EPA-600/4-79-039
June 1979

RAPID TECHNIQUES FOR CALCULATING THE POLLUTANT STANDARDS INDEX (PSI)

Revised June 1979

by

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FOREWORD

Monitoring activities provide the most important quantitative information available on the state-of-the-environment, thereby providing a scientific measure of the impact of environmental regulatory actions. To generate valid monitoring data, research is necessary to evaluate and improve measuring instruments and techniques, develop criteria for designing monitoring networks, carry out effective statistical analyses of monitoring data, and give technical support to field monitoring activities. The Environmental Protection Agency's (EPA's) Office of Research and Development (ORD) carries forward a broadly based national research program in air pollution, water pollution, and other environmental topic areas. Within ORD, the Office of Monitoring and Technical Support oversees research and policies concerned with monitoring quality assurance, measurement methods evaluation, advanced monitoring techniques, and improved methods for analyzing and handling environmental data.

This report is intended to provide technical aids that will assist State and local agencies in computing a nationally uniform air pollution index, the Pollutant Standards Index. Use of this index by air pollution control agencies is covered under regulations promulgated by EPA in August 1978, as required by the Clean Air Act Amendments of 1977 (P.L. 95-95).

The report was first issued in March 1978. With EPA's decision to amend the National Ambient Air Quality Standard for ozone (Federal Register, February 8, 1978), this report was revised and reissued in June 1979.

ABSTRACT

Rapid techniques for calculating the Pollutant Standards Index (PSI) for daily public reporting of air quality are discussed. A complete set of original nomograms for calculating the PSI in gravimetric or volumetric units is presented. The nomograms are recommended for use by all State and local air pollution control agencies as ammeans of determining the PSI rapidly and accurately. Examples of linear and logarithmic graphs for calculating the PSI are also included.

Tables for rapidly identifying the critical pollutant on a given day and automatically determining its PSI value to the nearest unit are listed in Appendix A. Tables A-2 and A-4 list the precise pollutant concentrations corresponding to consecutive unit values of PSI between 1 and 500, and can, therefore, provide the definitive verification of estimates of PSI obtained from the nomograms or other graphs. Computer programs for creating these or similar tables appear in Appendix B.

The first edition of this report covered the period from July 1977 to February 1978 and work was completed March 1978. The revised edition covered the period through May of 1979 and work was completed in June of 1979.

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I. INTRODUCTION

In May 1974, Thom and Ott[1] began a national survey of existing air pollution indices--those in the literature and those in use by air pollution control agencies throughout the United States and Canada. The survey, published in 1976, identified the structural characteristics of a candidate national uniform air pollution index.[2,3] In September 1976, the Environmental Protection Agency (EPA) formally adopted an air pollution index based upon this structure, the Pollutant Standards Index (PSI).[4,5]

The PSI was intended to be used by State and local air pollution control agencies for reporting air quality data to the public on a daily basis. At that time, its use by air pollution agencies was completely optional, and a number of agencies adopted it.[6] With passage of the Clean Air Act Amendments of 1977, the PSI has been given greater importance. Section 309 of the Clean Air Act Amendments[7] requires that a national air quality monitoring system be established using a uniform air quality index.

Air pollution index reports generally should be made as current as possible, since the public has little interest in reports that are more than a day old. Thus, a need arises for effective techniques to assist the engineer, data analyst, or field technician in rapidly calculating the PSI on a routine basis.

When the PSI was initially published,[5] graphs of its subindices were included to aid in its calculation. Subsequent reports from air pollution control agencies made it apparent that other computational aids for the PSI were needed. In February 1977, Severn[8] developed a PSI manual containing logarithmic plots for use by the Baltimore Division of Air Pollution Control. The manual consisted of over 20 pages of explanatory materials and graphs for calculating the PSI. In April 1977, Zorbini[9] presented an 11-page table compiled by the North Ohio Valley Air Authority (NOVAA). The table contained integer PSI values and the corresponding concentration values for each pollutant. Other agencies throughout the United States have indicated a similar need for a means of computing the PSI accurately and conveniently from available air monitoring data.

To meet these needs, we have prepared several new computational aids. Foremost among these is the PSI nomogram, which enables the PSI to be calculated rapidly using a pair of charts. This report presents the PSI nomograms for all combinations of pollutants and concentration units.

A second computational approach of importance is the use of tables. A novel departure from most tables has been employed here that unambiguously denotes the PSI to the nearest unit. This approach is somewhat different than that originally proposed by NOVAA, although their original effort contributed

many ideas to the approach taken in this report. Although tables are sometimes unwieldy, they provide the highest precision of any computational aids available, and are useful as references. Finally, computers, minicomputers, and programmable hand calculators afford still another way for computing the index. A FORTRAN computer program to assist the engineer and computer programmer in adapting the PSI to a particular installation is presented in another report.[10] Computer approaches are extremely rapid and precise, but they require data processing equipment that may not be available at some installations.

Within EPA, we have experimented with a variety of techniques for calculating the PSI. The remainder of this report describes each technique, discusses its advantages and disadvantages, and provides a complete presentation of graphs, nomograms, and tables for reference purposes. Additional documentation, including computer programs for making tables, is given in the appendices.

Readers seeking additional information on PSI can obtain the EPA guideline report,[5] or the report on the computer program,[10] by writing to the Environmental Protection Agency Library, MD-35, Research Triangle Park, North Carolina 27711. The history of PSI's development, along with examples of the application of PSI to actual data and the theoretical basis of various air and water pollution index structures, have been summarized in a book.[11]

Although this report was first issued in March 1978 as "Rapid Techniques for Computing the Pollutant Standards Index," the revision of the National Ambient Air Quality Standard for Ozone has necessitated some changes in the nomograms and tables. These changes have been incorporated into this revised edition.

II. STRUCTURE OF THE PSI

The PSI is based upon the Federal National Ambient Air Quality Standards (NAAQS); Episode criteria (Alert, Warning, and Emergency); and Significant Harm levels that have been established for the various air pollutants. It includes six pollutants: carbon monoxide (CO), sulfur dioxide (SO_2), total suspended particulates (TSP), photochemical oxidants (principally O_3), nitrogen dioxide (NO_2), and Coefficient of Haze (COH). Combinations of pollutants as they appear in the Code of Federal Regulations are also included: SO_2 x TSP and COH x SO_2. Each pollutant is represented mathematically in the index by a segmented linear function* called a "subindex." Each subindex relates the observed short-term (24 hours or less) concentration to the subindex value in Table 1:

Table 1

BREAKPOINTS FOR PSI SUBINDICES

Concentration	Subindex Value
50% of NAAQS**	50
NAAQS	100
Alert	200
Warning	300
Emergency	400
Significant Harm	500

One set of breakpoints - TSP x SO_2 in ($\mu g/m^3$) (ppm) - does not appear in the Federal Register and was newly calculated for the PSI. The conversion factor employed in determining the TSP x SO_2 breakpoints was the following:

$$1 \text{ ppm } SO_2 = 2619 \ \mu g/m^3$$

(at 25°C and 760mm)

*A segmented linear function consists of successive straight line segments joined at their end points, or "breakpoints."

**For SO_2 and TSP, the annual NAAQS are used at this level and are interpreted on a 24-hour basis.

This value was based in turn on the following physical constants:

Absolute zero = -273.15°C

Atomic wt. of O = 15.9994

Atomic wt. of S = 32.06

Gas constant R = 0.08205 atm-liters/mole °K

The resulting breakpoints for TSP x SO_2, correct to 4 significant figures are:

Episode Level	PSI	TSP x SO_2 (ppm $\mu g/m^3$)
Alert	200	24.82
Warning	300	99.66
Emergency	400	150.1
Significant Harm	500	187.1

All other breakpoints are found in the Federal Register and also appear in Tables A-1 and A-3. (However, the breakpoints for COH are based upon the "standard" conversion factor between COH and TSP and should be used only if no site-specific conversion factor is available.)

For any given day, the value of the PSI is simply the largest value of the subindices. Mathematically,

$$PSI = \text{Max} \left\{ I_1, I_2, \ldots I_n \right\},$$

where I_1 denotes the first subindex, I_2 denotes the second subindex, and so on. Usually, n = 5. In the current version of the proposed Federal regulation on PSI, a pollutant can be deleted if measurements indicate that PSI values are below PSI = 50 for an extended time period (for example, a season or a year). When the PSI is reported, the pollutant responsible, or the "critical" pollutant, also is identified. If two or more subindices exceed 100, all such pollutants should be identified.

The PSI values are characterized by five health-related terms (Table 2):

Table 2

Range	Descriptor Category
$0 \leq PSI \leq 50$	"Good"
$50 < PSI \leq 100$	"Moderate"
$100 < PSI < 200$	"Unhealthful"
$200 \leq PSI < 300$	"Very Unhealthful"
$300 \leq PSI < 500$	"Hazardous"

A typical report on radio or television might consist of the following statement: "Today's air quality index is 120; the air quality is 'unhealthful'; and the pollutant responsible is carbon monoxide." The index also can be forecast a day in advance using such language as, "no significant change," "increase," or "decrease."

Units

Two sets of units are commonly used in air quality measurements--gravimetric and volumetric. Gravimetric units are mass per unit volume, usually expressed as micrograms of substance per cubic meter of air ($\mu g/m^3$); volumetric units are volume of gaseous pollutant per unit volume of air, often expressed as parts per million (ppm).

The conversion factors between these sets of units are known to about four significant figures (limited, in the case of SO_2, by the variable isotopic abundance of sulfur in the earth's crust.) However, the standards and episode levels appearing in the Federal Register have been rounded off to only one or two (sometimes three) significant figures. Thus, the conversion factors at these levels are inexact, and there is even a small possibility that a concentration reported in one set of units will exceed a standard, while if it is converted correctly to another set of units, it will not exceed the standard. For example, a CO value of 29.8 ppm measured at reference conditions is below the "warning" level of 30 ppm, but, when converted correctly to 34.12 mg/m^3, exceeds the "warning" level of 34 mg/m^3.

Since the PSI is based upon the Federal Register values, it shares this potential ambiguity. However, there is some indication that the Federal Register values may be revised in the future to remove this potential ambiguity. If the Federal Register numbers are revised, then, at that time, the PSI can be altered to agree with whatever new standards and episode levels are adopted.

We have provided tables and nomograms in both sets of units for the convenience of the many agencies measuring gases in volumetric units (ppm). Many State and local agencies use mixtures of units and will wish to "cut and paste" the nomograms here to achieve a custom nomogram for their own use.

III. GRAPHICAL TECHNIQUES

Three main graphical techniques are available for calculating the PSI:

- linear graphs
- logarithmic graphs
- nomograms

Each technique has characteristics that may make it desirable for a given application. The following discussion outlines major advantages and disadvantages of each method.

Linear Graphs

The most straightforward approach is simply to plot the PSI subindex values for each pollutant on ordinary graph paper. Since the PSI is a segmented linear index, only the five or six breakpoints (occurring at PSI values of 50, 100, 200, 300, 400, and 500) for each pollutant need to be plotted. They are then connected by straight lines. For ease of identifying the proper descriptive word for any pollutant concentration, horizontal lines may be drawn at the breakpoints to divide the graph into regions corresponding to the "Good," "Moderate," "Unhealthful," "Very Unhealthful," and "Hazardous" descriptors. These labels should be written directly on the graph to make identification of each region as easy and rapid as possible. An example of such a graph, the CO subindex in ppm, is included in Figure 1.

One advantage of the linear graph is that it can be made with the simplest materials and is very easy to understand by all users. A disadvantage is that it gives the same space to the seldom-attained upper levels of the PSI values as to the the more common lower levels. This defect may be corrected by changing the scale at selected breakpoints, expanding it between, say, 0 and 100, and compressing it between 200 and 500. However, such changes of scale increase the complexity of the graph and may cause occasional misinterpretations.

Logarithmic Graphs

The logarithmic plot has the advantage of expanding the region in which most readings occur (i.e., PSI<100) thereby increasing the precision in that region. Before preparing a logarithmic plot for any pollutant, it would be desirable to inspect its historical values--if these never go below, say, 10 on the PSI scale, it becomes unnecessary to include the region below PSI = 10.

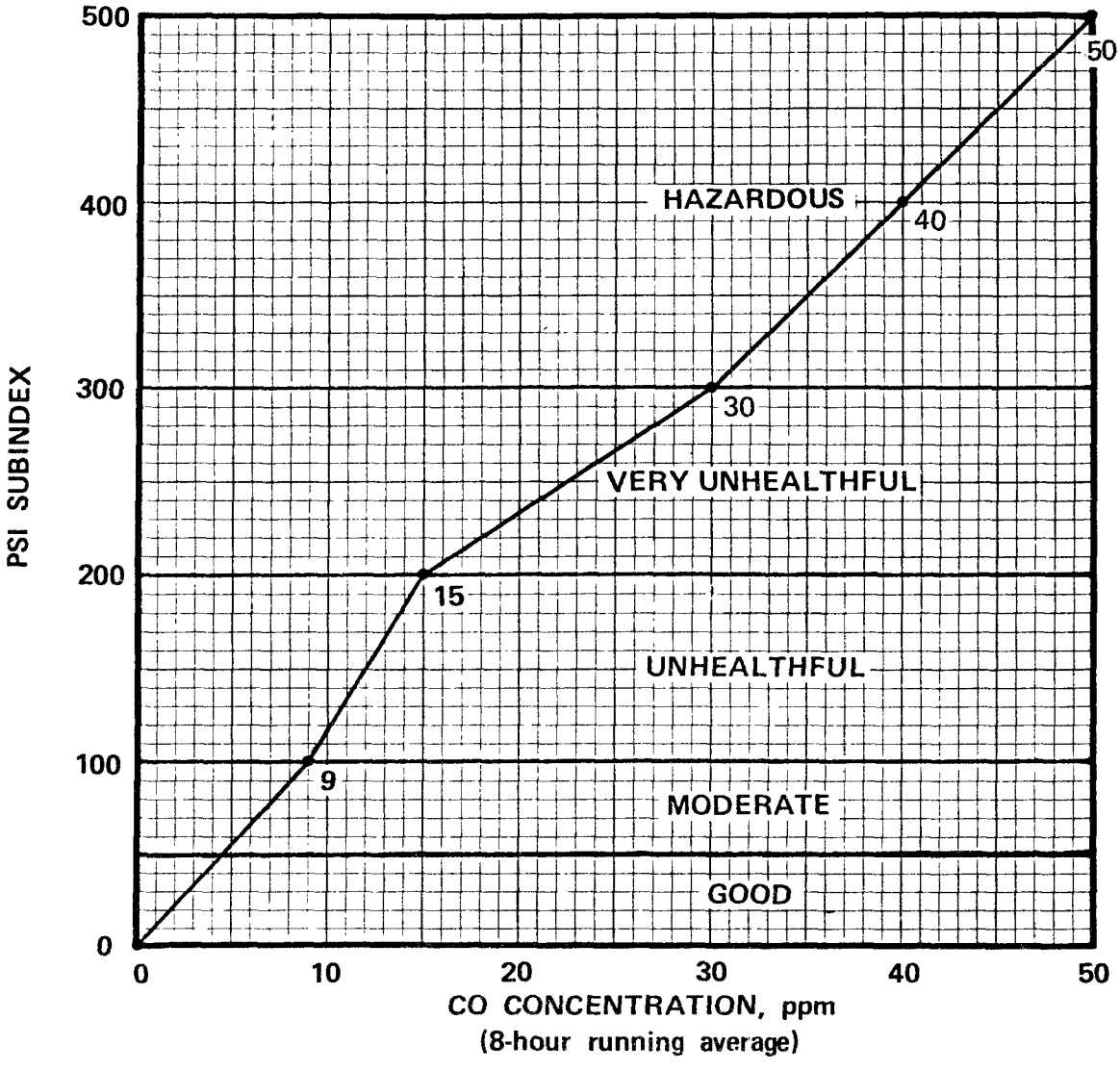

Figure 1. Example of PSI subindex function for CO plotted on linear graph paper.

In Baltimore, Severn[8] prepared logarithmic plots of the PSI for all of the pollutants. The resulting graphs were enclosed in plastic sheets for protection and daily use by station personnel. By using two or more scales along the horizontal axis of the logarithmic graph, two or more pollutants may be plotted on a single diagram. Figure 2 shows a plot of TSP on logarithmic graph paper.

Logarithmic graphs may be useful for some applications. However, some users may find them difficult or time-consuming to prepare and read. In addition, a number of charts will be required if many pollutants are reported.

Nomograms

Both types of graphs mentioned above have the disadvantage of requiring the user to locate a concentration on one axis, travel vertically to the curve of interest, and then travel horizontally to the corresponding PSI subindex value. This requires considerable attention, and leaves room for error in both of the "traveling" procedures. A device offering greater precision with less chance for error is the nomogram.

A nomogram "collapses" the two scales involved (in this case, the PSI subindex values and the pollutant concentrations) to give a direct representation on a single line of the relationship between the two sets of numbers. Each pollutant concentration occurs immediately adjacent to its corresponding PSI subindex, eliminating the "traveling" error described above.

Because the nomogram eliminates much of the wasted space in an ordinary graph, it has the additional advantage of being able to display a number of pollutants and their corresponding subindex relationships on a single page. The major disadvantage of the nomogram is the time it takes to prepare. The tick marks must be determined precisely, their length and number must be chosen carefully for maximum ease and rapidity of use, and the draftsmanship must be painstaking. Since these requirements might be too exacting to allow many air pollution control agencies to prepare such nomograms, we have prepared a model nomogram for all pollutants and all systems of units presently contained in the PSI (See Figures 3-6).

