X	X	X	X	SUBURBAN	RESIDENTIAL
141220022A07	5	IL	CHICAGO (WASHINGTON HS)	X	X	X	X	X	SUBURBAN	RESIDENTIAL

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK

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***** AN "X" INDICATES SAMPLER HISTORY AT THE SITE *****

	R	E	S	G	T	N	I.	A.	O.	T	H.	E.	C	D	C	L	L	E
													O	O	I	O	O	A
													L	L	C	L	C	N
													L	L	C	L	C	L
													H	H	L	A	D	E
231100020A07	5	MI	DETROIT (APC HQ BLDG)	X	X													
241040025A07	5	MN	DULUTH (ELLIOT MEATS)	X	X													
241620007A07	5	MN	INT FALLS (CUSTOM BLDG)	X	X													
242260049A07	5	MN	MINNEAPOLIS (REGINA HS)	X	X													
242260051A07	5	MN	MINNEAPOLIS (NICOLLET)	X	X													
243300003A07	5	MN	ST PAUL (FIRE STA)	X	X													
251260003A07	4	MS	JACKSON(SUN & SAND MOTEL)										X	X				
260030001A07	7	MO	ST LOUIS (AFTON)	X	X								X	X				
262380002A07	7	MO	KANSAS CITY MO (FIRE STA)	X	X								X	X				
264280007A07	7	MO	ST LOUIS (S BROADHAY)	X	X								X	X				
270160005A07	6	MT	BUTTE (GREENLY SCHOOL)										X	X				
271100020A07	6	MT	MISSOULA (ROSELAHN PK)										X	X				
281080028A07	7	NE	OMAHA (O STREET)	X	X								X	X				
290480001A07	9	NV	RENO (KIRKMAN ST)	X	X								X	X				
290580001A07	9	NV	WINNEMUCCA	X	X								X	X				
310720005A07	2	NJ	CARDEN	X	X								X	X				
311380001A07	2	NJ	LIVINGSTON	X	X								X	X				
312320005A07	2	NJ	JERSEY CITY (BAY STREET)	X	X								X	X				
320040001A07	6	NH	ALBUQUERQUE (YMCA)	X	X								X	X				
320090001A07	6	NH	BAYARD (COBRE SCHOOL)	X	X								X	X				
330660003A07	2	NY	BUFFALO (PS #26)	X	X								X	X				
330660010A07	2	NY	BUFFALO (PS #28)	X	X								X	X				
33200003A07	2	NY	ALGOLA (BIG SISTER STP)	X	X								X	X				

*** AN "X" INDICATES SAMPLER HISTORY AT THE SITE ***

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE NETWORK
NETWORK SITE DESCRIPTION

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**** AN "X" INDICATES SAMPLER HISTORY AT THE SITE ****

	R	E	S	G	T	N	O	C	C	D	C	L	L	E	
	S	I	T	A	A	H	L	O	O	I	O	O	A	L	
	I	T	O	T	H	E	L	L	C	L	C	N	D	E	
301460015A07	10	CR	PORTLAND (CTRL FIRE STA)	X	X	X	X	X	X	X	X	X	X	COMMERCIAL	13.7
390100064A07	3	PA	PITT (S ALLEGHENY HIGH S)	X	X	X	X	X	X	X	X	X	X	INDUSTRIAL	10.7
390100068A07	3	PA	PITT(W ALLEGHENY CO HIGH)	X	X	X	X	X	X	X	X	X	X	RESIDENTIAL	4.6
390400002A07	3	PA	PITTSBURGH (AVALON)	X	X	X	X	X	X	X	X	X	X	RESIDENTIAL	5.5
390780725A07	3	PA	BETHLEHEM	X	X	X	X	X	X	X	X	X	X	INDUSTRIAL	6.1
396620001A07	3	PA	PITT (NORTH BRADDOCK)	X	X	X	X	X	X	X	X	X	X	INDUSTRIAL	7.6
397140003A07	3	PA	PHILA(500 S BROAD STREET)	X	X	X	X	X	X	X	X	X	X	COMMERCIAL	10.7
397140019A07	3	PA	PHILA (ALLEGHENY)	X	X	X	X	X	X	X	X	X	X	INDUSTRIAL	3.0
397140020A07	3	PA	PHILA (BELMONT FILTER PL)	X	X	X	X	X	X	X	X	X	X	RESIDENTIAL	1.8
397140023A07	3	PA	PHILA (SE WATER TREAT PL)	X	X	X	X	X	X	X	X	X	X	INDUSTRIAL	3.0
397140026A07	3	PA	PHILA (NORTHEAST AIRPORT)	X	X	X	X	X	X	X	X	X	X	COMMERCIAL	6.1
397140032A07	3	PA	PHILA (GRATZ COLLEGE)	X	X	X	X	X	X	X	X	X	X	RESIDENTIAL	9.1
397140036A07	3	PA	PHILA (PRESBYTERIAN HOME)	X	X	X	X	X	X	X	X	X	X	INDUSTRIAL	7.6
397140037A07	3	PA	PHILA (TEMPLE UNIVERSITY)	X	X	X	X	X	X	X	X	X	X	COMMERCIAL	12.2
397140038A07	3	PA	PHILA (ST JOHN CAUNTIUS)	X	X	X	X	X	X	X	X	X	X	RESIDENTIAL	6.1
397260021A07	3	PA	PITT (HAZELWOOD #2)	X	X	X	X	X	X	X	X	X	X	COMMERCIAL	5.2
410300012A07	1	RI	PROVIDENCE (ROCKEFF LIB)	X	X	X	X	X	X	X	X	X	X	INDUSTRIAL	16.7
420560003A07	4	SC	CHARLESTON SC (FIRE STA)	X	X	X	X	X	X	X	X	X	X	RESIDENTIAL	3.0
440380006A07	4	TN	CHATTANOOGA (WDEF STA)	X	X	X	X	X	X	X	X	X	X	COMMERCIAL	6.1
442540006A07	4	TN	NASHVILLE (6TH AVENUE)	X	X	X	X	X	X	X	X	X	X	COMMERCIAL	12.2
451310050A07	6	TX	DALLAS (CONVENTION CTR)	X	X	X	X	X	X	X	X	X	X	AGRICULTURAL	1.2
451700002A07	6	TX	EL PASO (TILLMAN CTR)	X	X	X	X	X	X	X	X	X	X	COMMERCIAL	1.0
451710004A07	6	TX	EL PASO (CLINT)	X	X	X	X	X	X	X	X	X	X	RURAL	1.2

ENVIRONMENTAL PROTECTION AGENCY
INHALABLE PARTICULATE METRIC
NETWORK SITE DESCRIPTION

**** AN "X" INDICATES SAMPLER HISTORY AT THE SITE ****

			C	C	D	C	L	L	A	E
R	E	S	O	O	I	O	O	H	H	L
S	I	T	L	L	H	L	A	D	D	L
I	T	A	E	E	S	S	T	O	O	V
T	O	H	P	P	S	S	C	T	T	H
E	N	E	I	I	I	I	I	I	S	E
4523300024A07	6	TX	HOUSTON (CAHS-8)	X	X	X	X	X	SUBURBAN	COMMERCIAL
452560016A07	6	TX	HOUSTON (CAHS-1)	X	X	X	X	X	SUBURBAN	INDUSTRIAL
454715001A07	6	TX	HOUSTON (SEABROOK)	X	X	X	X	X	SUBURBAN	COMMERCIAL
460520001A07	6	UT	MAGNA (BROCKBAK JR HS)	X	X	X	X	X	SUBURBAN	INDUSTRIAL
460920001A07	6	UT	SALT LAKE CITY (S 200 E)	X	X	X	X	X	CENTER CITY	COMMERCIAL
4802000020A07	3	VA	ARLINGTON (COMM BLDG)	X	X	X	X	X	SUBURBAN	RESIDENTIAL
481440005A07	3	VA	HAMPTON (VIRGINIA SCHOOL)	X	X	X	X	X	SUBURBAN	INDUSTRIAL
481560002A07	3	VA	HOPEMILL (NEWS BLDG)	X	X	X	X	X	SUBURBAN	INDUSTRIAL
482140007A07	3	VA	NORFOLK (OLD DOMINION U)	X	X	X	X	X	CENTER CITY	RESIDENTIAL
482630001A07	3	VA	FAIRFAX (GREAT FALLS)	X	X	X	X	X	RURAL	RESIDENTIAL
482660002A07	3	VA	RICHMOND VA (HEALTH DEPT)	X	X	X	X	X	CENTER CITY	COMMERCIAL
491840057A07	10	WA	SEATTLE (DUWAMISH PUMP)	X	X	X	X	X	SUBURBAN	INDUSTRIAL
491840073A07	10	WA	SEATTLE (CITY LIGHT CO)	X	X	X	X	X	SUBURBAN	COMMERCIAL
492040013A07	10	WA	SPokane (BOONE ST)	X	X	X	X	X	SUBURBAN	INDUSTRIAL
500280004A07	3	WV	CHARLESTON WV (E WASHGTH)	X	X	X	X	X	CENTER CITY	INDUSTRIAL
502000002A07	3	WV	WEIRTON	X	X	X	X	X	CENTER CITY	COMMERCIAL
502120002A07	3	WV	WHEELING	X	X	X	X	X	SUBURBAN	COMMERCIAL
510240002A07	5	WI	BELoit (FIRE STATION)	X	X	X	X	X	CENTER CITY	INDUSTRIAL
511160009A07	5	WI	GREEN BAY	X	X	X	X	X	CENTER CITY	INDUSTRIAL

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APPENDIX E

INHALABLE PARTICULATE NETWORK SAMPLER CALIBRATION DATES

SAROAD	DESCRIPTION	TYPE	DATES
010380003A07	South Birmingham	TSP SSS PM ₁₅	6/79, 11/80 12/80, 3/81, 6/81, 8/81 6/79, 8/82, 4/83,
0103800023A07	North Birmingham (S 20th)	TSP(C) SSS SSS(C) PM ₁₅ PM ₁₅ (C) PM ₁₀	5/79, 11/80, 5/81, 6/81, 7/81 10/80, 4/81, 8/81, 9/81, 7/82, 1/83, 4/83, 10/83 5/79, 11/80, 4/81, 9/81 11/80, 8/81, 7/82, 1/83, 4/83, 10/83 8/81, 4/83 8/81 8/81, 4/83
0103800026A07	Inglenook	TSP SSS PM ₁₅	5/79, 11/80, 5/81 12/80, 10/81 6/79
010570001A07	Huffman	TSP SSS PM ₁₅	5/79, 11/80, 3/81, 9/81 5/79, 11/80, 5/81, 10/81 6/79
0123800029A07	Mobile (WKRG Tower)	PM ₁₅	3/81, 10/82
012540001A07	Mtn Brook	TSP SSS PM ₁₅	5/79, 12/80, 5/81 12/80, 10/81 7/81
013200001A07	Tarrant (Pinson St.)	TSP SSS PM ₁₅	5/79, 11/80, 12/80, 5/81, 11/82, 4/83, 10/83 5/79, 11/80, 12/80, 5/81, 8/81, 9/81 6/79, 8/82, 4/83
020040003A07	Anchorage	TSP SSS PM ₁₅	6/80, 2/81, 9/81, 8/82, 6/83 6/80, 9/81 4/82, 9/82, 6/83, 8/83
030440006A07	Carefree Airport	TSP SSS PM ₁₅	4/79, 4/80, 6/80, 4/81, 6/81, 9/81, 11/81, 10/82 7/79, 6/80, 11/80, 1/81, 11/81 7/79, 12/80, 7/82

(C) - Collocated

INHALABLE PARTICULATE NETWORK SAMPLER CALIBRATION DATES

<u>SAROAD</u>	<u>DESCRIPTION</u>	<u>TYPE</u>	<u>DATES</u>
010380003A07	South Birmingham	TSP TSP(C) SSS PM ₁₅	6/79, 11/80 12/80, 3/81, 6/81, 8/81 6/79, 8/82, 4/83,
010380023A07	North Birmingham (S 20th)	TSP TSP(C) SSS SSS(C) PM ₁₅ PM ₁₅ (C) PM ₁₀	5/79, 11/80, 5/81, 6/81, 7/81 10/80, 4/81, 8/81, 9/81, 7/82, 1/83, 4/83, 10/83 5/79, 11/80, 4/81, 9/81 11/80, 8/81, 7/82, 1/83, 4/83, 10/83 8/81, 4/83 8/81 8/81, 4/83
010380026A07	Inglewood	TSP SSS PM ₁₅	5/79, 11/80, 5/81 12/80, 10/81 6/79
010570001A07	Huffman	TSP SSS PM ₁₅	5/79, 11/80, 3/81, 9/81 5/79, 11/80, 5/81, 10/81 6/79
012380029A07	Mobile (WKRG Tower)	PM ₁₅	3/81, 10/82
012540001A07	Mtn Brook	TSP SSS PM ₁₅	5/79, 12/80, 5/81 12/80, 10/81 7/81
013200001A07	Tarrant (Pinson St)	TSP SSS PM ₁₅	5/79, 11/80, 12/80, 5/81, 11/82, 4/83, 10/83 5/79, 11/80, 12/80, 5/81, 8/81, 9/81 6/79, 8/82, 4/83
020040003A07	Anchorage	TSP SSS PM ₁₅	6/80, 2/81, 9/81, 8/82, 6/83 6/80, 9/81 4/82, 9/82, 6/83, 8/83
030440006A07	Carefree Airport	TSP SSS PM ₁₅	4/79, 4/80, 6/80, 4/81, 6/81, 9/81, 11/81, 10/82 7/79, 6/80, 11/80, 1/81, 11/81 7/79, 12/80, 7/82

(C) - Collocated

030600002A07	Phoenix (Roosevelt St)	TSP SSS PM ₁₅ PM ₁₀	6/79, 10/80, 12/80, 1/83, 7/83, 9/83 7/79, 4/80, 10/80, 2/82, 4/82, 1/83 8/81, 7/82 8/81, 7/82
030600004A07	North Phoenix	TSP SSS SSS(C) PM ₁₅	6/79, 9/80, 3/81 6/79, 3/81, 6/81, 1/83 11/80, 1/83 7/79, 12/80
041440001A07	Little Rock	TSP SSS PM ₁₅	8/80, 11/80, 3/81, 7/81, 2/83, 5/83, 9/83 9/80, 3/81, 7/81 1/82, 9/83
050500002A07	Azusa (Loren Ave)	TSP SSS PM ₁₅ PM ₁₀	6/79, 3/80 12/78, 6/79 4/81, 7/82 6/83
050520003A07	Bakersfield (Chester Ave)	TSP SSS PM ₁₅ PM ₁₀	5/80, 4/81, 11/81, 8/82, 4/83, 9/83 6/80, 4/81 7/80, 7/82 6/83
051260002A07	Chico	TSP SSS PM ₁₅	6/80, 12/80, 7/81 1/83 6/80 8/82
052220003A07	San Diego	TSP SSS PM ₁₅ PM ₁₀	8/80, 9/80, 6/82, 9/82, 3/83 5/80, 6/83 6/80 3/81 6/83
052820002A07	Five Points	TSP SSS PM ₁₅	9/79, 5/81 8/79, 5/81 9/79, 1/81, 3/82
054020002A07	Livermore (Railroad Ave)	TSP SSS PM ₁₅	9/79 9/79 1/79

0540200003A07	Livermore (Old First St)	TSP SSS PM ₁₅	9/79 9/79 9/79, 3/82
054080002A07	Lompoc	TSP SSS PM ₁₅	5/80, 9/81 6/80 8/80, 8/82
054180103A07	West Los Angeles	TSP SSS PM ₁₅	6/79, 1/80, 7/80 5/79, 2/80, 8/80 6/79
055760004A07	Pasadena	TSP SSS PM ₁₅	5/79, 1/80, 8/80 6/79 5/79
056300003A07	Richmond CA	TSP SSS PM ₁₅	9/79 9/79 9/79
05635001A07	Rubidoux (Riverside)	TSP SSS PM ₁₅ PM ₁₀	5/83, 9/83 5/79, 5/83 7/81, 7/82, 6/83 8/81, 7/82, 6/83
056860003A07	San Francisco East	TSP SSS	9/79 11/80
056980004A07	San Jose	TSP SSS PM ₁₅	9/79, 4/81 10/80, 6/81 9/79, 4/82
060080003A07	Denver (Buckley Field)	TSP SSS PM ₁₅	4/80, 12/80, 1/81, 4/81, 9/81, 2/82, 8/82, 1/83 6/80, 9/80, 12/80, 1/81, 9/81 1/83
060580001A07	Denver (14th Street)	TSP SSS PM ₁₅ PM ₁₀	4/80, 2/81, 8/81 6/80 8/81 10/82, 2/83