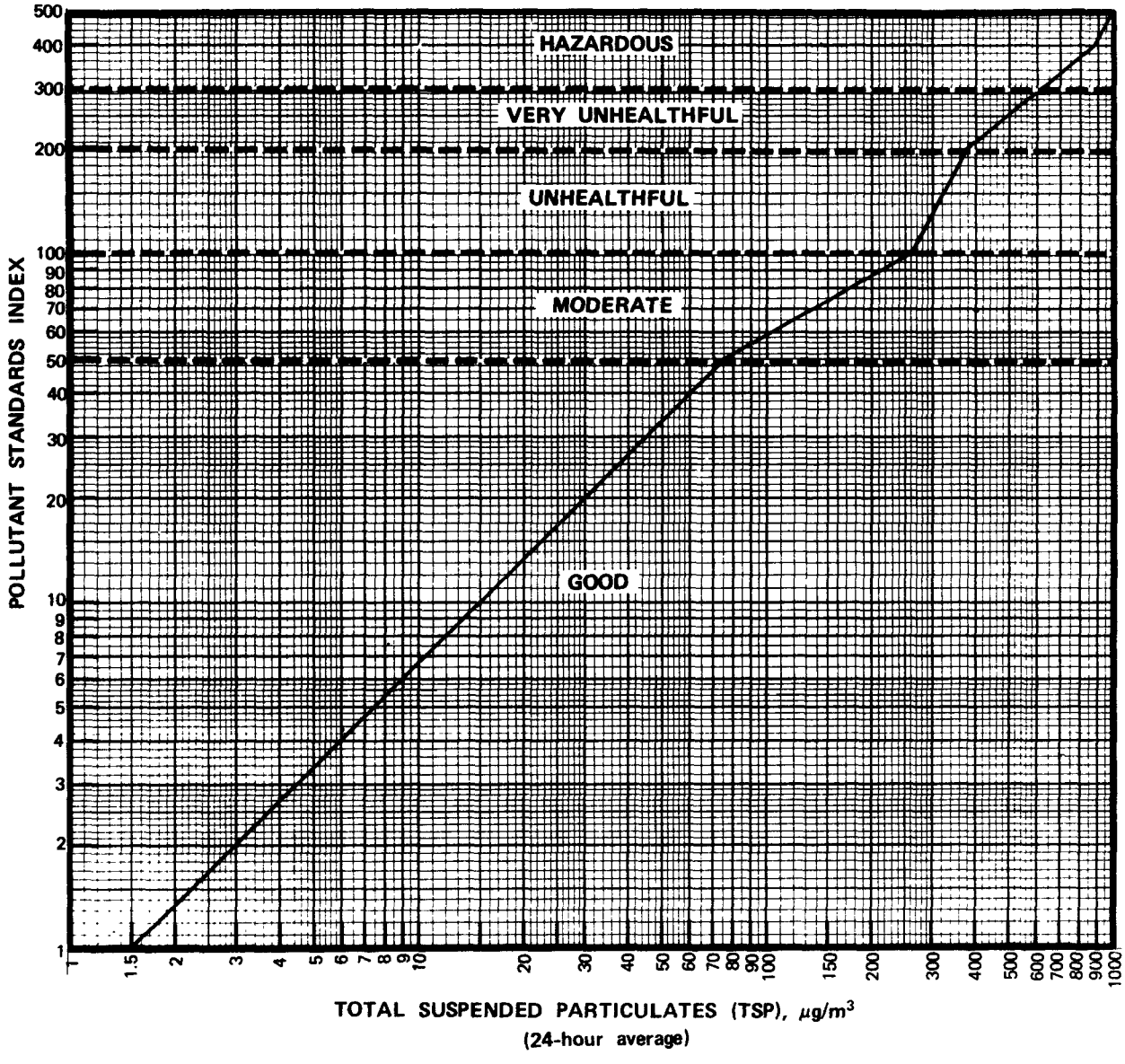

Figure 2. Example of log-log plot of PSI subindex for TSP, from Severn.[8]

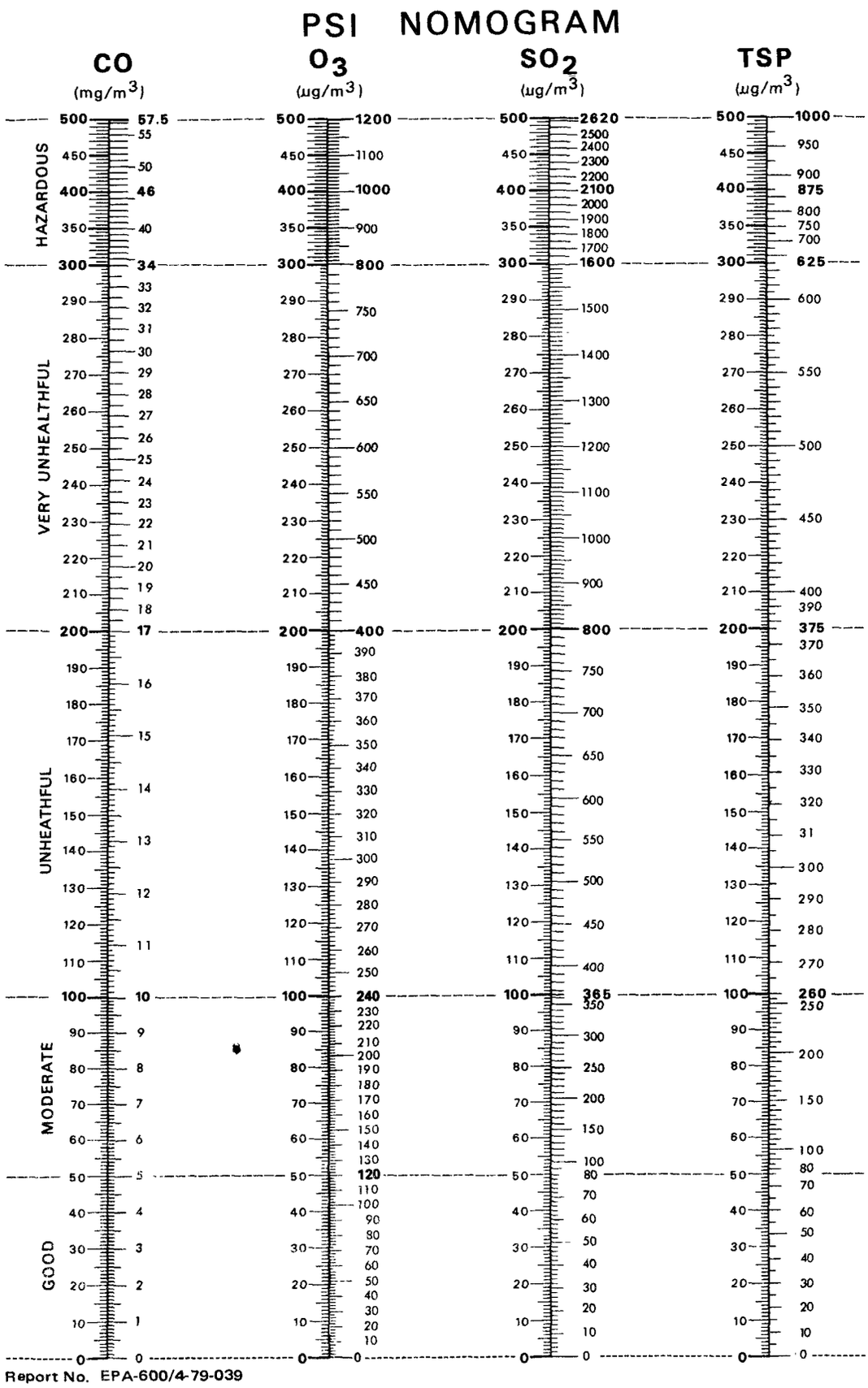

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Figure 3. PSI nomogram for CO, O_3, SO_2, and TSP, expressed in gravimetric units.

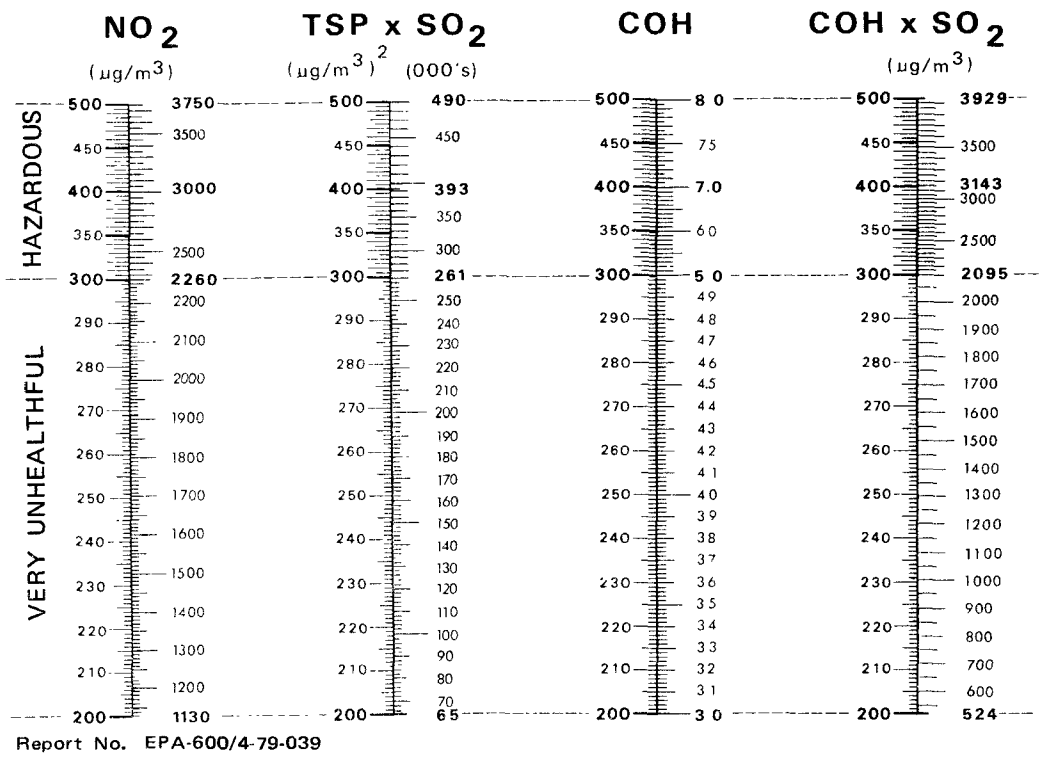

Figure 4. PSI nomogram for NO_2, TSP x SO_2, COH, and COH x SO_2, expressed in gravimetric units.

PSI NOMOGRAM

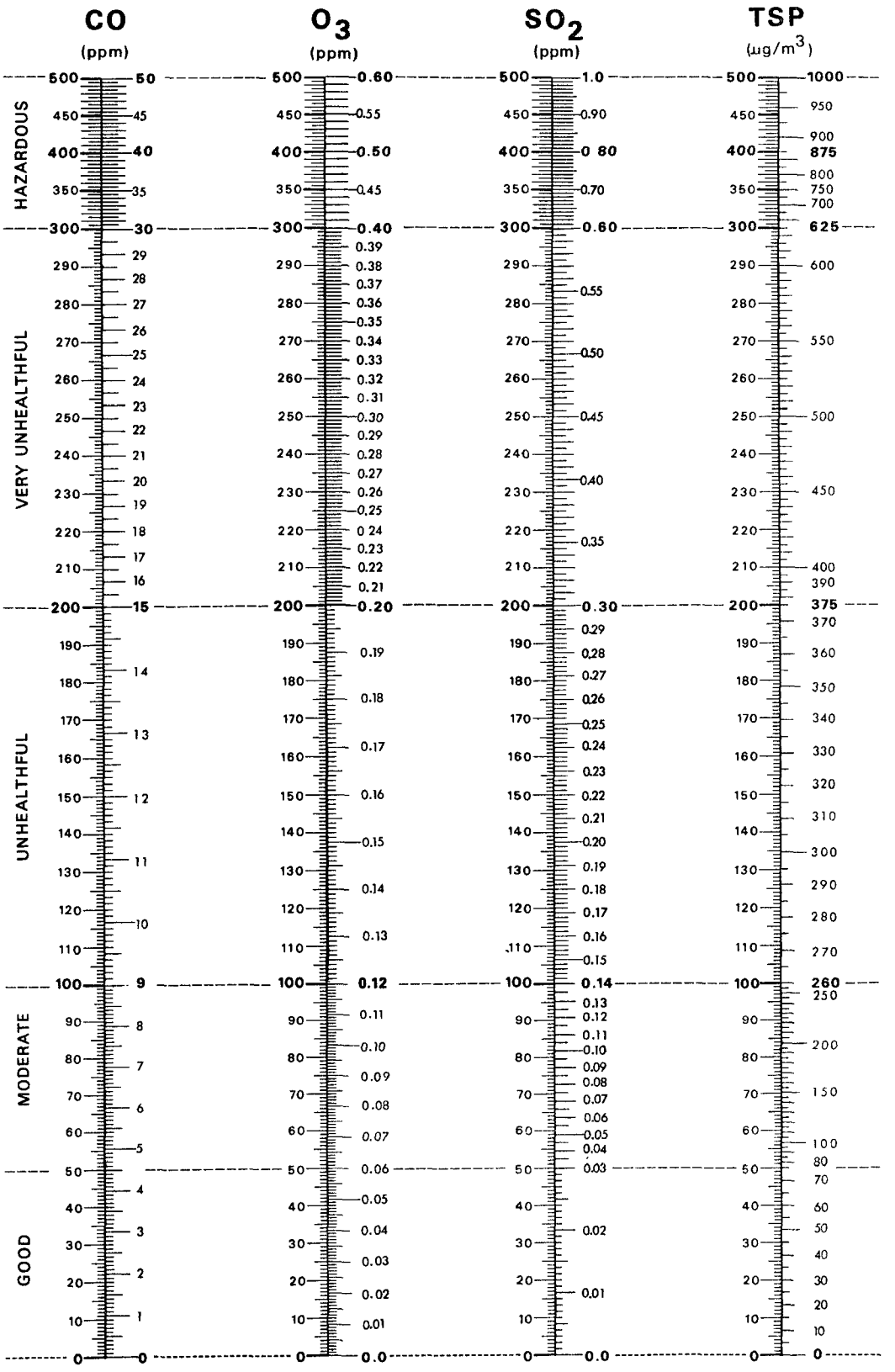

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Figure 5. PSI nomogram for CO, O_3, SO_2, and TSP, expressed in volumetric units.

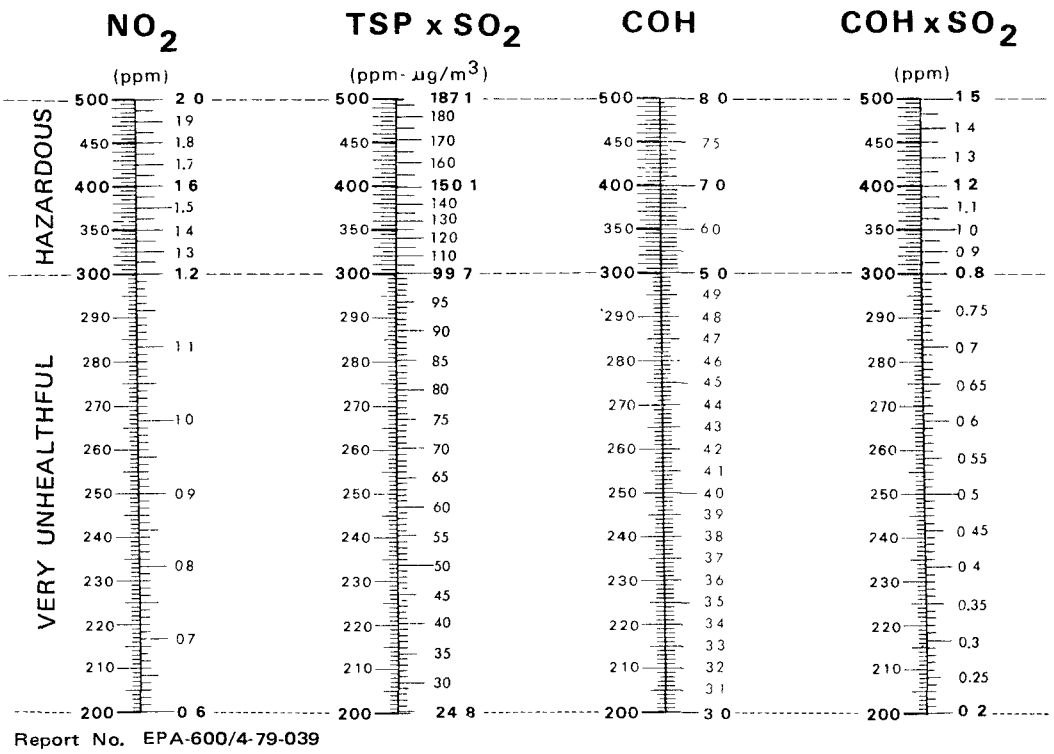

Figure 6. PSI nomogram for NO_2, TSP x SO_2, COH, and COH x SO_2, expressed in volumetric units.

Uses of the Nomogram--

The main use of the nomogram is expected to be as a calculational aid. Daily readings of pollutant concentrations would be checked against the PSI subindex scales to determine the highest reading. The information would be written down elsewhere, the nomogram remaining unmarked for use on succeeding days.

A second possible use of the nomogram has been suggested. Some agencies may wish to use copies of the nomogram as permanent records of each day's pollutant concentrations. All pollutants measured that day would have their levels checked or circled on the nomogram. The PSI value for that day would be determined from the highest subindex and reported elsewhere in the usual fashion. Copies of the nomogram could be carried on a clipboard for use at the monitoring station. Each copy would then be dated and signed by the technician making the reading. The copies could be kept in a binder to form a permanent record of a year's air quality at each station. Then, if questions came up regarding possible errors, or knowledge of the PSI subindex for a particular pollutant was felt to be important, the complete record would be available. However, it is recognized that this procedure may be somewhat wasteful of space.