061260001A07	Denver (Lakewood)	TSP SSS SSS(C) PM ₁₅ PM ₁₅ (C)	1/80,9/81 4/80,9/81 9/81 3/81,9/82 3/81,9/82
061820001A07	Pueblo (Central Main St.)	SSS PM ₁₅ PM ₁₀	1/83 4/81 8/82
062220101A07	Fort Collins	TSP SSS PM ₁₅	8/80,9/80,7/81,12/82,4/83,5/83,9/83 6/80,7/81 1/82,6/82
070420003A07	Hartford (Public Library)	TSP SSS PM ₁₅	11/79,6/80,11/80 11/79,6/80,11/80 11/79
070478001A07	Morris Dam (Litchfield Co)	TSP PM ₁₅ PM ₁₀	10/79,3/81 11/79 10/82
080020001A07	Dover (Police Station)	TSP PM ₁₅	3/79 7/81
080180001A07	Wilmington DE (Claymont)	TSP SSS PM ₁₅	8/80,8/82,1/83,5/83,9/83 6/80 7/80,5/82,9/83
090020017A07	Washington (L Street)	TSP SSS PM ₁₅	8/79,12/80 8/79 7/79,3/82
090020019A07	Washington (Garrison Sch)	TSP SSS PM ₁₅	6/80 6/80 6/81,10/82
104360035A07	Tampa (Davis Island)	SSS PM ₁₅	11/80 3/81,10/82

(C) - Collocated

1102000001A07	Atlanta (Butler Street)	TSP SSS PM ₁₅	6/80, 1/81, 4/81, 11/81, 8/82 6/80, 1/81 7/80, 8/82
110200039A07	Atlanta (Marietta Blvd)	TSP SSS PM ₁₅	6/80 6/80 7/80
114500017A07	Savannah (Scott Mid Sch)	TSP SSS PM ₁₅	11/80 3/81, 10/82
120370004A07	Pearl City (HI)	TSP SSS PM ₁₅	8/79, 1/81, 2/81 8/79, 9/79, 1/81, 8/81 9/79
130220003A07	Boise (Fire Station #6)	TSP SSS PM ₁₅ PM ₁₀	6/80, 12/80, 2/81, 8/81, 4/83 6/80, 1/81 7/80 9/82
141220014A07	Chicago (Farr Dormitory)	TSP SSS PM ₁₅	8/79, 5/82 10/80 7/79
141220022A07	Chicago (Washington HS)	TSP SSS PM ₁₅ PM ₁₀	8/79, 5/82, 1/83 8/79, 1/80, 11/80 10/80 1/82
142360010A07	Chicago (Evanston)	TSP SSS PM ₁₅	7/79, 3/82, 2/83, 10/83 6/80 5/82, 2/83
148320007A07	Chicago (Braidwood)	TSP SSS PM ₁₅	8/79, 8/80, 3/81 6/80 9/79, 5/82
151520016A07	Gary (Federal Bldg)	TSP SSS PM ₁₅ PM ₁₀	8/80, 2/83, 4/83, 5/83, 10/83 6/80 8/79, 8/82 10/82

152040021A07	Indianapolis (Michigan St)	TSP SSS PM ₁₅	9/80, 3/82, 1/83 9/80 9/82, 1/83
152160002A07	Jeffersonville (Library)	TSP SSS	8/80 9/80
1625000003A07	Marshalltown (City Hall)	TSP SSS PM ₁₅	2/80, 2/81, 4/82 2/80 6/80
1625000004A07	Marshalltown (Fisher Sch)	TSP SSS PM ₁₅	10/80 10/80 8/82
171800011A07	Kansas City KS (Fairfax)	TSP PM ₁₅ PM ₁₀	12/79 1/80 1/83, 8/83, 9/83
173560007A07	Topeka (Quincy Sch)	TSP SSS PM ₁₅	3/80 3/80 6/81, 4/82
173740012A07	Wichita (Sedgwick Ave)	TSP SSS PM ₁₅	11/80, 12/82, 5/83 6/79, 1/83
180080002A07	Ashland (Oil Refinery)	TSP SSS PM ₁₅	8/80 6/80 6/81
183090001A07	Louisville (Okolona)	TSP SSS PM ₁₅ PM ₁₀	8/80, 4/83, 7/83, 9/83 8/80 8/82 9/83
200010001A07	Acadia National Park	TSP SSS PM ₁₅	10/79, 4/82, 5/83 11/79 1/81, 6/83, 8/83

(C) - Collocated

210120001A07	Baltimore (Fire Dept HQ)	TSP SSS PM ₁₅	6/80, 2/82, 8/83 6/80, 4/81 7/81, 6/82, 7/83
210120008A07	Baltimore (SE Police Sta)	TSP SSS PM ₁₅	8/79 8/79, 1/81 7/81
210120009A07	Baltimore (SW Police Sta)	TSP PM ₁₅	7/79, 6/80, 6/82 7/79, 6/80, 5/82, 6/83
211380002A07	Rockville (City Hall)	--	--
211380007A07	Rockville (Maryvale Sch)	TSP SSS PM ₁₅	6/80, 1/83, 9/83 6/80 6/81, 3/82, 7/83
220240012A07	Boston (Fire HQ)	TSP SSS PM ₁₅ PM ₁₀	11/79, 3/81, 7/81, 2/83, 4/83, 9/83 10/79, 7/80, 3/81, 7/81 11/79, 9/82 5/83
220240013A07	Boston (E Bost SOC Ctr)	TSP SSS PM ₁₅	10/79, 8/80, 3/81, 9/81 9/80, 6/81 11/79
222160011A07	Springfield (Howard St)	SSS PM ₁₅ PM ₁₅ (C)	4/81 3/81 3/81
222640016A07	Worcester (YMCA)	SSS PM ₁₅ PM ₁₅ (C)	9/80 3/81 3/81
231180015A07	Detroit (Southwest HS)	TSP SSS PM ₁₅ PM ₁₀	1/81, 5/83 1/81 8/82 5/83
231180020A07	Detroit (APC HQ)	TSP SSS	1/81 1/81

241040025A07	Duluth (Elliott Meats)	TSP SSS	8/80 6/80
241620007A07	Int Falls (Custom Bldg)	TSP SSS	8/80 6/80
242260049A07	Minneapolis (Regina HS)	TSP PM ₁₅	8/79,3/80,9/80 8/79
242260051A07	Minneapolis (Nicollet)	TSP SSS PM ₁₅	8/79,3/80,9/80 8/79,12/80 8/79,8/82
243300003A07	St Paul (Fire Sta)	TSP SSS PM ₁₅	8/80,11/80,4/83 6/80 12/81,5/83
251260001A07	Jackson (Sun & Sand Motel)	TSP SSS PM ₁₅	11/80 3/81,10/82
260030001A07	St. Louis (Afton)	TSP SSS PM ₁₅	12/79,7/80 6/80,11/80,3/81 1/80,4/82
262380022A07	Kansas City MO (Fire Sta)	TSP SSS PM ₁₅	12/79,1/80,6/80,10/80,1/81,7/81,12/81 12/79,6/80,1/81 6/81,12/82,9/83
264280007A07	St Louis (S Broadway)	TSP SSS PM ₁₅ PM ₁₀	12/79,5/83 12/79 1/80,1/82 3/83
270160005A07	Butte (Greely Sch)	--	--
271100020A07	Missoula (Rose Lawn)	--	--
281880028A07	Omaha (O Street)	TSP SSS PM ₁₀	3/80,12/80,5/81,5/82,6/82,12/82 5/80,1/81 1/83

290480001A07	Reno (Kirmen St)	TSP SSS PM ₁₅ PM ₁₀	6/80, 12/80, 9/81, 12/81, 4/82, 12/82, 6/83 6/80, 1/81, 4/81, 9/81, 11/81 7/81, 4/82 6/83
290580001A07	Winnemucca	TSP PM ₁₅	8/79 7/79
310720005A07	Camden	TSP SSS PM ₁₅	8/80, 7/81 6/80 3/81, 9/82
311380001A07	Livingston	TSP SSS PM ₁₅	6/79 5/80 7/79
312320005A07	Jersey City (Bay St)	TSP SSS PM ₁₅	8/80, 8/81 6/80 3/81, 10/82, 5/83
320040001A07	Albuquerque (YMCA)	TSP SSS PM ₁₅ PM ₁₀	9/80, 3/83 9/80 12/80, 7/82 10/82
320090001A07	Bayard (Cobre Sch)	TSP SSS PM ₁₅ PM ₁₀	9/80 9/80 9/80 10/82
330660003A07	Buffalo (PS #26)	TSP SSS PM ₁₅	6/79, 10/80, 3/81 12/80 7/79
330660010A07	Buffalo (PS #28)	TSP SSS PM ₁₅ (C) PM ₁₅ PM ₁₀	5/79, 10/80, 2/81, 2/82, 6/82, 1/83, 2/83, 8/83, 10/83 12/80, 3/82, 1/83 8/81, 8/82 8/81, 8/82 8/82

(C) - Collocated

332000003A07	Angola (Big Sister STP)	TSP SSS PM ₁₅	7/79, 10/80, 2/81 10/80 7/79, 6/82
333520001A07	Buffalo (Wilmuth Pump Sta)	TSP SSS SSS(C) PM ₁₅ PM ₁₀ PM ₁₀ (C)	6/79, 10/80, 11/80, 3/81 7/79, 5/80, 10/80, 3/81 11/80 1/81, 8/82 8/82 8/82
334680005A07	NYC (Central Park)	TSP SSS PM ₁₅	6/79 6/79 12/80, 10/82
334680011A07	NYC (Green Point)	TSP SSS PM ₁₅	6/79 12/80, 1/83 7/79
334680079A07	NYC (Intermed Sch #45)	TSP SSS PM ₁₅	5/79, 4/83, 5/83 11/80 10/82, 1/83
340700010A07	Charlotte	TSP SSS PM ₁₅	9/80, 4/81, 10/81, 11/82 9/80, 11/81 9/80, 8/82
341160006A07	Durham (Cameo Bldg)	TSP TSP(C) SSS SSS(C)	6/79, 11/80 9/80 5/79, 11/80 9/80
341160101A07	Res Triangle Park (Beaunit)	TSP SSS	6/79, 3/80, 6/80, 12/80 5/79, 12/79, 3/80, 6/80
341160102A07	Res Triangle Park (RTI)	TSP SSS PM ₁₅	6/80 2/80, 6/81, 1/83
360060014A07	Akron (Morley Health Ctr)	TSP SSS PM ₁₅	4/79, 8/79, 7/80 4/79, 4/81 5/79

361220020A07	Cincinnati (Drake Mem)	TSP SSS PM PM15 PM10	7/79, 3/80, 7/80, 12/80, 2/83, 9/83 7/79, 9/80, 2/81, 6/81, 11/81 11/80, 10/82 9/83
361300013A07	Cleveland (APCD HQ)	TSP SSS PM PM15 PM10	4/79, 8/79, 7/80, 7/82, 1/83, 5/83, 11/83 6/80, 5/81 4/79 8/83
361300021A07	Cleveland (Rhodes HS)	TSP SSS PM PM15	4/79 6/80, 1/83 4/79, 9/82
361300041A07	Cleveland (Washington Pk)	TSP SSS PM PM15	4/79, 7/82 4/79, 2/80 3/81, 9/82, 9/83
361460001A07	Columbus (S Washington)	TSP SSS	8/80, 5/81, 10/81 6/80, 5/81, 10/81, 1/83
361660014A07	Dayton (E Monument)	TSP SSS PM PM15	8/80, 7/82 6/80, 3/81 6/81, 10/82
363080010A07	Ironton (Hospital)	TSP SSS PM PM15	8/80, 6/81, 10/81, 1/83 6/80, 6/81 7/80, 10/82
364140002A07	Medina (W Liberty)	TSP SSS PM PM15 PM10	5/79, 9/80 4/79, 4/80, 9/80 1/80, 9/82 9/83
364340005A07	Middletown (Brentwood)	TSP SSS PM PM15	8/80, 3/81, 7/81, 11/81, 3/82, 7/82, 11/82 8/80, 3/81, 11/81 7/81, 10/82

(C) - Collocated

366420012A07	Steubenville (Washington)	TSP SSS PM ₁₅ PM ₁₅ (C) PM ₁₀	5/79, 12/79, 6/80, 10/80, 6/82, 4/83, 9/83, 10/83 4/79, 12/79, 10/80, 4/83, 7/83, 9/83, 10/83 8/81, 9/82, 9/83 8/81, 9/82, 9/83 9/82, 9/83
367760002A07	Youngstown (Fire Sta)	TSP SSS PM ₁₅ PM ₁₀	8/80, 3/81, 1/83, 9/83 6/80, 9/80 8/80, 9/82 9/83
3722000035A07	Oklahoma City (Fire Sta)	TSP SSS PM ₁₅	8/80, 5/81, 3/83 9/80, 5/81 3/81
3805000104A07	Sauvie Island	TSP SSS PM ₁₅	9/79, 10/80, 4/81 6/80, 12/80, 6/81, 10/81 9/79, 8/82
380560013A07	Eugene (Lane College)	TSP SSS PM ₁₅	6/80, 8/80, 12/80 6/80, 12/80 8/80
381460015A07	Portland (Ctrl Fire Sta)	TSP SSS PM ₁₅ PM ₁₀	9/79, 7/80, 10/80, 3/81, 2/83 9/79, 6/80, 10/80, 3/81, 9/81 9/79 8/82
390100064A07	Pitt (S Allegheny HS)	TSP SSS PM ₁₅	8/80, 8/81, 5/82, 2/83 9/80, 8/81 7/81, 10/82
390100068A07	Pitt (W Allegheny Co High)	TSP SSS PM ₁₅	6/79, 3/83, 8/83, 9/83, 10/83 7/81, 4/82, 9/83
390400002A07	Pittsburgh (Avalon)	TSP SSS PM ₁₅	8/80, 3/83, 9/83, 10/83 9/80 7/81, 10/82, 9/83

390780725A07	Bethlehem	TSP SSS PM ₁₅	9/80, 3/81 9/80, 3/81 6/81, 10/82
396620001A07	Pitt (North Braddock)	TSP SSS PM ₁₅ PM ₁₀	7/79, 11/79, 7/80, 1/81, 6/81, 11/81 7/79, 7/80, 1/81, 4/82, 6/83, 9/83, 10/83 8/81 8/81, 10/82, 9/83
397140003A07	Phila (500 S Broad St)	TSP TSP(C) SSS SSS(C) PM ₁₅ PM ₁₅ (C) PM ₁₅ PM ₁₀ (C)	3/79, 1/80, 9/83 3/79, 10/79, 1/83, 9/83 4/79, 10/79, 2/80, 3/80 4/79, 10/79, 3/80, 5/80, 1/83 8/81, 9/82 8/81, 9/82 8/81, 9/82 8/81, 9/82
397140019A07	Phila (Allegheny Av)	TSP SSS PM ₁₅	3/79, 11/79 4/79, 11/79, 1/80 9/82
397140020A07	Phila (Belmont Filter Pl)	--	--
397140023A07	Phila (SE Water Treat Pl)	--	--
397140024A07	Phila (NE Airport)	TSP SSS PM ₁₅	4/79, 10/79 5/80 10/79
397140032A07	Phila (Gratz College)	--	--
397140036A07	Phila Pres Home	TSP SSS PM ₁₅	3/79, 10/79 5/80 11/79
397140037A07	Phila (Temple Univ)	--	--
397140038A07	Phila (St John Cantius)	TSP SSS PM ₁₅	3/79, 10/79 4/79, 10/79, 1/80, 11/80 3/79, 9/82

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397260021A07	Pitt (Hazelwood #2)	TSP PM ₁₅	7/79, 1/81, 2/81, 3/82, 1/83, 4/83, 9/83, 10/83 7/79, 10/82, 9/83
410300012A07	Providence (Rockeff Lib)	SSS PM ₁₅	11/80 1/81, 9/82, 5/83
420560003A07	Charleston SC (Fire Sta)	SSS PM ₁₅	4/81 3/81, 10/82, 4/83
440380006A07	Chattanooga (WDEF)	TSP SSS PM ₁₅	8/80, 11/80, 10/81, 4/83 6/80, 3/81 3/81, 8/82, 8/83
442540006A07	Nashville (8th Ave)	TSP SSS PM ₁₅	8/80, 9/81, 5/82 8/80 3/81, 8/82
451310050A07	Dallas (Convention Ctr)	TSP SSS PM ₁₅	10/79, 1/80, 8/80, 12/80, 3/82 10/79, 6/80, 8/80, 12/80
451700002A07	El Paso (Tillman Ctr)	TSP SSS PM ₁₅ PM ₁₀	9/79, 10/80, 5/81, 1/83 9/79, 10/80, 5/81 10/79 1/83
451710004A07	El Paso (Clint)	TSP PM ₁₅	10/79, 10/80, 6/81, 3/82 10/79
452330024A07	Houston (CAMS-8)	TSP PM ₁₅	10/79, 3/81 9/79
452560034A07	Houston (CAMS-1)	TSP SSS PM ₁₅ PM ₁₀	9/79, 12/80, 2/83 10/79, 12/80, 9/82 8/81, 9/82, 9/83 8/81, 9/82, 9/83
454715001A07	Houston (Seabrook)	TSP SSS PM ₁₅	10/79, 2/82, 3/82, 9/82, 2/83, 6/83 6/80 9/82