How to Use the Nomogram--The basic use of the nomogram is to determine the PSI value for any given pollutant concentration. The left-hand side of each strip contains tick marks corresponding to each unit between 1 and 500 on the PSI scale (or between 200 and 500 for those pollutants that have no national ambient air quality standards). Since levels above 300 are rarely achieved, the range between 300 and 500 has been compressed so that each tick mark corresponds to five PSI units. (If greater precision is required in this 300-500 range, the user may consult Table A-4.)

The right-hand side of each strip contains tick marks corresponding to intervals of different sizes, depending upon the pollutant. To determine the PSI value corresponding to an observed pollutant concentration, locate the two values just above and below the observed value by interpolation, and read the PSI value off the left-hand side. Figure 7 illustrates the technique of using the nomogram. In the Figure, assume that an observed concentration of TSP is 277 $\mu g/m^3$. Since 277 is about two-fifths of the way between 275 and 280 (the closest values explicitly indicated on the nomogram), then the nearest PSI value would be 115 (the number corresponding to this interpolated value).

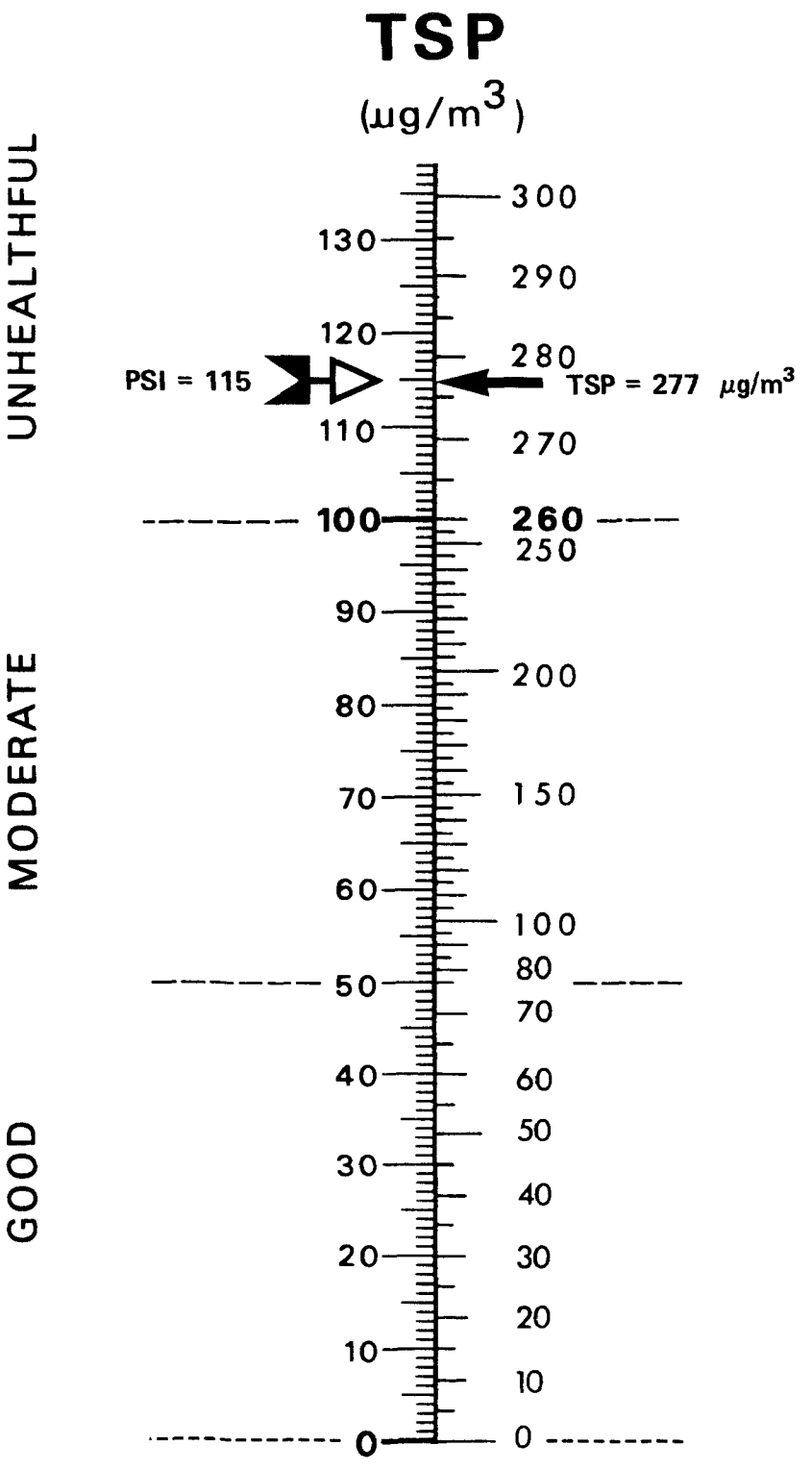

Figure 7. Illustration of nomogram: TSP concentration of 277 $\mu g/m^3$ corresponds to PSI value of 115, to the nearest unit.

IV. TABULAR FORMS

Tables provide the definitive values for the PSI subindices and are, therefore, necessary for reference purposes. Well designed tables can be used also for rapid calculation of the PSI, although highly detailed tables take up several pages and may be unwieldy compared to the nomogram. Appendix A includes three sets of tables:

- Tables A-1 and A-3

  "Rapid Survey" tables for finding the critical pollutant (the one with the highest PSI value) for any one day.

- Tables A-2 and A-4

  "Working" tables for determining the PSI to the nearest unit rapidly and unambiguously.

- Tables A-5 through A-15

  "Reference" tables giving values of the PSI associated with a range of concentrations for each pollutant individually.

How to Use the Tables --

"Rapid Survey" Tables--

Table A-1. This table gives values of the PSI from 5-200 (in increments of five) for all of those pollutants with National Ambient Air Quality Standards: CO, O_3, SO_2, and TSP. The table provides a swift way of comparing concentrations for each pollutant on any one day and determining which pollutant has the maximum PSI value for that day. To determine the exact PSI value for that day, the user can then look up that pollutant only in the more detailed "Working" Table A-2. For example, assume the following values for the four pollutants on a certain day: CO = 4.0 ppm, O_3 = 0.048 ppm, SO_2 = 0.028 ppm, and TSP = 67.5 $\mu g/m^3$. Table A-1 shows that the PSI subindices for the four pollutants are as follows: CO = less than 45; O_3 = 40; SO_2 = more than 45; and TSP, exactly 45. Thus SO_2 is the critical pollutant for that day and a look at Table A-2 shows that the PSI value for that day is 47.

Table A-3. This table gives values of the PSI from 200-500, also in increments of five for all pollutants with episode levels as defined in the Federal Register. On those occasions when Alert levels are exceeded, Table A-3 may be used to determine the pollutant or combination of

pollutants with the highest PSI subindex. For example, if the values on one day were TSP = 300 $\mu g/m^3$, SO_2 = .10 ppm, and NO_2 = 1190 $\mu g/m^3$, then the table would show that the NO_2 subindex was just above 205, while the TSP x SO_2 subindex (corresponding to 30 $\mu g/m^3$ - ppm) was well above 205. To determine the exact value of the PSI, the user would then turn to the TSP x SO_2 column in Table A-4.

"Working" Tables--

Tables A-2 and A-4. In these tables, the values of the PSI, correct to the nearest integer, can be found immediately and unambiguously without the need for interpolation.

The normal approach to creating tables is to choose integer values for one variable and calculate the corresponding values of the second variable. This approach has one drawback--for the numbers about halfway between two table entries, it may take extra time, with the attendant possibilities of error, to determine the proper value by interpolation.

To avoid this drawback, Tables A-2 and A-4 list the half-integer values of the PSI for each pollutant. For each of the 500 PSI values, the tables list explicitly the upper and lower boundaries of the pollutant concentrations corresponding to that value. These are the "cut-off" points that determine the proper PSI value for any pollutant concentration; by listing them explicitly, we remove any need for interpolation or estimation.

Thus, the pollutant concentrations corresponding to a PSI value of 50 are all of those contained in the range from 49.5 to 50.5; and the table lists only these "half-unit" values. For instance, Example 1 shows a section of an "ordinary" (integer-value) table next to a corresponding section of a half-integer table. Using the "ordinary" table, it would be quite difficult to say whether an observed concentration for SO_2 of 415 $\mu g/m^3$ corresponded to a PSI value of 111 or 112. Using the half-integer table, however, it is easy to see that 415 $\mu g/m^3$ is smaller than the value of 415.03 $\mu g/m^3$ that marks the dividing line between 111 and 112; thus the correct value of 111 can be selected rapidly with confidence.

Example 1

Comparison of Standard Tables (requiring interpolation) With Half-Integer Tables Allowing Immediate Determination of PSI.

STANDARD INTEGER-VALUE TABLE		"WORKING" HALF-INTEGER TABLE	
PSI	SO_2	PSI	SO_2
111	412.85	110.5	410.68
112	417.20	111.5	415.03
113	421.55	112.5	419.38

Standard tables require calculation to determine the closest column entry to a given value. For example, an observed concentration for SO_2 of 415 $\mu g/m^3$ could not immediately be assigned a PSI value, since 415 is nearly midway between the column entries of 412.85 and 417.20. Two subtractions would have to be performed and the results compared before the nearest PSI integer could be determined.

On the other hand, the table showing only the half-integer values of the PSI requires no calculation--it is at once evident that 415 is less than 415.03 (the dividing line between PSI = 111 and PSI = 112) so that PSI = 111.

To determine the PSI value corresponding to any pollutant concentration, travel down the proper column to the two values bracketing the observed concentration. Then travel horizontally at the level of the smaller concentration (the upper row) to the value in the left-hand or right-hand column marked "PSI (nearest unit)" (See Example 2).

Example 2

How to Use Tables A-2 and A-4*

PSI (Nearest Unit)	PSI	CO (mg/m^3)	03	SO_2	TSP
41	40.5	4.05	97.20	64.80	60.75
42	41.5	4.15	99.60	66.40	62.25
43	42.5	4.25	102.00	68.00	63.75
44	43.5	4.35	104.40	69.60	65.25
45	44.5	4.45	106.80	71.20	66.75

*Assume an observed value for TSP of $65\mu g/m^3$. In the TSP column, locate the values just above and below this value (63.75 and 65.25), and then locate the PSI value level with the smaller concentration (the upper of the two rows) in the left-hand column. In the example, the proper PSI value is 43.

Exceptions--The only exceptions to the above procedure occur at the Federally-set pollutant concentration standards corresponding to the PSI values 100, 200,...500. At these points, it would be misleading to report a PSI value of 100, say, for a concentration that corresponds to a value of 99.9--such a concentration is below the standard and, therefore, the PSI value should be reported as 99. The values corresponding to 100, 200,...500 are listed explicitly in Tables A-1 and A-3. Only if the observed concentration exceeds these values may the PSI value be reported as 100, 200,...500.

"Reference" Tables--

Tables A-5 through A-15. These tables were originally designed to aid in constructing the PSI nomogram. They may find further use with agencies wishing to construct their own nomograms. These tables also provide a check on the accuracy of the nomogram provided here.

For each pollutant, about 250-300 equal increments have been selected spanning the range from PSI = 0 to PSI = 500. This ensures a sufficient number of values to construct a nomogram accurate to the nearest PSI unit.

Ambiguities--What if a reading falls exactly on a half-integer value of the PSI? This should happen very seldom, but when it does, the user may wish to round off to the nearest odd number. This has two advantages: (1) over the long run, the user will be rounding upward about as often as downward; and (2) in those cases involving readings near the Federal standards (PSI values of 100, 200, etc.), a reading of 99.5, say, will be correctly rounded downward to 99, while a reading at 100.5 will be rounded upward to 101. In each case, there will be no ambiguity concerning whether or not a standard was surpassed.

Programs for Creating Tables

Some agencies may desire to modify these tables for their own purposes. Possible modifications include:

- different breakpoints for COH based upon site-specific conversion factors.
- more (or less) detail for certain pollutants.
- different formatting for special purposes.

To assist such efforts, we have included in Appendix B the main program for Table A-3 and the main program and all subroutines for Tables A-5 through A-15. Table A-3 was selected to represent the entire group of Tables A-1 through A-4, which are basically similar (differing only in the range of the PSI values and the size of the increment). Tables A-5 through A-15, however, required inverting each of the 41 equations used in Tables A-1 through A-4 to relate pollutant concentrations to their PSI values. Rather than require each agency to go through the exercise of inverting these equations, it appeared preferable to list them in one place for future reference. Therefore, the 11 subroutines containing these 41 inverted equations have been included with the main program in Appendix B.

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Table A-1

RAPID SURVEY TABLE: POLLUTANT CONCENTRATIONS FOR PSI = 5-200 IN STEPS OF 5

PSI	UNITS IN MICROGRAMS/CUBIC METER				UNITS IN PARTS PER MILLION			PSI
	CO (MG/M3)	03	SO2	TSP	CO	03	SO2	
5	0.50	12.00	8.00	7.50	0.4500	0.0060	0.0030	5
10	1.00	24.00	16.00	15.00	0.9000	0.0120	0.0060	10
15	1.50	36.00	24.00	22.50	1.3500	0.0180	0.0090	15
20	2.00	48.00	32.00	30.00	1.8000	0.0240	0.0120	20
25	2.50	60.00	40.00	37.50	2.2500	0.0300	0.0150	25
30	3.00	72.00	48.00	45.00	2.7000	0.0360	0.0180	30
35	3.50	84.00	56.00	52.50	3.1500	0.0420	0.0210	35
40	4.00	96.00	64.00	60.00	3.6000	0.0480	0.0240	40
45	4.50	108.00	72.00	67.50	4.0500	0.0540	0.0270	45
50	5.00	120.00	80.00	75.00	4.5000	0.0600	0.0300	50
55	5.50	132.00	108.50	93.50	4.9500	0.0660	0.0410	55
60	6.00	144.00	137.00	112.00	5.4000	0.0720	0.0520	60
65	6.50	156.00	165.50	130.50	5.8500	0.0780	0.0630	65
70	7.00	168.00	194.00	149.00	6.3000	0.0840	0.0740	70
75	7.50	180.00	222.50	167.50	6.7500	0.0900	0.0850	75
80	8.00	192.00	251.00	186.00	7.2000	0.0960	0.0960	80
85	8.50	204.00	279.50	204.50	7.6500	0.1020	0.1070	85
90	9.00	216.00	308.00	223.00	8.1000	0.1080	0.1180	90
95	9.50	228.00	336.50	241.50	8.5500	0.1140	0.1290	95
100	10.00	240.00	365.00	260.00	9.0000	0.1200	0.1400	100
105	10.35	248.00	386.75	265.75	9.3000	0.1240	0.1480	105
110	10.70	256.00	408.50	271.50	9.6000	0.1280	0.1560	110
115	11.05	264.00	430.25	277.25	9.9000	0.1320	0.1640	115
120	11.40	272.00	452.00	283.00	10.2000	0.1360	0.1720	120
125	11.75	280.00	473.75	288.75	10.5000	0.1400	0.1800	125
130	12.10	288.00	495.50	294.50	10.8000	0.1440	0.1880	130
135	12.45	296.00	517.25	300.25	11.1000	0.1480	0.1960	135
140	12.80	304.00	539.00	306.00	11.4000	0.1520	0.2040	140
145	13.15	312.00	560.75	311.75	11.7000	0.1560	0.2120	145
150	13.50	320.00	582.50	317.50	12.0000	0.1600	0.2200	150
155	13.85	328.00	604.25	323.25	12.3000	0.1640	0.2280	155
160	14.20	336.00	626.00	329.00	12.6000	0.1680	0.2360	160
165	14.55	344.00	647.75	334.75	12.9000	0.1720	0.2440	165
170	14.90	352.00	669.50	340.50	13.2000	0.1760	0.2520	170
175	15.25	360.00	691.25	346.25	13.5000	0.1800	0.2600	175
180	15.60	368.00	713.00	352.00	13.8000	0.1840	0.2680	180
185	15.95	376.00	734.75	357.75	14.1000	0.1880	0.2760	185
190	16.30	384.00	756.50	363.50	14.4000	0.1920	0.2840	190
195	16.65	392.00	778.25	369.25	14.7000	0.1960	0.2920	195
200	17.00	400.00	800.00	375.00	15.0000	0.2000	0.3000	200