460520001A07	Magna (Brockbank Jr HS)	TSP SSS PM PM ₁₅ PM ₁₀	5/80, 1/83, 2/83 4/80 3/81 1/83
460920001A07	Salt Lake City (6 S 200 E)	TSP SSS PM PM ₁₅ PM ₁₀	5/80, 1/83 4/80 3/81 1/83
480200020A07	Arlington	TSP SSS	6/80, 1/81, 5/81 6/80, 1/81, 5/81
481440005A07	Hampton (VA Sch)	TSP SSS	8/80, 2/81 6/80, 2/81
481560002A07	Hopewell (News Bldg)	TSP SSS PM ₁₅	6/80, 3/81 6/80, 3/81 8/80, 8/82
482140007A07	Norfolk (Old Dominion U)	TSP SSS PM ₁₅	8/80, 12/80, 10/81 6/80, 12/80 6/81, 8/82
482630001A07	Fairfax (Great Falls)	TSP SSS PM PM ₁₅ PM ₁₀	8/80, 10/80, 1/81, 3/83 6/80 7/80, 8/82 3/83
482660002A07	Richmond VA	TSP SSS	6/80, 4/81, 9/81 6/80
491840057A07	Seattle (Duwamish Pump)	TSP SSS SSS(C)	9/79, 6/81, 9/81, 1/82, 1/83 9/79 11/80
491840073A07	Seattle (City Light Co)	TSP SSS PM ₁₅	9/79, 3/81 11/80 9/79

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492040013A07	Spokane (Boone St)	TSP SSS PM ₁₅ PM ₁₀	5/80, 8/80 6/80, 1/83 7/80 8/82
500280004A07	Charleston WV (E Washgtn)	TSP SSS PM ₁₅	8/80 6/80 3/81, 10/82
502000002A07	Weirton	TSP SSS PM ₁₅	8/80, 6/83, 7/83 6/80 3/81, 10/82
502120002A07	Wheeling	TSP SSS PM ₁₅	8/80, 5/81, 7/83 8/80, 5/81 3/80, 10/82, 9/83
510240002A07	Beloit (Fire Station)	TSP SSS PM ₁₅	8/80, 2/81, 3/83 6/80, 2/81 7/81, 7/82
511180009A07	Green Bay	TSP SSS PM ₁₅	8/80, 1/81, 5/81, 9/81, 3/82, 7/82, 11/82 6/80, 1/81, 5/81 7/81, 2/82, 9/82

(c) - Collocated)

APPENDIX F

IPN QUALITY ASSURANCE FLOW AUDITS % DIFFERENCE

SITE	REGION	STATE	NAME	START DATE	AUDIT DATE	END DATE	TSP	SSI	DICHOT	DICHOT	DICHOT
									15 TOTAL	15 COARSE	10 TOTAL
											COARSE
010380003A07	4	AL	South Birmingham	08/79	10/79	+ 2.8			+ 1.9	+23.2	
				11/80	- 1.2				+ 0.2	+ 9.9	
				01/82	11/81				-23.4	+ 1.2	
010380023A07	4	AL	North Birmingham (S 20th)	07/79	10/79	- 2.1					
				11/80	- 6.3	- 9.4			+ 1.7	^a	
				01/82					+ 2.9	+ 1.8	
				01/82					+ 2.8	+ 3.1	
				03/83	- 5.9	- 2.4			+ 3.3	- 2.7	+ 3.0
				03/83					+ 3.3	+ 1.2	
010380026A07	4	AL	Inglewood	07/79	10/79	+ 6.0			- 0.5	- 4.0	
				11/80	^a				-11.2	+ 7.7	
				01/82	11/81				-10.5	+ 8.4	
010570001A07	4	AL	Huffman	05/80	11/80	+ 0.7		- 4.0	+ 1.2	- 2.9	
012380029A07	4	AL	Mobile (WRG Tower)	09/81	01/82				+ 2.2	+ 3.1	
				03/83	03/83				+ 7.0	- 6.2	
012540001A07	4	AL	Htn Brook	07/79	10/79	0.0			+ 2.8	+72.5	
				11/80	-12.5				- 1.0	+47.8	
				01/82	03/82				^a	^a	
013200001A07	4	AL	Tarrant (Pinson St.)	07/79	10/79	- 1.4			+ 2.0	+77.9	
				11/80	- 7.7	- 8.2			+ 1.3	- 2.9	
				01/82					- 1.5	- 4.6	
				03/83	- 4.6				+ 4.5	+ 3.7	
020040003A07	10	AK	Anchorage	08/80	07/81	- 7.6		- 2.3			
				09/83	- 0.3				-18.7	-14.4	
030440006A07	9	AZ	Carefree Airport	08/79	10/79	+ 5.2			+ 4.1	+ 2.5	
				02/81	+11.8	+15.2			- 0.2	+ 9.2	
				08/82	10/82	- 2.7			- 0.8	+ 6.4	

IPN QUALITY ASSURANCE FLOW AUDITS % DIFFERENCE

SITE	REGION	STATE	NAME	START DATE	AUDIT DATE	END DATE	TSP	SSI	DICHOT 15 TOTAL	DICHOT 10 COARSE	DICHOT 10 TOTAL	DICHOT COARSE
030600002A07	9	AZ	Phoenix (Roosevelt St)	08/79	03/81 08/82 09/83	-	- 6.6 + 1.1 - 3.6	- 3.7 + 14.4 - 4.1	+ 13.2 + 26.5 + 1.3	+ 9.2 + 23.7 + 18.4	+ 3.5	+ 23.7
030600004A07	9	AZ	North Phoenix	08/79	10/79 03/81	+ 9.2 -11.2	-	+ 6.3 + 7.1	- 1.2 + 50.4	- 1.2 + 50.4		
041440001A07	6	AR	Little Rock	11/80	03/83	+ 3.6	-	+ 6.9	- 7.2	-		
050500002A07	9	CA	Azusa (Loren Ave)	08/79	10/79 07/81 09/83	+ 6.8 + 3.8 +11.7	0.0	+ 5.2 + 5.2 +2.1	- 6.3 - 6.3 + 1.2	- 4.6 - 4.6 + 1.2		
050520003A07	9	CA	Bakersfield (Chester Ave)	09/80	07/81 08/82 07/83	- 1.1 + 1.0 + 7.6	-	- 2.5 + 7.3 - 6.3	+ 4.4 + 4.4 - 2.9	+ 2.5 + 1.8 - 6.3		
051260002A07	9	CA	Chico	08/80	07/81 08/82 07/83	- 2.2 + 0.6 + 1.9	-	-14.2 + 0.6 + 7.6	-	- 3.9 + 16.8	a	
052220003A07	9	CA	San Diego (El Cajon)	09/81	08/82 07/83	+ 1.1 - 0.6	-	-	-12.4 + 6.9	+ 10.6 + 19.3		
052800005A07	9	CA	Fresno (E Olive)	08/80	07/81 08/82 07/83	- 9.4 + 6.6	-	+ 7.6	+ 3.4 + 7.7	+ 1.2	a	
052820002A07	9	CA	Five Points	09/79	08/82	10/82	-	-	- 5.6	+ 1.2		
054020002A07	9	CA	Livermore (Railroad Ave)	09/79	02/80	12/80	+ 0.7	+ 1.3	- 3.5			
054020003A07	9	CA	Livermore (Old First St)	03/81	07/81 08/82	+ 4.8 08/82	-	+ 4.4	- 1.2 + 7.7	- 5.1		

IPN QUALITY ASSURANCE FLOW AUDITS % DIFFERENCE

SITE	REGION	STATE	NAME	START DATE	AUDIT DATE	END DATE	TSP	SSI	DICHOT	DICHOT	DICHOT	DICHOT
									15	15	10	10
									TOTAL	COARSE	TOTAL	COARSE
054080002A07	9	CA	Lompoc	08/80	07/81 08/82	03/83	- 1.3 - 7.2	+ 1.3	+ 0.4	- 5.1	- 3.2	- 1.8
054180103A07	9	CA	West Los Angeles	07/79	10/79 07/81 08/82	10/82	+ 1.4 + 1.8	+ 8.9	- a	- 6.7	- 3.5	- 2.9
055760004A07	9	CA	Pasadena	07/79	10/79 07/81	12/81	- 2.1	- 0.3	+60.4	+68.7		
056300003A07	9	CA	Richmond CA	09/79	02/80 07/81 08/82	10/82	- 2.7	+ 5.8	- 1.1	- 8.2	+ 2.8	+ 1.2
056535001A07	9	CA	Rubidoux (Riverside)	08/79	10/79 07/81 08/82 09/83		+11.8	+ 0.6 - 1.8	+ 1.3	+ 8.4	+ 1.0	+ 3.7
056686003A07	9	CA	San Francisco East	11/79	02/80 07/81 08/82		+ 0.0	- 1.0	- 7.1	+ 0.0	+ 8.2	+ 9.2
056980004A07	9	CA	San Jose	09/79	02/80 07/81 08/82		- 1.1	+ 2.9	- 1.6	- 4.4	- 5.3	5.7
060080003A07	8	CO	Denver (Buckley Field)	07/80	02/81 09/83		+15.3 -12.8	+ 2.4	+ 1.8	- 4.6	+ 2.6	- 1.2
060580001A07	8	CO	Denver (14th Street)	07/80	02/81 09/83		+16.2 a	+12.5	-11.5	- 7.2		
061260001A07	8	CO	Denver (Lakewood)	07/80	02/81	03/83	+ 9.7	+ 2.2				

IPN QUALITY ASSURANCE FLOW AUDITS % DIFFERENCE

SITE	REGION	STATE	NAME	START DATE	AUDIT DATE	END DATE	TSP	SSI	DICHOT	DICHOT	DICHOT	DICHOT
									15	15	10	10
									TOTAL	COARSE	TOTAL	COARSE
061820001A07	8	CO	Pueblo (Central Main St)	07/81	09/83		- 5.1		+ 5.8	- 0.6		
062220101A07	8	CO	Fort Collins	04/82	09/83	a			+ 6.7	+ 6.4		
070420003A07	1	CT	Hartford (Public Library)	01/80	11/80	- 5.7	- 6.7	- 1.7	- 5.7			
070478001A07	1	CT	Morris Dam (Litchfield Co)	12/79	11/80	- 5.7			+ 3.6	- 0.6		
080020001A07	3	DE	Dover (Police Station)	08/79	07/80	12/81	- 7.9		+ 8.5	+ 1.8		
080180001A07	3	DE	Wilmington DE (Claymont)	09/80	02/82	- 0.2	+ 5.1		+15.8	+ 27.9		
090020017A07	3	DC	Washington (L Street)	09/79	02/80	8.1			a	a		
090020019A07	3	DC	Washington (Garrison Sch)	08/80	02/82	12/81			- 3.1	- 15.2		
104360035A07	4	FL	Tampa (Davis Island)	08/81	01/82	03/83			-23.9	-10.2		
110200001A07	4	GA	Atlanta (Butler Street)	07/80	11/80	+ 3.0	+ 5.9	+ 8.5	- 0.2	- 8.8		
110200039A07	4	GA	Atlanta (Marietta Blvd)	07/80	11/80	+ 0.6	-15.6	+ 7.0	+ 6.9	+ 7.1		
114500017A07	4	GA	Savannah (Scott Mid Sch)	08/81	01/82	11/82	- 3.8		+ 6.2	+ 0.6		
120370004A07	9	HI	Pearl City (HI)	09/79	02/80	+14.5	- 0.9	- 4.3	- 2.7	- 0.6		
130220003A07	10	ID	Boise (Fire Station #6)	08/80	07/81	10/82	- 6.6		+11.9	+ 5.0		
					09/83	+10.0	a	- 9.4	- 7.7			

IPN QUALITY ASSURANCE FLOW AUDITS % DIFFERENCE

SITE	REGION	STATE	NAME	START DATE	AUDIT DATE	END DATE	TSP	SSI	DICHOT	DICHOT	DICHOT	DICHOT
									15	15	TOTAL	COARSE
141220014A07	5	IL	Chicago (Farr Dormitory)	10/79	03/81	08/82	a	- 0.4	+ 2.1	- 6.7		
141220022A07	5	IL	Chicago (Washington HS)	02/81	03/81		a	- 5.1	+ 8.4	+ 8.4		
142360010A07	5	IL	Chicago (Evanston)	07/81	-			- 3.7	- 3.3	a		
148320007A07	5	IL	Chicago (Braewood)	09/79	03/81	09/82	- 7.1	+ 3.1	+10.4	-12.1		
151520016A07	5	IN	Gary (Federal Bldg)	05/81	01/83		a		a	a		
152040021A07	5	IN	Indianapolis (Michigan St)	10/80	03/81		+ 8.1	+ 7.1	+ 4.7	+ 1.8		
152160002A07	5	IN	Jeffersonville (Library)	11/80	-	03/82						
162500003A07	7	IA	Marshalltown (City Hall)	08/80	04/81	10/82	-	-11.0	- 3.7	+ 7.1	+ 3.1	
162500004A07	7	IA	Marshalltown (Fisher Sch)	08/80	04/81	02/83	a		a	- 0.9	a	
171800011A07	7	KS	Kansas City KS (Faxfax)	02/80	06/80		- 2.9		+ 7.5	- 1.8		
				03/81	03/81		- 5.3		- 5.0	-12.9		
				01/83	01/83		- 0.6		- 4.2	- 0.6		
173560007A07	7	KS	Topeka (Quincy Sch)	07/80	03/81		+ 0.3	- 2.4	+18.6	+16.8		
173740012A07	7	KS	Wichita (Sedwick Ave)	08/81	03/83	06/83			+ 7.1	+50.5		
180080002A07	4	KY	Ashland (Oil Refinery)	10/80	03/81	11/81	a					
183090001A07	4	KY	Louisville (Okolona)	11/80	03/81		- 0.2	+ 9.8	+ 3.9	+ 1.8		
				11/82			+ 1.1					

IPN QUALITY ASSURANCE FLOW AUDITS % DIFFERENCE

SITE	REGION	STATE	NAME	START DATE	AUDIT DATE	END DATE	TSP	SSI	DICHOT	DICHOT	DICHOT	DICHOT
									15	15	TOTAL	COARSE
200010001A07	1	ME	Acadia National Park	02/80	05/83			- 0.7		+ 9.0		+ 2.5
210120001A07	3	MD	Baltimore (Fire Dept HQ)	08/80	11/80 02/82 06/83			- 1.7 a a	+ 8.4	- 0.6 a	- 6.3 a	- 6.3
210120008A07	3	MD	Baltimore (SE Police Sta)	12/80	11/80	12/81	+23.3	-20.0				
210120009A07	3	MD	Baltimore (SW Police Sta)	08/79	02/80 11/80 02/82 06/83			- 6.8 a a	- 10.1	- 3.1 + 0.8 + 43.5	- 6.7 + 43.3 +11.4	- 6.7
211380002A07	3	MD	Rockville (City Hall)	10/80	02/82	08/81	- 6.0		a	a	a	a
211380007A07	3	MD	Rockville (Maryvale Sch)	09/81	06/83	05/83	- 0.7					
220240012A07	1	MA	Boston (Fire HQ)	12/79	07/80 02/82 05/83			+ 5.0 +19.1 - 8.7	+ 2.6	+42.6 +10.9 + 3.7	+ 6.3 - 5.4 + 3.7	+ 1.2 - 8.7
220240013A07	1	MA	Boston (E. Boston SOC Ctr)	12/79	07/80	12/81	+ 1.4			+15.8	+ 2.5	
222160011A07	1	MA	Springfield (Howard St)	06/81	02/82	09/82				+ 0.8	- 2.9	
222640016A07	1	MA	Worcester (YMCA)	06/81	02/82 02/82	08/82			+ 6.4	+ 1.7	+ 6.0	
231180015A07	5	MI	Detroit (Southwest HS)	08/80	04/81 01/83	11/81	+ 3.3 - 3.9	+ 0.4		- 0.4	- 0.6	
231180020A07	5	MI	Detroit (APC HQ)	08/80	04/81	12/81	+ 2.0					
241040025A07	5	MN	Duluth (Elliott Meats)	09/80	04/81	12/81	+ 3.1					
241620007A07	5	MN	Int Falls (Custom Bldg)	09/80	04/81	10/81	a	+ 8.6				