Table A-2

WORKING TABLE: POLLUTANT CONCENTRATIONS FOR PSI = 0.5-199.5

PSI (NEAREST UNIT)	PSI	UNITS IN MICROGRAMS/CUBIC METER				UNITS IN PARTS PER MILLION			PSI	PSI (NEAREST UNIT)
		CO (MG/M3)	O3	SO2	TSP	CO	O3	SO2		
1	0.5	0.05	1.20	0.80	0.75	0.0450	0.0006	0.0003	0.5	1
2	1.5	0.15	3.60	2.40	2.25	0.1350	0.0018	0.0009	1.5	2
3	2.5	0.25	6.00	4.00	3.75	0.2250	0.0030	0.0015	2.5	3
4	3.5	0.35	8.40	5.60	5.25	0.3150	0.0042	0.0021	3.5	4
5	4.5	0.45	10.80	7.20	6.75	0.4050	0.0054	0.0027	4.5	5
6	5.5	0.55	13.20	8.80	8.25	0.4950	0.0066	0.0033	5.5	6
7	6.5	0.65	15.60	10.40	9.75	0.5850	0.0078	0.0039	6.5	7
8	7.5	0.75	18.00	12.00	11.25	0.6750	0.0090	0.0045	7.5	8
9	8.5	0.85	20.40	13.60	12.75	0.7650	0.0102	0.0051	8.5	9
10	9.5	0.95	22.80	15.20	14.25	0.8550	0.0114	0.0057	9.5	10
11	10.5	1.05	25.20	16.80	15.75	0.9450	0.0126	0.0063	10.5	11
12	11.5	1.15	27.60	18.40	17.25	1.0350	0.0138	0.0069	11.5	12
13	12.5	1.25	30.00	20.00	18.75	1.1250	0.0150	0.0075	12.5	13
14	13.5	1.35	32.40	21.60	20.25	1.2150	0.0162	0.0081	13.5	14
15	14.5	1.45	34.80	23.20	21.75	1.3050	0.0174	0.0087	14.5	15
16	15.5	1.55	37.20	24.80	23.25	1.3950	0.0186	0.0093	15.5	16
17	16.5	1.65	39.60	26.40	24.75	1.4850	0.0198	0.0099	16.5	17
18	17.5	1.75	42.00	28.00	26.25	1.5750	0.0210	0.0105	17.5	18
19	18.5	1.85	44.40	29.60	27.75	1.6650	0.0222	0.0111	18.5	19
20	19.5	1.95	46.80	31.20	29.25	1.7550	0.0234	0.0117	19.5	20
21	20.5	2.05	49.20	32.80	30.75	1.8450	0.0246	0.0123	20.5	21
22	21.5	2.15	51.60	34.40	32.25	1.9350	0.0258	0.0129	21.5	22
23	22.5	2.25	54.00	36.00	33.75	2.0250	0.0270	0.0135	22.5	23
24	23.5	2.35	56.40	37.60	35.25	2.1150	0.0282	0.0141	23.5	24
25	24.5	2.45	58.80	39.20	36.75	2.2050	0.0294	0.0147	24.5	25
26	25.5	2.55	61.20	40.80	38.25	2.2950	0.0306	0.0153	25.5	26
27	26.5	2.65	63.60	42.40	39.75	2.3850	0.0318	0.0159	26.5	27
28	27.5	2.75	66.00	44.00	41.25	2.4750	0.0330	0.0165	27.5	28
29	28.5	2.85	68.40	45.60	42.75	2.5650	0.0342	0.0171	28.5	29
30	29.5	2.95	70.80	47.20	44.25	2.6550	0.0354	0.0177	29.5	30
31	30.5	3.05	73.20	48.80	45.75	2.7450	0.0366	0.0183	30.5	31
32	31.5	3.15	75.60	50.40	47.25	2.8350	0.0378	0.0189	31.5	32
33	32.5	3.25	78.00	52.00	48.75	2.9250	0.0390	0.0195	32.5	33
34	33.5	3.35	80.40	53.60	50.25	3.0150	0.0402	0.0201	33.5	34
35	34.5	3.45	82.80	55.20	51.75	3.1050	0.0414	0.0207	34.5	35
36	35.5	3.55	85.20	56.80	53.25	3.1950	0.0426	0.0213	35.5	36
37	36.5	3.65	87.60	58.40	54.75	3.2850	0.0438	0.0219	36.5	37
38	37.5	3.75	90.00	60.00	56.25	3.3750	0.0450	0.0225	37.5	38
39	38.5	3.85	92.40	61.60	57.75	3.4650	0.0462	0.0231	38.5	39
40	39.5	3.95	94.80	63.20	59.25	3.5550	0.0474	0.0237	39.5	40
41	40.5	4.05	97.20	64.80	60.75	3.6450	0.0486	0.0243	40.5	41
42	41.5	4.15	99.60	66.40	62.25	3.7350	0.0498	0.0249	41.5	42
43	42.5	4.25	102.00	68.00	63.75	3.8250	0.0510	0.0255	42.5	43
44	43.5	4.35	104.40	69.60	65.25	3.9150	0.0522	0.0261	43.5	44
45	44.5	4.45	106.80	71.20	66.75	4.0050	0.0534	0.0267	44.5	45
46	45.5	4.55	109.20	72.80	68.25	4.0950	0.0546	0.0273	45.5	46
47	46.5	4.65	111.60	74.40	69.75	4.1850	0.0558	0.0279	46.5	47
48	47.5	4.75	114.00	76.00	71.25	4.2750	0.0570	0.0285	47.5	48
49	48.5	4.85	116.40	77.60	72.75	4.3650	0.0582	0.0291	48.5	49
50	49.5	4.95	118.80	79.20	74.25	4.4550	0.0594	0.0297	49.5	50

Table A-2 (Continued)

WORKING TABLE: POLLUTANT CONCENTRATIONS FOR PSI = 0.5-199.5

PSI (NEAREST UNIT)	PSI	UNITS IN MICROGRAMS/CUBIC METER				UNITS IN PARTS PER MILLION			PSI	PSI (NEAREST UNIT)
		CO (MG/M3)	O3	SO2	TSP	CO	O3	SO2		
51	50.5	5.05	121.20	82.85	76.85	4.5450	0.0606	0.0311	50.5	51
52	51.5	5.15	123.60	88.55	80.55	4.6350	0.0618	0.0333	51.5	52
53	52.5	5.25	126.00	94.25	84.25	4.7250	0.0630	0.0355	52.5	53
54	53.5	5.35	128.40	99.95	87.95	4.8150	0.0642	0.0377	53.5	54
55	54.5	5.45	130.80	105.65	91.65	4.9050	0.0654	0.0399	54.5	55
56	55.5	5.55	133.20	111.35	95.35	4.9950	0.0666	0.0421	55.5	56
57	56.5	5.65	135.60	117.05	99.05	5.0850	0.0678	0.0443	56.5	57
58	57.5	5.75	138.00	122.75	102.75	5.1750	0.0690	0.0465	57.5	58
59	58.5	5.85	140.40	128.45	106.45	5.2650	0.0702	0.0487	58.5	59
60	59.5	5.95	142.80	134.15	110.15	5.3550	0.0714	0.0509	59.5	60
61	60.5	6.05	145.20	139.85	113.85	5.4450	0.0726	0.0531	60.5	61
62	61.5	6.15	147.60	145.55	117.55	5.5350	0.0738	0.0553	61.5	62
63	62.5	6.25	150.00	151.25	121.25	5.6250	0.0750	0.0575	62.5	63
64	63.5	6.35	152.40	156.95	124.95	5.7150	0.0762	0.0597	63.5	64
65	64.5	6.45	154.80	162.65	128.65	5.8050	0.0774	0.0619	64.5	65
66	65.5	6.55	157.20	168.35	132.35	5.8950	0.0786	0.0641	65.5	66
67	66.5	6.65	159.60	174.05	136.05	5.9850	0.0798	0.0663	66.5	67
68	67.5	6.75	162.00	179.75	139.75	6.0750	0.0810	0.0685	67.5	68
69	68.5	6.85	164.40	185.45	143.45	6.1650	0.0822	0.0707	68.5	69
70	69.5	6.95	166.80	191.15	147.15	6.2550	0.0834	0.0729	69.5	70
71	70.5	7.05	169.20	196.85	150.85	6.3450	0.0846	0.0751	70.5	71
72	71.5	7.15	171.60	202.55	154.55	6.4350	0.0858	0.0773	71.5	72
73	72.5	7.25	174.00	208.25	158.25	6.5250	0.0870	0.0795	72.5	73
74	73.5	7.35	176.40	213.95	161.95	6.6150	0.0882	0.0817	73.5	74
75	74.5	7.45	178.80	219.65	165.65	6.7050	0.0894	0.0839	74.5	75
76	75.5	7.55	181.20	225.35	169.35	6.7950	0.0906	0.0861	75.5	76
77	76.5	7.65	183.60	231.05	173.05	6.8850	0.0918	0.0883	76.5	77
78	77.5	7.75	186.00	236.75	176.75	6.9750	0.0930	0.0905	77.5	78
79	78.5	7.85	188.40	242.45	180.45	7.0650	0.0942	0.0927	78.5	79
80	79.5	7.95	190.80	248.15	184.15	7.1550	0.0954	0.0949	79.5	80
81	80.5	8.05	193.20	253.85	187.85	7.2450	0.0966	0.0971	80.5	81
82	81.5	8.15	195.60	259.55	191.55	7.3350	0.0978	0.0993	81.5	82
83	82.5	8.25	198.00	265.25	195.25	7.4250	0.0990	0.1015	82.5	83
84	83.5	8.35	200.40	270.95	198.95	7.5150	0.1002	0.1037	83.5	84
85	84.5	8.45	202.80	276.65	202.65	7.6050	0.1014	0.1059	84.5	85
86	85.5	8.55	205.20	282.35	206.35	7.6950	0.1026	0.1081	85.5	86
87	86.5	8.65	207.60	288.05	210.05	7.7850	0.1038	0.1103	86.5	87
88	87.5	8.75	210.00	293.75	213.75	7.8750	0.1050	0.1125	87.5	88
89	88.5	8.85	212.40	299.45	217.45	7.9650	0.1062	0.1147	88.5	89
90	89.5	8.95	214.80	305.15	221.15	8.0550	0.1074	0.1169	89.5	90
91	90.5	9.05	217.20	310.85	224.85	8.1450	0.1086	0.1191	90.5	91
92	91.5	9.15	219.60	316.55	228.55	8.2350	0.1098	0.1213	91.5	92
93	92.5	9.25	222.00	322.25	232.25	8.3250	0.1110	0.1235	92.5	93
94	93.5	9.35	224.40	327.95	235.95	8.4150	0.1122	0.1257	93.5	94
95	94.5	9.45	226.80	333.65	239.65	8.5050	0.1134	0.1279	94.5	95
96	95.5	9.55	229.20	339.35	243.35	8.5950	0.1146	0.1301	95.5	96
97	96.5	9.65	231.60	345.05	247.05	8.6850	0.1158	0.1323	96.5	97
98	97.5	9.75	234.00	350.75	250.75	8.7750	0.1170	0.1345	97.5	98
99	98.5	9.85	236.40	356.45	254.45	8.8650	0.1182	0.1367	98.5	99
100	99.5	9.95	238.80	362.15	258.15	8.9550	0.1194	0.1389	99.5	100

Table A-2 (Continued)

WORKING TABLE: POLLUTANT CONCENTRATIONS FOR PSI = 0.5-199.5

PSI (NEAREST UNIT)	PSI	UNITS IN MICROGRAMS/CUBIC METER				UNITS IN PARTS PER MILLION			PSI	PSI (NEAREST UNIT)
		CO (MG/M3)	03	SO2	TSP	CO	03	SO2		
101	100.5	10.04	240.80	367.18	260.58	9.0300	0.1204	0.1408	100.5	101
102	101.5	10.11	242.40	371.53	261.73	9.0900	0.1212	0.1424	101.5	102
103	102.5	10.18	244.00	375.88	262.88	9.1500	0.1220	0.1440	102.5	103
104	103.5	10.25	245.60	380.23	264.03	9.2100	0.1228	0.1456	103.5	104
105	104.5	10.32	247.20	384.58	265.18	9.2700	0.1236	0.1472	104.5	105
106	105.5	10.39	248.80	388.93	266.33	9.3300	0.1244	0.1488	105.5	106
107	106.5	10.46	250.40	393.28	267.48	9.3900	0.1252	0.1504	106.5	107
108	107.5	10.53	252.00	397.63	268.63	9.4500	0.1260	0.1520	107.5	108
109	108.5	10.60	253.60	401.98	269.78	9.5100	0.1268	0.1536	108.5	109
110	109.5	10.67	255.20	406.33	270.93	9.5700	0.1276	0.1552	109.5	110
111	110.5	10.74	256.80	410.68	272.08	9.6300	0.1284	0.1568	110.5	111
112	111.5	10.81	258.40	415.03	273.23	9.6900	0.1292	0.1584	111.5	112
113	112.5	10.88	260.00	419.38	274.38	9.7500	0.1300	0.1600	112.5	113
114	113.5	10.95	261.60	423.73	275.53	9.8100	0.1308	0.1616	113.5	114
115	114.5	11.02	263.20	428.08	276.68	9.8700	0.1316	0.1632	114.5	115
116	115.5	11.09	264.80	432.43	277.83	9.9300	0.1324	0.1648	115.5	116
117	116.5	11.16	266.40	436.78	278.98	9.9900	0.1332	0.1664	116.5	117
118	117.5	11.23	268.00	441.13	280.13	10.0500	0.1340	0.1680	117.5	118
119	118.5	11.30	269.60	445.48	281.28	10.1100	0.1348	0.1696	118.5	119
120	119.5	11.37	271.20	449.83	282.43	10.1700	0.1356	0.1712	119.5	120
121	120.5	11.44	272.80	454.18	283.58	10.2300	0.1364	0.1728	120.5	121
122	121.5	11.51	274.40	458.53	284.73	10.2900	0.1372	0.1744	121.5	122
123	122.5	11.58	276.00	462.88	285.88	10.3500	0.1380	0.1760	122.5	123
124	123.5	11.65	277.60	467.23	287.03	10.4100	0.1388	0.1776	123.5	124
125	124.5	11.72	279.20	471.58	288.18	10.4700	0.1396	0.1792	124.5	125
126	125.5	11.79	280.80	475.93	289.33	10.5300	0.1404	0.1808	125.5	126
127	126.5	11.86	282.40	480.28	290.48	10.5900	0.1412	0.1824	126.5	127
128	127.5	11.93	284.00	484.63	291.63	10.6500	0.1420	0.1840	127.5	128
129	128.5	12.00	285.60	488.98	292.78	10.7100	0.1428	0.1856	128.5	129
130	129.5	12.07	287.20	493.33	293.93	10.7700	0.1436	0.1872	129.5	130
131	130.5	12.14	288.80	497.68	295.08	10.8300	0.1444	0.1888	130.5	131
132	131.5	12.21	290.40	502.03	296.23	10.8900	0.1452	0.1904	131.5	132
133	132.5	12.28	292.00	506.38	297.38	10.9500	0.1460	0.1920	132.5	133
134	133.5	12.35	293.60	510.73	298.53	11.0100	0.1468	0.1936	133.5	134
135	134.5	12.42	295.20	515.08	299.68	11.0700	0.1476	0.1952	134.5	135
136	135.5	12.49	296.80	519.43	300.83	11.1300	0.1484	0.1968	135.5	136
137	136.5	12.56	298.40	523.78	301.98	11.1900	0.1492	0.1984	136.5	137
138	137.5	12.63	300.00	528.13	303.13	11.2500	0.1500	0.2000	137.5	138
139	138.5	12.70	301.60	532.48	304.28	11.3100	0.1508	0.2016	138.5	139
140	139.5	12.77	303.20	536.83	305.43	11.3700	0.1516	0.2032	139.5	140
141	140.5	12.84	304.80	541.18	306.58	11.4300	0.1524	0.2048	140.5	141
142	141.5	12.91	306.40	545.53	307.73	11.4900	0.1532	0.2064	141.5	142
143	142.5	12.98	308.00	549.88	308.88	11.5500	0.1540	0.2080	142.5	143
144	143.5	13.05	309.60	554.23	310.03	11.6100	0.1548	0.2096	143.5	144
145	144.5	13.12	311.20	558.58	311.18	11.6700	0.1556	0.2112	144.5	145
146	145.5	13.19	312.80	562.93	312.33	11.7300	0.1564	0.2128	145.5	146
147	146.5	13.26	314.40	567.28	313.48	11.7900	0.1572	0.2144	146.5	147
148	147.5	13.33	316.00	571.63	314.63	11.8500	0.1580	0.2160	147.5	148
149	148.5	13.40	317.60	575.98	315.78	11.9100	0.1588	0.2176	148.5	149
150	149.5	13.47	319.20	580.33	316.93	11.9700	0.1596	0.2192	149.5	150

Table A-2 (Continued)