IPN QUALITY ASSURANCE FLOW AUDITS % DIFFERENCE

SITE	REGION	STATE	NAME	START DATE	AUDIT DATE	END DATE	TSP	SSI	DICHOT			DICHOT		
									15 TOTAL	15 COARSE	10 TOTAL	10 COARSE	10 TOTAL	10 COARSE
242260049A07	5	MN	Minneapolis (Regina HS)	09/79	06/80 04/81	01/82	+ 0.0 a	+ 27.0 + 4.3	+ 5.0 + 0.5					
242260051A07	5	MN	Minneapolis (Nicollet)	11/79	06/80 04/81	- 8.8 a	+ 1.8 - 4.6	+17.6 + 0.2	+ 6.3 + 0.5					
243300003A07	5	MN	St Paul (Fire Sta)	09/80	04/81 01/83	+ 2.9 - 0.1	- 1.5	- 0.7	- 1.8					
251260003A07	4	MS	Jackson (Sun & Sand Motel)	08/81	01/82	02/83		+ 5.5	+ 1.8					
260030001A07	7	MO	St. Louis (Afton)	01/80	06/80 01/83	+ 0.0	+12.9 + 1.3	+ 2.5 + 0.0						
26238002A07	7	MO	Kansas City MO (Fire Sta)	02/80	06/80 01/83	- 1.5	+11.3 + 0.7	+14.4 - 2.9	- 1.2					
264280007A07	7	MO	St Louis (S Broadway)	04/80	06/80 01/83	12/82	- 5.6 -13.5	+ 3.5 a	a					
270160005A07	8	MT	Butte (Greely Sch)	02/82	09/83			+ 5.4	- 6.7					
271100020A07	8	MT	Missoula (Rose Lawn)	04/82	09/83			+ 5.0	- 1.2					
281880028A07	7	NE	Omaha (O Street)	07/80	03/81 03/83	- 3.0 + 2.9	- 2.6	+ 3.7	+ 1.8					
290480001A07	9	NV	Reno (Kirman St)	08/80	07/81 09/83	+ 5.6 + 1.7	+ 9.3	- 4.0	- 7.2					
290580001A07	9	NV	Winnemucca	09/79	08/82	10/82		- 4.1	- 3.5					
310720005A07	2	NJ	Camden	09/80	11/80 02/82	+ 1.2 02/83	- 1.3	- 3.8	- 1.2					

IPN QUALITY ASSURANCE FLOW AUDITS % DIFFERENCE

SITE	REGION	STATE	NAME	START DATE	AUDIT DATE	END DATE	TSP	SSI	DICHOT			DICHOT		
									15	15	TOTAL	COARSE	TOTAL	COARSE
311360001A07	2	NJ	Livingston	08/80	11/80	- 0.8	a	+ 2.2	- 6.2					
312320005A07	2	NJ	Jersey City (Bay St)	09/80	11/80	+ 4.3	a	+ 1.3	- 8.7					
320040001A07	6	NH	Albuquerque (YMCA)	11/80	07/81 03/83	-40.5 a	a	+ a	+ a					
320090001A07	6	NH	Bayard (Cobre Sch)	12/80	07/81 03/83	+20.2 +32.5	- 3.6	+ 6.6	- 5.0					
330660003A07	2	NY	Buffalo (PS #26)	08/79	02/80	+ 5.2	- 8.8	+ 20.1						
330660010A07	2	NY	Buffalo (PS #28)	08/79	02/80	-19.0 02/82 05/83	- 7.4 + 2.6	-15.2 + 1.6	- 3.9	+ 10.6				
332000003A07	2	NY	Angola (Big Sister STP)	08/79	02/80 02/82	+ 6.0 10/82	-	- 11.0	- 16.5					
33352001A07	2	NY	Buffalo (Wilmuth Pump Sta)	05/81	02/80 02/82 05/83	- 3.4 + 6.5	-	+ 7.5	+ 5.0					
334680005A07	2	NY	NYC (Central Park)	02/81	02/82	- 1.0	-	- 6.3	- 4.8					
334680011A07	2	NY	NYC (Green Point)	06/80	02/80 02/82	- 7.8 - 8.1	-	+ 2.0	+ 1.2					
334680079A07	2	NY	NYC (Intermed Sch #45)	08/81	02/82 05/83	- 0.5 06/83 a	-	+ 3.1	- 6.2					

IPN QUALITY ASSURANCE FLOW AUDITS % DIFFERENCE

SITE	REGION	STATE	NAME	START DATE	AUDIT DATE	END DATE	TSP	SSI	DICHOT			DICHOT		
									TOTAL	COARSE	15	10	COARSE	
340700010A07	4	NC	Charlotte	05/81	01/82	02/83	- 3.2	-	+ 3.7	- 6.2				
341160006A07	4	NC	Durham (Cameo Bldg)	05/80	04/81	03/83	+ 3.1	+ 3.7	+ 1.8	+ 8.2	a			
341160101A07	4	NC	Res Triangle Park (Beaunit)	07/79	06/83	06/83	+ 0.0	+ 3.3	+ 1.1	- 3.1				
341160102A07	4	NC	Res Triangle Park (RTI)	10/80	01/82	01/82	- 0.3	+ 2.5	+ 10.1	+14.1				
					01/82	01/82	+ 1.0	- 0.3	- 0.7	- 1.2				
					01/82	01/82	- 0.4	- 0.4	+ 8.4					
					03/82	05/83	- 0.8	+ 7.1						
360060014A07	5	OH	Akron (Morley Health Ctr)	06/79	10/79	10/82	+ 0.0	+ 3.4	+ 0.5	+68.4				
361220020A07	5	OH	Cincinnati (Drake Mem)	08/79	10/79	12/82	+ 0.7	-	- 3.8	a				
					12/82	01/83	-	-	- 0.4	- 4.6				
361300013A07	5	OH	Cleveland (APCD HQ)	07/79	10/79	12/82	+ 2.1	+ 0.8	+ 0.6	+ 1.2				
					07/80	12/82	-	-	- 5.9	- 0.6				
361300021A07	5	OH	Cleveland (Rhodes HS)	02/80	01/80	02/82	+ 1.5	-	+ 2.1	+44.7				
361300041A07	5	OH	Cleveland (Washington Pk)	02/80	01/80	04/83	+18.2	+ 6.5	+ 0.6					
361460001A07	5	OH	Columbus (S Washington)	12/80	03/81	03/82	+12.8	+ 7.8	+ 0.6					
361660014A07	5	OH	Dayton (E Monument)	12/80	12/82	03/83	-	-	- 4.4	+11.3				
363080010A07	5	OH	Ironton (Hospital)	10/80	03/81	03/82	+ 2.1	+11.0	+32.4	+149.3	a			
364140002A07	5	OH	Medina (W Liberty)	01/80	07/80	12/82	+ .08	- 4.2	+ 7.4	- 3.4				
					12/82	a	- 0.1	- 4.0	- 0.1	- 4.0				

IPN QUALITY ASSURANCE FLOW AUDITS % DIFFERENCE

SITE	REGION	STATE	NAME	START DATE	AUDIT DATE	END DATE	TSP	SSI	DICHOT			DICHOT			
									15	15	TOTAL	COARSE	TOTAL	10	10
364340005A07	5	OH	Middletown (Brentwood)	09/80	12/82		- 2.6		- 3.6	- 3.6	- 6.2				
366420012A07	5	OH	Steubenville (Washington)	05/79	11/79 12/82 12/82		- 4.7 + 0.6 + 0.4	- 6.6 + 2.8 + 4.4	+ 9.7 + 2.8 + 4.4	+ 32.8 - 5.1 - 3.5	+ 0.7 + 2.5				
367760002A07	5	OH	Youngstown (Fire Sta)	10/80	04/81 12/82		- 1.9	+ 1.5	+ 15.8 + 0.8	+ 1.8	+ 1.8				
372200035A07	6	OK	Oklahoma City (Fire Sta)	02/81	03/81 03/83		- 0.7 + 1.8	+ 4.7	a	a	a				
380500104A07	10	OR	Sauvie Island	09/79	02/80 07/81	10/82	- 3.4	- 22.9	- 3.2 + 4.3	- 8.7 + 17.6					
380560013A07	10	OR	Eugene (Lane College)	08/80	07/81	03/82	+ 2.0	+ 5.4	+ 13.9	+ 13.9	- 1.2				
381460015A07	10	OR	Portland (Ctrl Fire Sta)	09/79	02/80 07/81 09/83		- 7.5 + 5.2	- 4.2 + 4.1	- 3.0 + 0.6	- 10.7					
390100064A07	3	PA	Pitt (S Allegheny HS)	08/81	02/82 05/83	06/83	- 10.0 + 7.3	- 10.0 + 7.3	- 2.8 - 3.9	+ 3.0 + 7.1					
390100068A07	3	PA	Pitt (W Allegheny Co High)	08/79	11/79 02/82 05/83		- 6.0 a - 7.9	- 6.0 a - 7.9	- 3.2 - 10.8 + 4.3	- 5.2 - 18.5 + 1.2					
390400002A07	3	PA	Pittsburgh (Avalon)	09/80	02/82 05/83		a a	a	+ 6.9 + 5.3	+ 9.5 - 6.7					
390780725A07	3	PA	Bethlehem	10/80	02/82	03/83	- 1.3	- 1.3	- 5.8	- 7.3					