WORKING TABLE: POLLUTANT CONCENTRATIONS FOR PSI = 0.5-199.5

PSI (NEAREST UNIT)	PSI	UNITS IN MICROGRAMS/CUBIC METER				UNITS IN PARTS PER MILLION			PSI	PSI (NEAREST UNIT)
		CO (MG/M3)	03	SO2	TSP	CO	03	SO2		
151	150.5	13.54	320.80	584.68	318.08	12.0300	0.1604	0.2208	150.5	151
152	151.5	13.61	322.40	589.03	319.23	12.0900	0.1612	0.2224	151.5	152
153	152.5	13.68	324.00	593.38	320.38	12.1500	0.1620	0.2240	152.5	153
154	153.5	13.75	325.60	597.73	321.53	12.2100	0.1628	0.2256	153.5	154
155	154.5	13.82	327.20	602.08	322.68	12.2700	0.1636	0.2272	154.5	155
156	155.5	13.89	328.80	606.43	323.83	12.3300	0.1644	0.2288	155.5	156
157	156.5	13.96	330.40	610.78	324.98	12.3900	0.1652	0.2304	156.5	157
158	157.5	14.03	332.00	615.13	326.13	12.4500	0.1660	0.2320	157.5	158
159	158.5	14.10	333.60	619.48	327.28	12.5100	0.1668	0.2336	158.5	159
160	159.5	14.17	335.20	623.83	328.43	12.5700	0.1676	0.2352	159.5	160
161	160.5	14.24	336.80	628.18	329.58	12.6300	0.1684	0.2368	160.5	161
162	161.5	14.31	338.40	632.53	330.73	12.6900	0.1692	0.2384	161.5	162
163	162.5	14.38	340.00	636.88	331.88	12.7500	0.1700	0.2400	162.5	163
164	163.5	14.45	341.60	641.23	333.03	12.8100	0.1708	0.2416	163.5	164
165	164.5	14.52	343.20	645.58	334.18	12.8700	0.1716	0.2432	164.5	165
166	165.5	14.59	344.80	649.93	335.33	12.9300	0.1724	0.2448	165.5	166
167	166.5	14.66	346.40	654.28	336.48	12.9900	0.1732	0.2464	166.5	167
168	167.5	14.73	348.00	658.63	337.63	13.0500	0.1740	0.2480	167.5	168
169	168.5	14.80	349.60	662.98	338.78	13.1100	0.1748	0.2496	168.5	169
170	169.5	14.87	351.20	667.33	339.93	13.1700	0.1756	0.2512	169.5	170
171	170.5	14.94	352.80	671.68	341.08	13.2300	0.1764	0.2528	170.5	171
172	171.5	15.01	354.40	676.03	342.23	13.2900	0.1772	0.2544	171.5	172
173	172.5	15.08	356.00	680.38	343.38	13.3500	0.1780	0.2560	172.5	173
174	173.5	15.15	357.60	684.73	344.53	13.4100	0.1788	0.2576	173.5	174
175	174.5	15.22	359.20	689.08	345.68	13.4700	0.1796	0.2592	174.5	175
176	175.5	15.29	360.80	693.43	346.83	13.5300	0.1804	0.2608	175.5	176
177	176.5	15.36	362.40	697.78	347.98	13.5900	0.1812	0.2624	176.5	177
178	177.5	15.43	364.00	702.13	349.13	13.6500	0.1820	0.2640	177.5	178
179	178.5	15.50	365.60	706.48	350.28	13.7100	0.1828	0.2656	178.5	179
180	179.5	15.57	367.20	710.83	351.43	13.7700	0.1836	0.2672	179.5	180
181	180.5	15.64	368.80	715.18	352.58	13.8300	0.1844	0.2688	180.5	181
182	181.5	15.71	370.40	719.53	353.73	13.8900	0.1852	0.2704	181.5	182
183	182.5	15.78	372.00	723.88	354.88	13.9500	0.1860	0.2720	182.5	183
184	183.5	15.85	373.60	728.23	356.03	14.0100	0.1868	0.2736	183.5	184
185	184.5	15.92	375.20	732.58	357.18	14.0700	0.1876	0.2752	184.5	185
186	185.5	15.99	376.80	736.93	358.33	14.1300	0.1884	0.2768	185.5	186
187	186.5	16.06	378.40	741.28	359.48	14.1900	0.1892	0.2784	186.5	187
188	187.5	16.13	380.00	745.63	360.63	14.2500	0.1900	0.2800	187.5	188
189	188.5	16.20	381.60	749.98	361.78	14.3100	0.1908	0.2816	188.5	189
190	189.5	16.27	383.20	754.33	362.93	14.3700	0.1916	0.2832	189.5	190
191	190.5	16.34	384.80	758.68	364.08	14.4300	0.1924	0.2848	190.5	191
192	191.5	16.41	386.40	763.03	365.23	14.4900	0.1932	0.2864	191.5	192
193	192.5	16.48	388.00	767.38	366.38	14.5500	0.1940	0.2880	192.5	193
194	193.5	16.55	389.60	771.73	367.53	14.6100	0.1948	0.2896	193.5	194
195	194.5	16.62	391.20	776.08	368.68	14.6700	0.1956	0.2912	194.5	195
196	195.5	16.69	392.80	780.43	369.83	14.7300	0.1964	0.2928	195.5	196
197	196.5	16.76	394.40	784.78	370.98	14.7900	0.1972	0.2944	196.5	197
198	197.5	16.83	396.00	789.13	372.13	14.8500	0.1980	0.2960	197.5	198
199	198.5	16.90	397.60	793.48	373.28	14.9100	0.1988	0.2976	198.5	199
200	199.5	16.97	399.20	797.83	374.43	14.9700	0.1996	0.2992	199.5	200

Table A-3

RAPID SURVEY TABLE: POLLUTANT CONCENTRATIONS FOR PSI = 200-500 IN STEPS OF 5

PSI	UNITS IN MICROGRAMS/CUBIC METER					UNITS IN PARTS PER MILLION				MIXED UNITS			
	CO (MG/M3)	O3	SO2	TSP	NO2	CO	O3	SO2	NO2	TSPXSO2 (UG-MG/M6)	TSPXSO2 (PPM-UG/M3)	COH (COHS)	COHXSO2 (COHS-PPM)
200	17.00	400.	800.	375.00	1130.	15.00	0.200	0.300	0.60	65.0	24.820	3.00	0.200
205	17.85	420.	840.	387.50	1187.	15.75	0.210	0.315	0.63	74.8	28.562	3.10	0.230
210	18.70	440.	880.	400.00	1243.	16.50	0.220	0.330	0.66	84.6	32.304	3.20	0.260
215	19.55	460.	920.	412.50	1300.	17.25	0.230	0.345	0.69	94.4	36.046	3.30	0.290
220	20.40	480.	960.	425.00	1356.	18.00	0.240	0.360	0.72	104.2	39.788	3.40	0.320
225	21.25	500.	1000.	437.50	1413.	18.75	0.250	0.375	0.75	114.0	43.530	3.50	0.350
230	22.10	520.	1040.	450.00	1469.	19.50	0.260	0.390	0.78	123.8	47.272	3.60	0.380
235	22.95	540.	1080.	462.50	1526.	20.25	0.270	0.405	0.81	133.6	51.014	3.70	0.410
240	23.80	560.	1120.	475.00	1582.	21.00	0.280	0.420	0.84	143.4	54.756	3.80	0.440
245	24.65	580.	1160.	487.50	1639.	21.75	0.290	0.435	0.87	153.2	58.498	3.90	0.470
250	25.50	600.	1200.	500.00	1695.	22.50	0.300	0.450	0.90	163.0	62.240	4.00	0.500
255	26.35	620.	1240.	512.50	1752.	23.25	0.310	0.465	0.93	172.8	65.982	4.10	0.530
260	27.20	640.	1280.	525.00	1808.	24.00	0.320	0.480	0.96	182.6	69.724	4.20	0.560
265	28.05	660.	1320.	537.50	1865.	24.75	0.330	0.495	0.99	192.4	73.466	4.30	0.590
270	28.90	680.	1360.	550.00	1921.	25.50	0.340	0.510	1.02	202.2	77.208	4.40	0.620
275	29.75	700.	1400.	562.50	1978.	26.25	0.350	0.525	1.05	212.0	80.950	4.50	0.650
280	30.60	720.	1440.	575.00	2034.	27.00	0.360	0.540	1.08	221.8	84.692	4.60	0.680
285	31.45	740.	1480.	587.50	2091.	27.75	0.370	0.555	1.11	231.6	88.434	4.70	0.710
290	32.30	760.	1520.	600.00	2147.	28.50	0.380	0.570	1.14	241.4	92.176	4.80	0.740
295	33.15	780.	1560.	612.50	2204.	29.25	0.390	0.585	1.17	251.2	95.918	4.90	0.770
300	34.00	800.	1600.	625.00	2260.	30.00	0.400	0.600	1.20	261.0	99.660	5.00	0.800
305	34.60	810.	1625.	637.50	2297.	30.50	0.405	0.610	1.22	267.6	102.182	5.10	0.820
310	35.20	820.	1650.	650.00	2334.	31.00	0.410	0.620	1.24	274.2	104.704	5.20	0.840
315	35.80	830.	1675.	662.50	2371.	31.50	0.415	0.630	1.26	280.8	107.226	5.30	0.860
320	36.40	840.	1700.	675.00	2408.	32.00	0.420	0.640	1.28	287.4	109.748	5.40	0.880
325	37.00	850.	1725.	687.50	2445.	32.50	0.425	0.650	1.30	294.0	112.270	5.50	0.900
330	37.60	860.	1750.	700.00	2482.	33.00	0.430	0.660	1.32	300.6	114.792	5.60	0.920
335	38.20	870.	1775.	712.50	2519.	33.50	0.435	0.670	1.34	307.2	117.314	5.70	0.940
340	38.80	880.	1800.	725.00	2556.	34.00	0.440	0.680	1.36	313.8	119.836	5.80	0.960
345	39.40	890.	1825.	737.50	2593.	34.50	0.445	0.690	1.38	320.4	122.358	5.90	0.980
350	40.00	900.	1850.	750.00	2630.	35.00	0.450	0.700	1.40	327.0	124.880	6.00	1.000

Table A-3 (Continued)

RAPID SURVEY TABLE: POLLUTANT CONCENTRATIONS FOR PSI = 200-500 IN STEPS OF 5

PSI	UNITS IN MICROGRAMS/CUBIC METER					UNITS IN PARTS PER MILLION				MIXED UNITS			
	CO (MG/M3)	O3	SO2	TSP	NO2	CO	O3	SO2	NO2	TSPXSO2 (UG-MG/M6)	TSPXSO2 (PPM-UG/M3)	COH (COHS)	COHXSO2 (COHS-PPM)
355	40.60	910.	1875.	762.50	2667.	35.50	0.455	0.710	1.42	333.6	127.402	6.10	1.020
360	41.20	920.	1900.	775.00	2704.	36.00	0.460	0.720	1.44	340.2	129.924	6.20	1.040
365	41.80	930.	1925.	787.50	2741.	36.50	0.465	0.730	1.46	346.8	132.446	6.30	1.060
370	42.40	940.	1950.	800.00	2778.	37.00	0.470	0.740	1.48	353.4	134.968	6.40	1.080
375	43.00	950.	1975.	812.50	2815.	37.50	0.475	0.750	1.50	360.0	137.490	6.50	1.100
380	43.60	960.	2000.	825.00	2852.	38.00	0.480	0.760	1.52	366.6	140.012	6.60	1.120
385	44.20	970.	2025.	837.50	2889.	38.50	0.485	0.770	1.54	373.2	142.534	6.70	1.140
390	44.80	980.	2050.	850.00	2926.	39.00	0.490	0.780	1.56	379.8	145.056	6.80	1.160
395	45.40	990.	2075.	862.50	2963.	39.50	0.495	0.790	1.58	386.4	147.578	6.90	1.180
400	46.00	1000.	2100.	875.00	3000.	40.00	0.500	0.800	1.60	393.0	150.100	7.00	1.200
405	46.58	1010.	2126.	881.25	3038.	40.50	0.505	0.810	1.62	397.9	151.950	7.05	1.215
410	47.15	1020.	2152.	887.50	3075.	41.00	0.510	0.820	1.64	402.7	153.800	7.10	1.230
415	47.73	1030.	2178.	893.75	3113.	41.50	0.515	0.830	1.66	407.6	155.650	7.15	1.245
420	48.30	1040.	2204.	900.00	3150.	42.00	0.520	0.840	1.68	412.4	157.500	7.20	1.260
425	48.88	1050.	2230.	906.25	3188.	42.50	0.525	0.850	1.70	417.3	159.350	7.25	1.275
430	49.45	1060.	2256.	912.50	3225.	43.00	0.530	0.860	1.72	422.1	161.200	7.30	1.290
435	50.03	1070.	2282.	918.75	3263.	43.50	0.535	0.870	1.74	427.0	163.050	7.35	1.305
440	50.60	1080.	2308.	925.00	3300.	44.00	0.540	0.880	1.76	431.8	164.900	7.40	1.320
445	51.18	1090.	2334.	931.25	3338.	44.50	0.545	0.890	1.78	436.7	166.750	7.45	1.335
450	51.75	1100.	2360.	937.50	3375.	45.00	0.550	0.900	1.80	441.5	168.600	7.50	1.350
455	52.33	1110.	2386.	943.75	3413.	45.50	0.555	0.910	1.82	446.4	170.450	7.55	1.365
460	52.90	1120.	2412.	950.00	3450.	46.00	0.560	0.920	1.84	451.2	172.300	7.60	1.380
465	53.48	1130.	2438.	956.25	3488.	46.50	0.565	0.930	1.86	456.1	174.150	7.65	1.395
470	54.05	1140.	2464.	962.50	3525.	47.00	0.570	0.940	1.88	460.9	176.000	7.70	1.410
475	54.63	1150.	2490.	968.75	3563.	47.50	0.575	0.950	1.90	465.8	177.850	7.75	1.425
480	55.20	1160.	2516.	975.00	3600.	48.00	0.580	0.960	1.92	470.6	179.700	7.80	1.440
485	55.78	1170.	2542.	981.25	3638.	48.50	0.585	0.970	1.94	475.5	181.550	7.85	1.455
490	56.35	1180.	2568.	987.50	3675.	49.00	0.590	0.980	1.96	480.3	183.400	7.90	1.470
495	56.93	1190.	2594.	993.75	3713.	49.50	0.595	0.990	1.98	485.2	185.250	7.95	1.485
500	57.50	1200.	2620.	1000.00	3750.	50.00	0.600	1.000	2.00	490.0	187.100	8.00	1.500

Table A-4

WORKING TABLE: POLLUTANT CONCENTRATIONS FOR PSI = 200.5-499.5

PSI (NEAREST UNIT)	PSI	UNITS IN MICROGRAMS/CUBIC METER					UNITS IN PARTS PER MILLION				MIXED UNITS			
		CO (MG/M3)	O3	SO2	TSP	NO2	CO	O3	SO2	NO2	TSPXSO2 (UG-MG/M6)	TSPXSO2 (PPM-UG/M3)	COH (COHS)	COHXSO2 (COHS-PPM)
201	200.5	17.09	402.	804.	376.25	1136.	15.08	0.201	0.301	0.603	66.0	25.194	3.01	0.203
202	201.5	17.26	406.	812.	378.75	1147.	15.23	0.203	0.304	0.609	67.9	25.943	3.03	0.209
203	202.5	17.43	410.	820.	381.25	1158.	15.38	0.205	0.307	0.615	69.9	26.691	3.05	0.215
204	203.5	17.60	414.	828.	383.75	1170.	15.53	0.207	0.310	0.621	71.9	27.439	3.07	0.221
205	204.5	17.77	418.	836.	386.25	1181.	15.68	0.209	0.313	0.627	73.8	28.188	3.09	0.227
206	205.5	17.94	422.	844.	388.75	1192.	15.83	0.211	0.316	0.633	75.8	28.936	3.11	0.233
207	206.5	18.11	426.	852.	391.25	1203.	15.98	0.213	0.319	0.639	77.7	29.685	3.13	0.239
208	207.5	18.28	430.	860.	393.75	1215.	16.13	0.215	0.322	0.645	79.7	30.433	3.15	0.245
209	208.5	18.45	434.	868.	396.25	1226.	16.28	0.217	0.325	0.651	81.7	31.181	3.17	0.251
210	209.5	18.62	438.	876.	398.75	1237.	16.43	0.219	0.328	0.657	83.6	31.930	3.19	0.257
211	210.5	18.79	442.	884.	401.25	1249.	16.58	0.221	0.331	0.663	85.6	32.678	3.21	0.263
212	211.5	18.96	446.	892.	403.75	1260.	16.73	0.223	0.334	0.669	87.5	33.427	3.23	0.269
213	212.5	19.13	450.	900.	406.25	1271.	16.88	0.225	0.337	0.675	89.5	34.175	3.25	0.275
214	213.5	19.30	454.	908.	408.75	1283.	17.03	0.227	0.340	0.681	91.5	34.923	3.27	0.281
215	214.5	19.47	458.	916.	411.25	1294.	17.18	0.229	0.343	0.687	93.4	35.672	3.29	0.287
216	215.5	19.64	462.	924.	413.75	1305.	17.33	0.231	0.346	0.693	95.4	36.420	3.31	0.293
217	216.5	19.81	466.	932.	416.25	1316.	17.48	0.233	0.349	0.699	97.3	37.169	3.33	0.299
218	217.5	19.98	470.	940.	418.75	1328.	17.63	0.235	0.352	0.705	99.3	37.917	3.35	0.305
219	218.5	20.15	474.	948.	421.25	1339.	17.78	0.237	0.355	0.711	101.3	38.665	3.37	0.311
220	219.5	20.32	478.	956.	423.75	1350.	17.93	0.239	0.358	0.717	103.2	39.414	3.39	0.317
221	220.5	20.49	482.	964.	426.25	1362.	18.08	0.241	0.361	0.723	105.2	40.162	3.41	0.323
222	221.5	20.66	486.	972.	428.75	1373.	18.23	0.243	0.364	0.729	107.1	40.911	3.43	0.329
223	222.5	20.83	490.	980.	431.25	1384.	18.38	0.245	0.367	0.735	109.1	41.659	3.45	0.335
224	223.5	21.00	494.	988.	433.75	1396.	18.53	0.247	0.370	0.741	111.1	42.407	3.47	0.341
225	224.5	21.17	498.	996.	436.25	1407.	18.68	0.249	0.373	0.747	113.0	43.156	3.49	0.347
226	225.5	21.34	502.	1004.	438.75	1418.	18.83	0.251	0.376	0.753	115.0	43.904	3.51	0.353
227	226.5	21.51	506.	1012.	441.25	1429.	18.98	0.253	0.379	0.759	116.9	44.653	3.53	0.359
228	227.5	21.68	510.	1020.	443.75	1441.	19.13	0.255	0.382	0.765	118.9	45.401	3.55	0.365
229	228.5	21.85	514.	1028.	446.25	1452.	19.28	0.257	0.385	0.771	120.9	46.149	3.57	0.371
230	229.5	22.02	518.	1036.	448.75	1463.	19.43	0.259	0.388	0.777	122.8	46.898	3.59	0.377

Table A-4 (Continued)

WORKING TABLE: POLLUTANT CONCENTRATIONS FOR PSI = 200.5-499.5

PSI (NEAREST UNIT)	PSI	UNITS IN MICROGRAMS/CUBIC METER					UNITS IN PARTS PER MILLION				MIXED UNITS			
		CO (MG/M3)	O3	SO2	TSP	NO2	CO	O3	SO2	NO2	TSPXSO2 (UG-MG/M6)	TSPXSO2 (PPM-UG/M3)	COH (COHS)	COHXSO2 (COHS-PPM)
231	230.5	22.19	522.	1044.	451.25	1475.	19.58	0.261	0.391	0.783	124.8	47.646	3.61	0.383
232	231.5	22.36	526.	1052.	453.75	1486.	19.73	0.263	0.394	0.789	126.7	48.395	3.63	0.389
233	232.5	22.53	530.	1060.	456.25	1497.	19.88	0.265	0.397	0.795	128.7	49.143	3.65	0.395
234	233.5	22.70	534.	1068.	458.75	1509.	20.03	0.267	0.400	0.801	130.7	49.891	3.67	0.401
235	234.5	22.87	538.	1076.	461.25	1520.	20.18	0.269	0.403	0.807	132.6	50.640	3.69	0.407
236	235.5	23.04	542.	1084.	463.75	1531.	20.33	0.271	0.406	0.813	134.6	51.388	3.71	0.413
237	236.5	23.21	546.	1092.	466.25	1542.	20.48	0.273	0.409	0.819	136.5	52.137	3.73	0.419
238	237.5	23.38	550.	1100.	468.75	1554.	20.63	0.275	0.412	0.825	138.5	52.885	3.75	0.425
239	238.5	23.55	554.	1108.	471.25	1565.	20.78	0.277	0.415	0.831	140.5	53.633	3.77	0.431
240	239.5	23.72	558.	1116.	473.75	1576.	20.93	0.279	0.418	0.837	142.4	54.382	3.79	0.437
241	240.5	23.89	562.	1124.	476.25	1588.	21.08	0.281	0.421	0.843	144.4	55.130	3.81	0.443
242	241.5	24.06	566.	1132.	478.75	1599.	21.23	0.283	0.424	0.849	146.3	55.879	3.83	0.449
243	242.5	24.23	570.	1140.	481.25	1610.	21.38	0.285	0.427	0.855	148.3	56.627	3.85	0.455
244	243.5	24.40	574.	1148.	483.75	1622.	21.53	0.287	0.430	0.861	150.3	57.375	3.87	0.461
245	244.5	24.57	578.	1156.	486.25	1633.	21.68	0.289	0.433	0.867	152.2	58.124	3.89	0.467
246	245.5	24.74	582.	1164.	488.75	1644.	21.83	0.291	0.436	0.873	154.2	58.872	3.91	0.473
247	246.5	24.91	586.	1172.	491.25	1655.	21.98	0.293	0.439	0.879	156.1	59.621	3.93	0.479
248	247.5	25.08	590.	1180.	493.75	1667.	22.13	0.295	0.442	0.885	158.1	60.369	3.95	0.485
249	248.5	25.25	594.	1188.	496.25	1678.	22.28	0.297	0.445	0.891	160.1	61.117	3.97	0.491
250	249.5	25.42	598.	1196.	498.75	1689.	22.43	0.299	0.448	0.897	162.0	61.866	3.99	0.497
251	250.5	25.59	602.	1204.	501.25	1701.	22.58	0.301	0.451	0.903	164.0	62.614	4.01	0.503
252	251.5	25.76	606.	1212.	503.75	1712.	22.73	0.303	0.454	0.909	165.9	63.363	4.03	0.509
253	252.5	25.93	610.	1220.	506.25	1723.	22.88	0.305	0.457	0.915	167.9	64.111	4.05	0.515
254	253.5	26.10	614.	1228.	508.75	1735.	23.03	0.307	0.460	0.921	169.9	64.859	4.07	0.521
255	254.5	26.27	618.	1236.	511.25	1746.	23.18	0.309	0.463	0.927	171.8	65.608	4.09	0.527
256	255.5	26.44	622.	1244.	513.75	1757.	23.33	0.311	0.466	0.933	173.8	66.356	4.11	0.533
257	256.5	26.61	626.	1252.	516.25	1768.	23.48	0.313	0.469	0.939	175.7	67.105	4.13	0.539
258	257.5	26.78	630.	1260.	518.75	1780.	23.63	0.315	0.472	0.945	177.7	67.853	4.15	0.545
259	258.5	26.95	634.	1268.	521.25	1791.	23.78	0.317	0.475	0.951	179.7	68.601	4.17	0.551
260	259.5	27.12	638.	1276.	523.75	1802.	23.93	0.319	0.478	0.957	181.6	69.350	4.19	0.557

Table A-4 (Continued)

WORKING TABLE: POLLUTANT CONCENTRATIONS FOR PSI = 200.5-499.5

PSI (NEAREST UNIT)	PSI	UNITS IN MICROGRAMS/CUBIC METER					UNITS IN PARTS PER MILLION				MIXED UNITS			
		CO (MG/M3)	O3	SO2	TSP	NO2	CO	O3	SO2	NO2	TSPXSO2 (UG-MG/M6)	TSPXSO2 (PPM-UG/M3)	COH (COHS)	COHXSO2 (COHS-PPM)
261	260.5	27.29	642.	1284.	526.25	1814.	24.08	0.321	0.481	0.963	183.6	70.098	4.21	0.563
262	261.5	27.46	646.	1292.	528.75	1825.	24.23	0.323	0.484	0.969	185.5	70.847	4.23	0.569
263	262.5	27.63	650.	1300.	531.25	1836.	24.38	0.325	0.487	0.975	187.5	71.595	4.25	0.575
264	263.5	27.80	654.	1308.	533.75	1848.	24.53	0.327	0.490	0.981	189.5	72.343	4.27	0.581
265	264.5	27.97	658.	1316.	536.25	1859.	24.68	0.329	0.493	0.987	191.4	73.092	4.29	0.587
266	265.5	28.14	662.	1324.	538.75	1870.	24.83	0.331	0.496	0.993	193.4	73.840	4.31	0.593
267	266.5	28.31	666.	1332.	541.25	1881.	24.98	0.333	0.499	0.999	195.3	74.589	4.33	0.599
268	267.5	28.48	670.	1340.	543.75	1893.	25.13	0.335	0.502	1.005	197.3	75.337	4.35	0.605
269	268.5	28.65	674.	1348.	546.25	1904.	25.28	0.337	0.505	1.011	199.3	76.085	4.37	0.611
270	269.5	28.82	678.	1356.	548.75	1915.	25.43	0.339	0.508	1.017	201.2	76.834	4.39	0.617
271	270.5	28.99	682.	1364.	551.25	1927.	25.58	0.341	0.511	1.023	203.2	77.582	4.41	0.623
272	271.5	29.16	686.	1372.	553.75	1938.	25.73	0.343	0.514	1.029	205.1	78.331	4.43	0.629
273	272.5	29.33	690.	1380.	556.25	1949.	25.88	0.345	0.517	1.035	207.1	79.079	4.45	0.635
274	273.5	29.50	694.	1388.	558.75	1961.	26.03	0.347	0.520	1.041	209.1	79.827	4.47	0.641
275	274.5	29.67	698.	1396.	561.25	1972.	26.18	0.349	0.523	1.047	211.0	80.576	4.49	0.647
276	275.5	29.84	702.	1404.	563.75	1983.	26.33	0.351	0.526	1.053	213.0	81.324	4.51	0.653
277	276.5	30.01	706.	1412.	566.25	1994.	26.48	0.353	0.529	1.059	214.9	82.073	4.53	0.659
278	277.5	30.18	710.	1420.	568.75	2006.	26.63	0.355	0.532	1.065	216.9	82.821	4.55	0.665
279	278.5	30.35	714.	1428.	571.25	2017.	26.78	0.357	0.535	1.071	218.9	83.569	4.57	0.671
280	279.5	30.52	718.	1436.	573.75	2028.	26.93	0.359	0.538	1.077	220.8	84.318	4.59	0.677
281	280.5	30.69	722.	1444.	576.25	2040.	27.08	0.361	0.541	1.083	222.8	85.066	4.61	0.683
282	281.5	30.86	726.	1452.	578.75	2051.	27.23	0.363	0.544	1.089	224.7	85.815	4.63	0.689
283	282.5	31.03	730.	1460.	581.25	2062.	27.38	0.365	0.547	1.095	226.7	86.563	4.65	0.695
284	283.5	31.20	734.	1468.	583.75	2074.	27.53	0.367	0.550	1.101	228.7	87.311	4.67	0.701
285	284.5	31.37	738.	1476.	586.25	2085.	27.68	0.369	0.553	1.107	230.6	88.060	4.69	0.707
286	285.5	31.54	742.	1484.	588.75	2096.	27.83	0.371	0.556	1.113	232.6	88.808	4.71	0.713
287	286.5	31.71	746.	1492.	591.25	2107.	27.98	0.373	0.559	1.119	234.5	89.557	4.73	0.719
288	287.5	31.88	750.	1500.	593.75	2119.	28.13	0.375	0.562	1.125	236.5	90.305	4.75	0.725
289	288.5	32.05	754.	1508.	596.25	2130.	28.28	0.377	0.565	1.131	238.5	91.053	4.77	0.731
290	289.5	32.22	758.	1516.	598.75	2141.	28.43	0.379	0.568	1.137	240.4	91.802	4.79	0.737

Table A-4 (Continued)

WORKING TABLE: POLLUTANT CONCENTRATIONS FOR PSI = 200.5-499.5

PSI (NEAREST UNIT)	PSI	UNITS IN MICROGRAMS/CUBIC METER					UNITS IN PARTS PER MILLION				MIXED UNITS			
		CO (MG/M3)	O3	SO2	TSP	NO2	CO	O3	SO2	NO2	TSPXSO2 (UG-MG/M6)	TSPXSO2 (PPM-UG/M3)	COH (COHS)	COHXSO2 (COHS-PPM)
291	290.5	32.39	762.	1524.	601.25	2153.	28.58	0.381	0.571	1.143	242.4	92.550	4.81	0.743
292	291.5	32.56	766.	1532.	603.75	2164.	28.73	0.383	0.574	1.149	244.3	93.299	4.83	0.749
293	292.5	32.73	770.	1540.	606.25	2175.	28.88	0.385	0.577	1.155	246.3	94.047	4.85	0.755
294	293.5	32.90	774.	1548.	608.75	2187.	29.03	0.387	0.580	1.161	248.3	94.795	4.87	0.761
295	294.5	33.07	778.	1556.	611.25	2198.	29.18	0.389	0.583	1.167	250.2	95.544	4.89	0.767
296	295.5	33.24	782.	1564.	613.75	2209.	29.33	0.391	0.586	1.173	252.2	96.292	4.91	0.773
297	296.5	33.41	786.	1572.	616.25	2220.	29.48	0.393	0.589	1.179	254.1	97.041	4.93	0.779
298	297.5	33.58	790.	1580.	618.75	2232.	29.63	0.395	0.592	1.185	256.1	97.789	4.95	0.785
299	298.5	33.75	794.	1588.	621.25	2243.	29.78	0.397	0.595	1.191	258.1	98.537	4.97	0.791
300	299.5	33.92	798.	1596.	623.75	2254.	29.93	0.399	0.598	1.197	260.0	99.286	4.99	0.797
301	300.5	34.06	801.	1603.	626.25	2264.	30.05	0.400	0.601	1.202	261.7	99.912	5.01	0.802
302	301.5	34.18	803.	1608.	628.75	2271.	30.15	0.401	0.603	1.206	263.0	100.417	5.03	0.806
303	302.5	34.30	805.	1613.	631.25	2279.	30.25	0.402	0.605	1.210	264.3	100.921	5.05	0.810
304	303.5	34.42	807.	1618.	633.75	2286.	30.35	0.403	0.607	1.214	265.6	101.425	5.07	0.814
305	304.5	34.54	809.	1623.	636.25	2293.	30.45	0.404	0.609	1.218	266.9	101.930	5.09	0.818
306	305.5	34.66	811.	1628.	638.75	2301.	30.55	0.405	0.611	1.222	268.3	102.434	5.11	0.822
307	306.5	34.78	813.	1633.	641.25	2308.	30.65	0.406	0.613	1.226	269.6	102.939	5.13	0.826
308	307.5	34.90	815.	1638.	643.75	2316.	30.75	0.407	0.615	1.230	270.9	103.443	5.15	0.830
309	308.5	35.02	817.	1643.	646.25	2323.	30.85	0.408	0.617	1.234	272.2	103.947	5.17	0.834
310	309.5	35.14	819.	1648.	648.75	2330.	30.95	0.409	0.619	1.238	273.5	104.452	5.19	0.838
311	310.5	35.26	821.	1653.	651.25	2338.	31.05	0.410	0.621	1.242	274.9	104.956	5.21	0.842
312	311.5	35.38	823.	1658.	653.75	2345.	31.15	0.411	0.623	1.246	276.2	105.461	5.23	0.846
313	312.5	35.50	825.	1663.	656.25	2353.	31.25	0.412	0.625	1.250	277.5	105.965	5.25	0.850
314	313.5	35.62	827.	1668.	658.75	2360.	31.35	0.413	0.627	1.254	278.8	106.469	5.27	0.854
315	314.5	35.74	829.	1673.	661.25	2367.	31.45	0.414	0.629	1.258	280.1	106.974	5.29	0.858
316	315.5	35.86	831.	1678.	663.75	2375.	31.55	0.415	0.631	1.262	281.5	107.478	5.31	0.862
317	316.5	35.98	833.	1683.	666.25	2382.	31.65	0.416	0.633	1.266	282.8	107.983	5.33	0.866
318	317.5	36.10	835.	1688.	668.75	2390.	31.75	0.417	0.635	1.270	284.1	108.487	5.35	0.870
319	318.5	36.22	837.	1693.	671.25	2397.	31.85	0.418	0.637	1.274	285.4	108.991	5.37	0.874
320	319.5	36.34	839.	1698.	673.75	2404.	31.95	0.419	0.639	1.278	286.7	109.496	5.39	0.878

Table A-4 (Continued)

WORKING TABLE: POLLUTANT CONCENTRATIONS FOR PSI = 200.5-499.5

PSI (NEAREST UNIT)	PSI	UNITS IN MICROGRAMS/CUBIC METER					UNITS IN PARTS PER MILLION				MIXED UNITS			
		CO (MG/M3)	O3	SO2	TSP	NO2	CO	O3	SO2	NO2	TSPXSO2 (UG-MG/M6)	TSPXSO2 (PPM-UG/M3)	COH (COHS)	COHXSO2 (COHS-PPM)
321	320.5	36.46	841.	1703.	676.25	2412.	32.05	0.420	0.641	1.282	288.1	110.000	5.41	0.882
322	321.5	36.58	843.	1708.	678.75	2419.	32.15	0.421	0.643	1.286	289.4	110.505	5.43	0.886
323	322.5	36.70	845.	1713.	681.25	2427.	32.25	0.422	0.645	1.290	290.7	111.009	5.45	0.890
324	323.5	36.82	847.	1718.	683.75	2434.	32.35	0.423	0.647	1.294	292.0	111.513	5.47	0.894
325	324.5	36.94	849.	1723.	686.25	2441.	32.45	0.424	0.649	1.298	293.3	112.018	5.49	0.898
326	325.5	37.06	851.	1728.	688.75	2449.	32.55	0.425	0.651	1.302	294.7	112.522	5.51	0.902
327	326.5	37.18	853.	1733.	691.25	2456.	32.65	0.426	0.653	1.306	296.0	113.027	5.53	0.906
328	327.5	37.30	855.	1738.	693.75	2464.	32.75	0.427	0.655	1.310	297.3	113.531	5.55	0.910
329	328.5	37.42	857.	1743.	696.25	2471.	32.85	0.428	0.657	1.314	298.6	114.035	5.57	0.914
330	329.5	37.54	859.	1748.	698.75	2478.	32.95	0.429	0.659	1.318	299.9	114.540	5.59	0.918
331	330.5	37.66	861.	1753.	701.25	2486.	33.05	0.430	0.661	1.322	301.3	115.044	5.61	0.922
332	331.5	37.78	863.	1758.	703.75	2493.	33.15	0.431	0.663	1.326	302.6	115.549	5.63	0.926
333	332.5	37.90	865.	1763.	706.25	2501.	33.25	0.432	0.665	1.330	303.9	116.053	5.65	0.930
334	333.5	38.02	867.	1768.	708.75	2508.	33.35	0.433	0.667	1.334	305.2	116.557	5.67	0.934
335	334.5	38.14	869.	1773.	711.25	2515.	33.45	0.434	0.669	1.338	306.5	117.062	5.69	0.938
336	335.5	38.26	871.	1778.	713.75	2523.	33.55	0.435	0.671	1.342	307.9	117.566	5.71	0.942
337	336.5	38.38	873.	1783.	716.25	2530.	33.65	0.436	0.673	1.346	309.2	118.071	5.73	0.946
338	337.5	38.50	875.	1788.	718.75	2538.	33.75	0.437	0.675	1.350	310.5	118.575	5.75	0.950
339	338.5	38.62	877.	1793.	721.25	2545.	33.85	0.438	0.677	1.354	311.8	119.079	5.77	0.954
340	339.5	38.74	879.	1798.	723.75	2552.	33.95	0.439	0.679	1.358	313.1	119.584	5.79	0.958
341	340.5	38.86	881.	1803.	726.25	2560.	34.05	0.440	0.681	1.362	314.5	120.088	5.81	0.962
342	341.5	38.98	883.	1808.	728.75	2567.	34.15	0.441	0.683	1.366	315.8	120.593	5.83	0.966
343	342.5	39.10	885.	1813.	731.25	2575.	34.25	0.442	0.685	1.370	317.1	121.097	5.85	0.970
344	343.5	39.22	887.	1818.	733.75	2582.	34.35	0.443	0.687	1.374	318.4	121.601	5.87	0.974
345	344.5	39.34	889.	1823.	736.25	2589.	34.45	0.444	0.689	1.378	319.7	122.106	5.89	0.978
346	345.5	39.46	891.	1828.	738.75	2597.	34.55	0.445	0.691	1.382	321.1	122.610	5.91	0.982
347	346.5	39.58	893.	1833.	741.25	2604.	34.65	0.446	0.693	1.386	322.4	123.115	5.93	0.986
348	347.5	39.70	895.	1838.	743.75	2612.	34.75	0.447	0.695	1.390	323.7	123.619	5.95	0.990
349	348.5	39.82	897.	1843.	746.25	2619.	34.85	0.448	0.697	1.394	325.0	124.123	5.97	0.994
350	349.5	39.94	899.	1848.	748.75	2626.	34.95	0.449	0.699	1.398	326.3	124.628	5.99	0.998