IPN QUALITY ASSURANCE FLOW AUDITS % DIFFERENCE

SITE	REGION	STATE	NAME	START DATE	AUDIT DATE	END DATE	TSP	SSI	DICHOT	DICHOT	DICHOT	DICHOT
									15 TOTAL	15 COARSE	10 TOTAL	10 COARSE
396620001A07	3	PA	Pitt (North Braddock)	08/79	11/79	- 2.7			- 1.8 a	- 6.9		
				02/82					+ 2.0	+ 3.1		
				02/82					- 0.2	- 4.0		
				05/83								
397140003A07	3	PA	Phila (500 S Broad St)	04/79	09/79	- 0.8			+19.1	+60.2		
				09/79c		- 4.7			+11.4	+221.8	+288.4	
				11/80		- 3.8			- 5.4	- 4.6	- 1.2	
				11/80		- 8.4c			- 7.3c	4.2c	a	
				11/80		- 3.9c						
				11/80		- 16.2c						
				02/82		- 6.2c						
				02/82		a			- 6.4	- 6.7		
				02/82					- 4.4	- 4.9		
				02/82					+ 3.9	+ 0.9		
				05/83		- 0.7			+ 2.7	+ 4.4		
				05/83					+ 7.5	+ 7.1		
				05/83					+ 3.6	+ 7.1		
				05/83					+ 8.2	+10.6		
				05/83					+ 0.5	- 2.9		
397140019A07	3	PA	Phila (Allegheny Av)	05/79	09/79	- 6 6			+41.2	+154.5		
				11/80		- 2.0						
				11/80		-7.7c						
				02/82		a						
				02/82					- 1.0	- 3.3		
397140020A07	3	PA	Phila (Belmont Filter Pl)	06/79	09/79	- 4.7			+ 1.5	+ 1.9	+107.5	
397140023A07	3	PA	Phila (SE Water Treat Pl)	06/79	09/79	10/79						
397140024A07	3	PA	Phila (NE Airport)	05/79	09/79	10/79						
				11/80		- 6.7						
				02/82		- 3.8						
				02/82		a						
				10/82		- 7.7						
				10/82		- 2.7						
				10/82		- 0.6						
397140032A07	3	PA	Phila (Gratz College)	05/79	09/79	10/79						
				05/79		- 1.4						
				05/79								

IPN QUALITY ASSURANCE FLOW AUDITS % DIFFERENCE

SITE	REGION	STATE	NAME	START DATE	AUDIT DATE	END DATE	TSP	SSI	DICHOT		
									15	15	TOTAL	COARSE
397140036A07	3	PA	Phila (Presbyterian Home)	05/79	09/79	02/82	01/82	- 1.5	+ 4.3	+ 4.9	
397140037A07	3	PA	Phila (Temple Univ)	05/79	09/79	09/79		+ 5.6	- 1.4	- 4.2	+ 3.1
397140038A07	3	PA	Phila (St John Cantius)	05/79	09/79	11/80		- 2.0	+19.9	+11.4	+179.7
						11/80		- 6.5	-13.2	+28.8	+81.9
						02/82	11/82	^a	+ 2.7c	+8.4c	
								+ 0.3	- 4.3	- 2.9	
397260021A07	3	PA	Pitt (Hazelwood #2)	08/79	11/79	02/82	02/82	-10.1	- 4.0	-13.6	
						05/83		- 6.6	- 1.7	- 6.9	
								+ 0.3	+ 1.3	- 2.9	
410300012A07	1	RI	Providence (Rockeff Lib)	07/81	02/82	05/83	12/82		- 4.7	- 3.5	
420560003A07	4	SC	Charleston SC (Fire Sta)	10/81	01/82	03/83			+ 4.3	-12.6	
440380006A07	4	TN	Chattanooga (WDEF)	09/80	11/82			+12.1	- 1.5	+ 6.4	
442540006A07	4	TN	Nashville (8th Ave)	09/80	03/81	01/82		- 6.0	+ 3.7	- 1.8	
						03/83	03/83	+ 1.2	+ 2.0	+ 7.1	+ 3.1
451310050A07	6	TX	Dallas (Convention Ctr)	01/80	02/80	03/81	10/82	- 7.1	- 5.8	+ 2.7	- 1.2
								- 2.8	+ 1.4	+ 5.0	+ 5.4
451700002A07	6	TX	El Paso (Tillman Ctr)	11/79	02/80	03/81		+ 0.0	- 4.2	- 9.1	-13.9
						03/83		- 0.8	- 6.1	+ 3.4	+ 5.0
								- 1.0	+ 4.6	- 8.2	
451710004A07	6	TX	El Paso (Clinton)	11/79	02/80	03/81		+ 6.0	-11.5	-12.6	
								+ 0.5	- 2.1	+ 3.6	

IPN QUALITY ASSURANCE FLOW AUDITS % DIFFERENCE

SITE	REGION	STATE	NAME	START DATE	AUDIT DATE	END DATE	TSP	SSI	DICHOT			DICHOT		
									15	15	TOTAL	10	10	COURSE
452330024A07	6	TX	Houston (CAHS-8)	12/79	02/80 03/81	03/82	+19.3 +29.2	-	-3.8	+67.7	-	+6.4	-0.6	
452560034A07	6	TX	Houston (CAHS-1)	11/79	02/80 03/81	-	-0.7 -3.3	-2.5	a	a	a	a	a	
454715001A07	6	TX	Houston (Seabrook)	11/79	02/80 03/81	-	-2.0	-8.5 -11.9	+3.6	-2.3	+11.3	-49.1	-	
460520001A07	8	UT	Magna (Brockbank Jr HS)	07/80	07/81 09/83	06/83	-3.6 -2.9	+0.0	-5.7	+1.2	-8.4	+0.0	-	
460920001A07	8	UT	Salt Lake City (6 S 200 E)	07/80	07/81 09/83	-	-4.5	+4.9	+0.4	-2.9	+0.4	-	-	
480200020A07	3	VA	Arlington	08/80	11/80	12/81	-4.4	+11.1	+11.4	+9.9	-	-	-	
481440005A07	3	VA	Hampton (VA Sch)	09/80	11/80	12/81	-	+7.8	+1.0	+9.0	+1.8	-	-	
481560002A07	3	VA	Hopewell(News Bldg)	08/80	11/80 02/82	10/82	-	-5.1 -3.0	-1.5	-3.6	-	-	-	
482140007A07	3	VA	Norfolk (Old Dominion U)	09/80	11/80 02/82	02/83	-	-2.2	-0.4	a	a	a	a	
482630001A07	3	VA	Fairfax (Great Falls)	08/80	11/80 02/82	06/83	-	-1.8 +0.9	-8.4	+20.6	+0.0	-0.9	-5.5	
482660002A07	3	VA	Richmond VA	08/80	11/80	02/81	-	-2.1	-1.9	-	-0.3	-	-2.9	
491840057A07	10	WA	Seattle (Duwamish Pump)	01/82	07/81 07/81	09/83	-	-10.5 +1.6	-8.1	+8.0	+5.7	+4.9	+5.6	
							-	-7.4	+1.8	-2.3	+0.7	-	-6.2	

IPN QUALITY ASSURANCE FLOW AUDITS % DIFFERENCE

SITE	REGION	STATE	NAME	START DATE	AUDIT DATE	END DATE	TSP	SSI	DICHOT	DICHOT	DICHOT	DICHOT
									15 TOTAL	15 COARSE	10 TOTAL	10 COARSE
491840073A07	10	WA	Seattle (City Light Co)	09/79	02/80 07/81	03/82	- 6.0	- 2.5	+ 1.5	- 5.1		
492040013A07	10	WA	Spokane (Boone St)	08/80	07/81 09/83		a	+ 4.8	+ 9.3	+ 0.0		
500280004A07	3	WV	Charleston WV (E Washington)	08/81	02/82 05/83	05/83			-10.2	- 9.7		
5020000002A07	3	WV	Weirton	08/81	02/82 05/83	06/83	+ 1.1 - 0.2		- 3.5	- 1.8		
502120002A07	3	WV	Wheeling	09/80	04/81 02/82 05/83		a	+ 8.3		- 5.2	- 4.0	
510240002A07	5	WI	Beloit (Fire Station)	02/81	03/81 01/83	04/83	- 4.9	+ 5.0	a	a		
511180009A07	5	WI	Green Bay	02/81	03/81 01/83		- 8.9	- 5.6	a	a		

a - Inoperative

b - PM-10

c - Collocated sampler