Table A-4 (Continued)

WORKING TABLE: POLLUTANT CONCENTRATIONS FOR PSI = 200.5-499.5

PSI (NEAREST UNIT)	PSI	UNITS IN MICROGRAMS/CUBIC METER					UNITS IN PARTS PER MILLION				MIXED UNITS			
		CO (MG/M3)	O3	SO2	TSP	NO2	CO	O3	SO2	NO2	TSPXSO2 (UG-MG/M6)	TSPXSO2 (PPM-UG/M3)	COH (COHS)	COHXSO2 (COHS-PPM)
351	350.5	40.06	901.	1853.	751.25	2634.	35.05	0.450	0.701	1.402	327.7	125.132	6.01	1.002
352	351.5	40.18	903.	1858.	753.75	2641.	35.15	0.451	0.703	1.406	329.0	125.637	6.03	1.006
353	352.5	40.30	905.	1863.	756.25	2649.	35.25	0.452	0.705	1.410	330.3	126.141	6.05	1.010
354	353.5	40.42	907.	1868.	758.75	2656.	35.35	0.453	0.707	1.414	331.6	126.645	6.07	1.014
355	354.5	40.54	909.	1873.	761.25	2663.	35.45	0.454	0.709	1.418	332.9	127.150	6.09	1.018
356	355.5	40.66	911.	1878.	763.75	2671.	35.55	0.455	0.711	1.422	334.3	127.654	6.11	1.022
357	356.5	40.78	913.	1883.	766.25	2678.	35.65	0.456	0.713	1.426	335.6	128.159	6.13	1.026
358	357.5	40.90	915.	1888.	768.75	2686.	35.75	0.457	0.715	1.430	336.9	128.663	6.15	1.030
359	358.5	41.02	917.	1893.	771.25	2693.	35.85	0.458	0.717	1.434	338.2	129.167	6.17	1.034
360	359.5	41.14	919.	1898.	773.75	2700.	35.95	0.459	0.719	1.438	339.5	129.672	6.19	1.038
361	360.5	41.26	921.	1903.	776.25	2708.	36.05	0.460	0.721	1.442	340.9	130.176	6.21	1.042
362	361.5	41.38	923.	1908.	778.75	2715.	36.15	0.461	0.723	1.446	342.2	130.681	6.23	1.046
363	362.5	41.50	925.	1913.	781.25	2723.	36.25	0.462	0.725	1.450	343.5	131.185	6.25	1.050
364	363.5	41.62	927.	1918.	783.75	2730.	36.35	0.463	0.727	1.454	344.8	131.689	6.27	1.054
365	364.5	41.74	929.	1923.	786.25	2737.	36.45	0.464	0.729	1.458	346.1	132.194	6.29	1.058
366	365.5	41.86	931.	1928.	788.75	2745.	36.55	0.465	0.731	1.462	347.5	132.698	6.31	1.062
367	366.5	41.98	933.	1933.	791.25	2752.	36.65	0.466	0.733	1.466	348.8	133.203	6.33	1.066
368	367.5	42.10	935.	1938.	793.75	2760.	36.75	0.467	0.735	1.470	350.1	133.707	6.35	1.070
369	368.5	42.22	937.	1943.	796.25	2767.	36.85	0.468	0.737	1.474	351.4	134.211	6.37	1.074
370	369.5	42.34	939.	1948.	798.75	2774.	36.95	0.469	0.739	1.478	352.7	134.716	6.39	1.078
371	370.5	42.46	941.	1953.	801.25	2782.	37.05	0.470	0.741	1.482	354.1	135.220	6.41	1.082
372	371.5	42.58	943.	1958.	803.75	2789.	37.15	0.471	0.743	1.486	355.4	135.725	6.43	1.086
373	372.5	42.70	945.	1963.	806.25	2797.	37.25	0.472	0.745	1.490	356.7	136.229	6.45	1.090
374	373.5	42.82	947.	1968.	808.75	2804.	37.35	0.473	0.747	1.494	358.0	136.733	6.47	1.094
375	374.5	42.94	949.	1973.	811.25	2811.	37.45	0.474	0.749	1.498	359.3	137.238	6.49	1.098
376	375.5	43.06	951.	1978.	813.75	2819.	37.55	0.475	0.751	1.502	360.7	137.742	6.51	1.102
377	376.5	43.18	953.	1983.	816.25	2826.	37.65	0.476	0.753	1.506	362.0	138.247	6.53	1.106
378	377.5	43.30	955.	1988.	818.75	2834.	37.75	0.477	0.755	1.510	363.3	138.751	6.55	1.110
379	378.5	43.42	957.	1993.	821.25	2841.	37.85	0.478	0.757	1.514	364.6	139.255	6.57	1.114
380	379.5	43.54	959.	1998.	823.75	2848.	37.95	0.479	0.759	1.518	365.9	139.760	6.59	1.118

Table A-4 (Continued)

WORKING TABLE: POLLUTANT CONCENTRATIONS FOR PSI = 200.5-499.5

PSI (NEAREST UNIT)	PSI	UNITS IN MICROGRAMS/CUBIC METER					UNITS IN PARTS PER MILLION				MIXED UNITS			
		CO (MG/M3)	O3	SO2	TSP	NO2	CO	O3	SO2	NO2	TSPXSO2 (UG-MG/M6)	TSPXSO2 (PPM-UG/M3)	COH (COHS)	COHXSO2 (COHS-PPM)
381	380.5	43.66	961.	2003.	826.25	2856.	38.05	0.480	0.761	1.522	367.3	140.264	6.61	1.122
382	381.5	43.78	963.	2008.	828.75	2863.	38.15	0.481	0.763	1.526	368.6	140.769	6.63	1.126
383	382.5	43.90	965.	2013.	831.25	2871.	38.25	0.482	0.765	1.530	369.9	141.273	6.65	1.130
384	383.5	44.02	967.	2018.	833.75	2878.	38.35	0.483	0.767	1.534	371.2	141.777	6.67	1.134
385	384.5	44.14	969.	2023.	836.25	2885.	38.45	0.484	0.769	1.538	372.5	142.282	6.69	1.138
386	385.5	44.26	971.	2028.	838.75	2893.	38.55	0.485	0.771	1.542	373.9	142.786	6.71	1.142
387	386.5	44.38	973.	2033.	841.25	2900.	38.65	0.486	0.773	1.546	375.2	143.291	6.73	1.146
388	387.5	44.50	975.	2038.	843.75	2908.	38.75	0.487	0.775	1.550	376.5	143.795	6.75	1.150
389	388.5	44.62	977.	2043.	846.25	2915.	38.85	0.488	0.777	1.554	377.8	144.299	6.77	1.154
390	389.5	44.74	979.	2048.	848.75	2922.	38.95	0.489	0.779	1.558	379.1	144.804	6.79	1.158
391	390.5	44.86	981.	2053.	851.25	2930.	39.05	0.490	0.781	1.562	380.5	145.308	6.81	1.162
392	391.5	44.98	983.	2058.	853.75	2937.	39.15	0.491	0.783	1.566	381.8	145.813	6.83	1.166
393	392.5	45.10	985.	2063.	856.25	2945.	39.25	0.492	0.785	1.570	383.1	146.317	6.85	1.170
394	393.5	45.22	987.	2068.	858.75	2952.	39.35	0.493	0.787	1.574	384.4	146.821	6.87	1.174
395	394.5	45.34	989.	2073.	861.25	2959.	39.45	0.494	0.789	1.578	385.7	147.326	6.89	1.178
396	395.5	45.46	991.	2078.	863.75	2967.	39.55	0.495	0.791	1.582	387.1	147.830	6.91	1.182
397	396.5	45.58	993.	2083.	866.25	2974.	39.65	0.496	0.793	1.586	388.4	148.335	6.93	1.186
398	397.5	45.70	995.	2088.	868.75	2982.	39.75	0.497	0.795	1.590	389.7	148.839	6.95	1.190
399	398.5	45.82	997.	2093.	871.25	2989.	39.85	0.498	0.797	1.594	391.0	149.343	6.97	1.194
400	399.5	45.94	999.	2098.	873.75	2996.	39.95	0.499	0.799	1.598	392.3	149.848	6.99	1.198
401	400.5	46.06	1001.	2103.	875.63	3004.	40.05	0.500	0.801	1.602	393.5	150.285	7.01	1.201
402	401.5	46.17	1003.	2108.	876.88	3011.	40.15	0.501	0.803	1.606	394.5	150.655	7.02	1.204
403	402.5	46.29	1005.	2113.	878.13	3019.	40.25	0.502	0.805	1.610	395.4	151.025	7.03	1.207
404	403.5	46.40	1007.	2118.	879.38	3026.	40.35	0.503	0.807	1.614	396.4	151.395	7.04	1.210
405	404.5	46.52	1009.	2123.	880.63	3034.	40.45	0.504	0.809	1.618	397.4	151.765	7.05	1.213
406	405.5	46.63	1011.	2129.	881.88	3041.	40.55	0.505	0.811	1.622	398.3	152.135	7.06	1.216
407	406.5	46.75	1013.	2134.	883.13	3049.	40.65	0.506	0.813	1.626	399.3	152.505	7.07	1.219
408	407.5	46.86	1015.	2139.	884.38	3056.	40.75	0.507	0.815	1.630	400.3	152.875	7.08	1.222
409	408.5	46.98	1017.	2144.	885.63	3064.	40.85	0.508	0.817	1.634	401.2	153.245	7.09	1.225
410	409.5	47.09	1019.	2149.	886.88	3071.	40.95	0.509	0.819	1.638	402.2	153.615	7.10	1.228

Table A-4 (Continued)

WORKING TABLE: POLLUTANT CONCENTRATIONS FOR PSI = 200.4-499.5

PSI (NEAREST UNIT)	PSI	UNITS IN MICROGRAMS/CUBIC METER					UNITS IN PARTS PER MILLION				MIXED UNITS			
		CO (MG/M3)	O3	SO2	TSP	NO2	CO	O3	SO2	NO2	TSPXSO2 (UG-MG/M6)	TSPXSO2 (PPM-UG/M3)	COH (COHS)	COHXSO2 (COHS-PPM)
411	410.5	47.21	1021.	2155.	888.13	3079.	41.05	0.510	0.821	1.642	403.2	153.985	7.11	1.231
412	411.5	47.32	1023.	2160.	889.38	3086.	41.15	0.511	0.823	1.646	404.2	154.355	7.12	1.234
413	412.5	47.44	1025.	2165.	890.63	3094.	41.25	0.512	0.825	1.650	405.1	154.725	7.13	1.237
414	413.5	47.55	1027.	2170.	891.88	3101.	41.35	0.513	0.827	1.654	406.1	155.095	7.14	1.240
415	414.5	47.67	1029.	2175.	893.13	3109.	41.45	0.514	0.829	1.658	407.1	155.465	7.15	1.243
416	415.5	47.78	1031.	2181.	894.38	3116.	41.55	0.515	0.831	1.662	408.0	155.835	7.16	1.246
417	416.5	47.90	1033.	2186.	895.63	3124.	41.65	0.516	0.833	1.666	409.0	156.205	7.17	1.249
418	417.5	48.01	1035.	2191.	896.88	3131.	41.75	0.517	0.835	1.670	410.0	156.575	7.18	1.252
419	418.5	48.13	1037.	2196.	898.13	3139.	41.85	0.518	0.837	1.674	410.9	156.945	7.19	1.255
420	419.5	48.24	1039.	2201.	899.38	3146.	41.95	0.519	0.839	1.678	411.9	157.315	7.20	1.258
421	420.5	48.36	1041.	2207.	900.63	3154.	42.05	0.520	0.841	1.682	412.9	157.685	7.21	1.261
422	421.5	48.47	1043.	2212.	901.88	3161.	42.15	0.521	0.843	1.686	413.9	158.055	7.22	1.264
423	422.5	48.59	1045.	2217.	903.13	3169.	42.25	0.522	0.845	1.690	414.8	158.425	7.23	1.267
424	423.5	48.70	1047.	2222.	904.38	3176.	42.35	0.523	0.847	1.694	415.8	158.795	7.24	1.270
425	424.5	48.82	1049.	2227.	905.63	3184.	42.45	0.524	0.849	1.698	416.8	159.165	7.25	1.273
426	425.5	48.93	1051.	2233.	906.88	3191.	42.55	0.525	0.851	1.702	417.7	159.535	7.26	1.276
427	426.5	49.05	1053.	2238.	908.13	3199.	42.65	0.526	0.853	1.706	418.7	159.905	7.27	1.279
428	427.5	49.16	1055.	2243.	909.38	3206.	42.75	0.527	0.855	1.710	419.7	160.275	7.28	1.282
429	428.5	49.28	1057.	2248.	910.63	3214.	42.85	0.528	0.857	1.714	420.6	160.645	7.29	1.285
430	429.5	49.39	1059.	2253.	911.88	3221.	42.95	0.529	0.859	1.718	421.6	161.015	7.30	1.288
431	430.5	49.51	1061.	2259.	913.13	3229.	43.05	0.530	0.861	1.722	422.6	161.385	7.31	1.291
432	431.5	49.62	1063.	2264.	914.38	3236.	43.15	0.531	0.863	1.726	423.6	161.755	7.32	1.294
433	432.5	49.74	1065.	2269.	915.63	3244.	43.25	0.532	0.865	1.730	424.5	162.125	7.33	1.297
434	433.5	49.85	1067.	2274.	916.88	3251.	43.35	0.533	0.867	1.734	425.5	162.495	7.34	1.300
435	434.5	49.97	1069.	2279.	918.13	3259.	43.45	0.534	0.869	1.738	426.5	162.865	7.35	1.303
436	435.5	50.08	1071.	2285.	919.38	3266.	43.55	0.535	0.871	1.742	427.4	163.235	7.36	1.306
437	436.5	50.20	1073.	2290.	920.63	3274.	43.65	0.536	0.873	1.746	428.4	163.605	7.37	1.309
438	437.5	50.31	1075.	2295.	921.88	3281.	43.75	0.537	0.875	1.750	429.4	163.975	7.38	1.312
439	438.5	50.43	1077.	2300.	923.13	3289.	43.85	0.538	0.877	1.754	430.3	164.345	7.39	1.315
440	439.5	50.54	1079.	2305.	924.38	3296.	43.95	0.539	0.879	1.758	431.3	164.715	7.40	1.318

Table A-4 (Continued)

WORKING TABLE: POLLUTANT CONCENTRATIONS FOR PSI = 200.5-499.5

PSI (NEAREST UNIT)	PSI	UNITS IN MICROGRAMS/CUBIC METER					UNITS IN PARTS PER MILLION				MIXED UNITS			
		CO (MG/M3)	O3	SO2	TSP	NO2	CO	O3	SO2	NO2	TSPXSO2 (UG-MG/M6)	TSPXSO2 (PPM-UG/M3)	COH (COHS)	COHXSO2 (COHS-PPM)
441	440.5	50.66	1081.	2311.	925.63	3304.	44.05	0.540	0.881	1.762	432.3	165.085	7.41	1.321
442	441.5	50.77	1083.	2316.	926.88	3311.	44.15	0.541	0.883	1.766	433.3	165.455	7.42	1.324
443	442.5	50.89	1085.	2321.	928.13	3319.	44.25	0.542	0.885	1.770	434.2	165.825	7.43	1.327
444	443.5	51.00	1087.	2326.	929.38	3326.	44.35	0.543	0.887	1.774	435.2	166.195	7.44	1.330
445	444.5	51.12	1089.	2331.	930.63	3334.	44.45	0.544	0.889	1.778	436.2	166.565	7.45	1.333
446	445.5	51.23	1091.	2337.	931.88	3341.	44.55	0.545	0.891	1.782	437.1	166.935	7.46	1.336
447	446.5	51.35	1093.	2342.	933.13	3349.	44.65	0.546	0.893	1.786	438.1	167.305	7.47	1.339
448	447.5	51.46	1095.	2347.	934.38	3356.	44.75	0.547	0.895	1.790	439.1	167.675	7.48	1.342
449	448.5	51.58	1097.	2352.	935.63	3364.	44.85	0.548	0.897	1.794	440.0	168.045	7.49	1.345
450	449.5	51.69	1099.	2357.	936.88	3371.	44.95	0.549	0.899	1.798	441.0	168.415	7.50	1.348
451	450.5	51.81	1101.	2363.	938.13	3379.	45.05	0.550	0.901	1.802	442.0	168.785	7.51	1.351
452	451.5	51.92	1103.	2368.	939.38	3386.	45.15	0.551	0.903	1.806	443.0	169.155	7.52	1.354
453	452.5	52.04	1105.	2373.	940.63	3394.	45.25	0.552	0.905	1.810	443.9	169.525	7.53	1.357
454	453.5	52.15	1107.	2378.	941.88	3401.	45.35	0.553	0.907	1.814	444.9	169.895	7.54	1.360
455	454.5	52.27	1109.	2383.	943.13	3409.	45.45	0.554	0.909	1.818	445.9	170.265	7.55	1.363
456	455.5	52.38	1111.	2389.	944.38	3416.	45.55	0.555	0.911	1.822	446.8	170.635	7.56	1.366
457	456.5	52.50	1113.	2394.	945.63	3424.	45.65	0.556	0.913	1.826	447.8	171.005	7.57	1.369
458	457.5	52.61	1115.	2399.	946.88	3431.	45.75	0.557	0.915	1.830	448.8	171.375	7.58	1.372
459	458.5	52.73	1117.	2404.	948.13	3439.	45.85	0.558	0.917	1.834	449.7	171.745	7.59	1.375
460	459.5	52.84	1119.	2409.	949.38	3446.	45.95	0.559	0.919	1.838	450.7	172.115	7.60	1.378
461	460.5	52.96	1121.	2415.	950.63	3454.	46.05	0.560	0.921	1.842	451.7	172.485	7.61	1.381
462	461.5	53.07	1123.	2420.	951.88	3461.	46.15	0.561	0.923	1.846	452.7	172.855	7.62	1.384
463	462.5	53.19	1125.	2425.	953.13	3469.	46.25	0.562	0.925	1.850	453.6	173.225	7.63	1.387
464	463.5	53.30	1127.	2430.	954.38	3476.	46.35	0.563	0.927	1.854	454.6	173.595	7.64	1.390
465	464.5	53.42	1129.	2435.	955.63	3484.	46.45	0.564	0.929	1.858	455.6	173.965	7.65	1.393
466	465.5	53.53	1131.	2441.	956.88	3491.	46.55	0.565	0.931	1.862	456.5	174.335	7.66	1.396
467	466.5	53.65	1133.	2446.	958.13	3499.	46.65	0.566	0.933	1.866	457.5	174.705	7.67	1.399
468	467.5	53.76	1135.	2451.	959.38	3506.	46.75	0.567	0.935	1.870	458.5	175.075	7.68	1.402
469	468.5	53.88	1137.	2456.	960.63	3514.	46.85	0.568	0.937	1.874	459.4	175.445	7.69	1.405
470	469.5	53.99	1139.	2461.	961.88	3521.	46.95	0.569	0.939	1.878	460.4	175.815	7.70	1.408

Table A-4 (Continued)

WORKING TABLE: POLLUTANT CONCENTRATIONS FOR PSI = 200.5-499.5

PSI (NEAREST UNIT)	PSI	UNITS IN MICROGRAMS/CUBIC METER					UNITS IN PARTS PER MILLION				MIXED UNITS			
		CO (MG/M3)	O3	SO2	TSP	NO2	CO	O3	SO2	NO2	TSPXSO2 (UG-MG/M6)	TSPXSO2 (PPM-UG/M3)	COH (COHS)	COHXSO2 (COHS-PPM)
471	470.5	54.11	1141.	2467.	963.13	3529.	47.05	0.570	0.941	1.882	461.4	176.185	7.71	1.411
472	471.5	54.22	1143.	2472.	964.38	3536.	47.15	0.571	0.943	1.886	462.4	176.555	7.72	1.414
473	472.5	54.34	1145.	2477.	965.63	3544.	47.25	0.572	0.945	1.890	463.3	176.925	7.73	1.417
474	473.5	54.45	1147.	2482.	966.88	3551.	47.35	0.573	0.947	1.894	464.3	177.295	7.74	1.420
475	474.5	54.57	1149.	2487.	968.13	3559.	47.45	0.574	0.949	1.898	465.3	177.665	7.75	1.423
476	475.5	54.68	1151.	2493.	969.38	3566.	47.55	0.575	0.951	1.902	466.2	178.035	7.76	1.426
477	476.5	54.80	1153.	2498.	970.63	3574.	47.65	0.576	0.953	1.906	467.2	178.405	7.77	1.429
478	477.5	54.91	1155.	2503.	971.88	3581.	47.75	0.577	0.955	1.910	468.2	178.775	7.78	1.432
479	478.5	55.03	1157.	2508.	973.13	3589.	47.85	0.578	0.957	1.914	469.1	179.145	7.79	1.435
480	479.5	55.14	1159.	2513.	974.38	3596.	47.95	0.579	0.959	1.918	470.1	179.515	7.80	1.438
481	480.5	55.26	1161.	2519.	975.63	3604.	48.05	0.580	0.961	1.922	471.1	179.885	7.81	1.441
482	481.5	55.37	1163.	2524.	976.88	3611.	48.15	0.581	0.963	1.926	472.1	180.255	7.82	1.444
483	482.5	55.49	1165.	2529.	978.13	3619.	48.25	0.582	0.965	1.930	473.0	180.625	7.83	1.447
484	483.5	55.60	1167.	2534.	979.38	3626.	48.35	0.583	0.967	1 934	474.0	180.995	7.84	1.450
485	484.5	55.72	1169.	2539.	980.63	3634.	48.45	0.584	0.969	1.938	475.0	181.365	7.85	1.453
486	485.5	55.83	1171.	2545.	981.88	3641.	48.55	0.585	0.971	1.942	475.9	181.735	7.86	1.456
487	486.5	55.95	1173.	2550.	983.13	3649.	48.65	0.586	0.973	1.946	476.9	182.105	7.87	1.459
488	487.5	56.06	1175.	2555.	984.38	3656.	48.75	0.587	0.975	1.950	477.9	182.475	7.88	1.462
489	488.5	56.18	1177.	2560.	985.63	3664.	48.85	0.588	0.977	1.954	478.8	182.845	7.89	1.465
490	489.5	56.29	1179.	2565.	986.88	3671.	48.95	0.589	0.979	1.958	479.8	183.215	7.90	1.468
491	490.5	56.41	1181.	2571.	988.13	3679.	49.05	0.590	0.981	1.962	480.8	183.585	7.91	1.471
492	491.5	56.52	1183.	2576.	989.38	3686.	49.15	0.591	0.983	1.966	481.8	183.955	7.92	1.474
493	492.5	56.64	1185.	2581.	990.63	3694.	49.25	0.592	0.985	1.970	482.7	184.325	7.93	1.477
494	493.5	56.75	1187.	2586.	991.88	3701.	49.35	0.593	0.987	1.974	483.7	184.695	7.94	1.480
495	494.5	56.87	1189.	2591.	993.13	3709.	49.45	0.594	0.989	1.978	484.7	185.065	7.95	1.483
496	495.5	56.98	1191.	2597.	994.38	3716.	49.55	0.595	0.991	1.982	485.6	185.435	7.96	1.486
497	496.5	57.10	1193.	2602.	995.63	3724.	49.65	0.596	0.993	1.986	486.6	185.805	7.97	1.489
498	497.5	57.21	1195.	2607.	996.88	3731.	49.75	0.597	0.995	1.990	487.6	186.175	7.98	1.492
499	498.5	57.33	1197.	2612.	998.13	3739.	49.85	0.598	0.997	1.994	488.5	186.545	7.99	1.495
500	499.5	57.44	1199.	2617.	999.38	3746.	49.95	0.599	0.999	1.998	489.5	186.915	8.00	1.498

Table A-5

REFERENCE TABLE: PSI VALUES FOR CO ($\mu g/m^3$) AT EQUALLY SPACED CONCENTRATIONS

CO	PSI	CO	PSI	CO	PSI	CO	PSI	CO	PSI	CO	PSI
0.200	2.0	10.200	102.9	20.200	218.8	30.200	277.6	40.200	351.7	50.200	436.5
0.400	4.0	10.400	105.7	20.400	220.0	30.400	278.8	40.400	353.3	50.400	438.3
0.600	6.0	10.600	108.6	20.600	221.2	30.600	280.0	40.600	355.0	50.600	440.0
0.800	8.0	10.800	111.4	20.800	222.4	30.800	281.2	40.800	356.7	50.800	441.7
1.000	10.0	11.000	114.3	21.000	223.5	31.000	282.4	41.000	358.3	51.000	443.5
1.200	12.0	11.200	117.1	21.200	224.7	31.200	283.5	41.200	360.0	51.200	445.2
1.400	14.0	11.400	120.0	21.400	225.9	31.400	284.7	41.400	361.7	51.400	447.0
1.600	16.0	11.600	122.9	21.600	227.1	31.600	285.9	41.600	363.3	51.600	448.7
1.800	18.0	11.800	125.7	21.800	228.2	31.800	287.1	41.800	365.0	51.800	450.4
2.000	20.0	12.000	128.6	22.000	229.4	32.000	288.2	42.000	366.7	52.000	452.2
2.200	22.0	12.200	131.4	22.200	230.6	32.200	289.4	42.200	368.3	52.200	453.9
2.400	24.0	12.400	134.3	22.400	231.8	32.400	290.6	42.400	370.0	52.400	455.7
2.600	26.0	12.600	137.1	22.600	232.9	32.600	291.8	42.600	371.7	52.600	457.4
2.800	28.0	12.800	140.0	22.800	234.1	32.800	292.9	42.800	373.3	52.800	459.1
3.000	30.0	13.000	142.9	23.000	235.3	33.000	294.1	43.000	375.0	53.000	460.9
3.200	32.0	13.200	145.7	23.200	236.5	33.200	295.3	43.200	376.7	53.200	462.6
3.400	34.0	13.400	148.6	23.400	237.6	33.400	296.5	43.400	378.3	53.400	464.3
3.600	36.0	13.600	151.4	23.600	238.8	33.600	297.6	43.600	380.0	53.600	466.1
3.800	38.0	13.800	154.3	23.800	240.0	33.800	298.8	43.800	381.7	53.800	467.8
4.000	40.0	14.000	157.1	24.000	241.2	34.000	300.0	44.000	383.3	54.000	469.6
4.200	42.0	14.200	160.0	24.200	242.4	34.200	301.7	44.200	385.0	54.200	471.3
4.400	44.0	14.400	162.9	24.400	243.5	34.400	303.3	44.400	386.7	54.400	473.0
4.600	46.0	14.600	165.7	24.600	244.7	34.600	305.0	44.600	388.3	54.600	474.8
4.800	48.0	14.800	168.6	24.800	245.9	34.800	306.7	44.800	390.0	54.800	476.5
5.000	50.0	15.000	171.4	25.000	247.1	35.000	308.3	45.000	391.7	55.000	478.3
5.200	52.0	15.200	174.3	25.200	248.2	35.200	310.0	45.200	393.3	55.200	480.0
5.400	54.0	15.400	177.1	25.400	249.4	35.400	311.7	45.400	395.0	55.400	481.7
5.600	56.0	15.600	180.0	25.600	250.6	35.600	313.3	45.600	396.7	55.600	483.5
5.800	58.0	15.800	182.9	25.800	251.8	35.800	315.0	45.800	398.3	55.800	485.2
6.000	60.0	16.000	185.7	26.000	252.9	36.000	316.7	46.000	400.0	56.000	487.0
6.200	62.0	16.200	188.6	26.200	254.1	36.200	318.3	46.200	401.7	56.200	488.7
6.400	64.0	16.400	191.4	26.400	255.3	36.400	320.0	46.400	403.5	56.400	490.4
6.600	66.0	16.600	194.3	26.600	256.5	36.600	321.7	46.600	405.2	56.600	492.2
6.800	68.0	16.800	197.1	26.800	257.6	36.800	323.3	46.800	407.0	56.800	493.9
7.000	70.0	17.000	200.0	27.000	258.8	37.000	325.0	47.000	408.7	57.000	495.7
7.200	72.0	17.200	201.2	27.200	260.0	37.200	326.7	47.200	410.4	57.200	497.4
7.400	74.0	17.400	202.4	27.400	261.2	37.400	328.3	47.400	412.2	57.400	499.1
7.600	76.0	17.600	203.5	27.600	262.4	37.600	330.0	47.600	413.9	57.600	500.9
7.800	78.0	17.800	204.7	27.800	263.5	37.800	331.7	47.800	415.7	57.800	502.6
8.000	80.0	18.000	205.9	28.000	264.7	38.000	333.3	48.000	417.4	58.000	504.3
8.200	82.0	18.200	207.1	28.200	265.9	38.200	335.0	48.200	419.1	58.200	506.1
8.400	84.0	18.400	208.2	28.400	267.1	38.400	336.7	48.400	420.9	58.400	507.8
8.600	86.0	18.600	209.4	28.600	268.2	38.600	338.3	48.600	422.6	58.600	509.6
8.800	88.0	18.800	210.6	28.800	269.4	38.800	340.0	48.800	424.3	58.800	511.3
9.000	90.0	19.000	211.8	29.000	270.6	39.000	341.7	49.000	426.1	59.000	513.0
9.200	92.0	19.200	212.9	29.200	271.8	39.200	343.3	49.200	427.8	59.200	514.8
9.400	94.0	19.400	214.1	29.400	272.9	39.400	345.0	49.400	429.6	59.400	516.5
9.600	96.0	19.600	215.3	29.600	274.1	39.600	346.7	49.600	431.3	59.600	518.3
9.800	98.0	19.800	216.5	29.800	275.3	39.800	348.3	49.800	433.0	59.800	520.0
10.000	100.0	20.000	217.6	30.000	276.5	40.000	350.0	50.000	434.8	60.000	521.7

Table A-6

REFERENCE TABLE: PSI VALUES FOR CO (ppm) AT EQUALLY SPACED CONCENTRATIONS

CO	PSI	CO	PSI	CO	PSI	CO	PSI	CO	PSI	CO	PSI
0.200	2.2	10.200	120.0	20.200	234.7	30.200	302.0	40.200	402.0	50.200	502.0
0.400	4.4	10.400	123.3	20.400	236.0	30.400	304.0	40.400	404.0	50.400	504.0
0.600	6.7	10.600	126.7	20.600	237.3	30.600	306.0	40.600	406.0	50.600	506.0
0.800	8.9	10.800	130.0	20.800	238.7	30.800	308.0	40.800	408.0	50.800	508.0
1.000	11.1	11.000	133.3	21.000	240.0	31.000	310.0	41.000	410.0	51.000	510.0
1.200	13.3	11.200	136.7	21.200	241.3	31.200	312.0	41.200	412.0	51.200	512.0
1.400	15.6	11.400	140.0	21.400	242.7	31.400	314.0	41.400	414.0	51.400	514.0
1.600	17.8	11.600	143.3	21.600	244.0	31.600	316.0	41.600	416.0	51.600	516.0
1.800	20.0	11.800	146.7	21.800	245.3	31.800	318.0	41.800	418.0	51.800	518.0
2.000	22.2	12.000	150.0	22.000	246.7	32.000	320.0	42.000	420.0	52.000	520.0
2.200	24.4	12.200	153.3	22.200	248.0	32.200	322.0	42.200	422.0	52.200	522.0
2.400	26.7	12.400	156.7	22.400	249.3	32.400	324.0	42.400	424.0	52.400	524.0
2.600	28.9	12.600	160.0	22.600	250.7	32.600	326.0	42.600	426.0	52.600	526.0
2.800	31.1	12.800	163.3	22.800	252.0	32.800	328.0	42.800	428.0	52.800	528.0
3.000	33.3	13.000	166.7	23.000	253.3	33.000	330.0	43.000	430.0	53.000	530.0
3.200	35.6	13.200	170.0	23.200	254.7	33.200	332.0	43.200	432.0	53.200	532.0
3.400	37.8	13.400	173.3	23.400	256.0	33.400	334.0	43.400	434.0	53.400	534.0
3.600	40.0	13.600	176.7	23.600	257.3	33.600	336.0	43.600	436.0	53.600	536.0
3.800	42.2	13.800	180.0	23.800	258.7	33.800	338.0	43.800	438.0	53.800	538.0
4.000	44.4	14.000	183.3	24.000	260.0	34.000	340.0	44.000	440.0	54.000	540.0
4.200	46.7	14.200	186.7	24.200	261.3	34.200	342.0	44.200	442.0	54.200	542.0
4.400	48.9	14.400	190.0	24.400	262.7	34.400	344.0	44.400	444.0	54.400	544.0
4.600	51.1	14.600	193.3	24.600	264.0	34.600	346.0	44.600	446.0	54.600	546.0
4.800	53.3	14.800	196.7	24.800	265.3	34.800	348.0	44.800	448.0	54.800	548.0
5.000	55.6	15.000	200.0	25.000	266.7	35.000	350.0	45.000	450.0	55.000	550.0
5.200	57.8	15.200	201.3	25.200	268.0	35.200	352.0	45.200	452.0	55.200	552.0
5.400	60.0	15.400	202.7	25.400	269.3	35.400	354.0	45.400	454.0	55.400	554.0
5.600	62.2	15.600	204.0	25.600	270.7	35.600	356.0	45.600	456.0	55.600	556.0
5.800	64.4	15.800	205.3	25.800	272.0	35.800	358.0	45.800	458.0	55.800	558.0
6.000	66.7	16.000	206.7	26.000	273.3	36.000	360.0	46.000	460.0	56.000	560.0
6.200	68.9	16.200	208.0	26.200	274.7	36.200	362.0	46.200	462.0	56.200	562.0
6.400	71.1	16.400	209.3	26.400	276.0	36.400	364.0	46.400	464.0	56.400	564.0
6.600	73.3	16.600	210.7	26.600	277.3	36.600	366.0	46.600	466.0	56.600	566.0
6.800	75.6	16.800	212.0	26.800	278.7	36.800	368.0	46.800	468.0	56.800	568.0
7.000	77.8	17.000	213.3	27.000	280.0	37.000	370.0	47.000	470.0	57.000	570.0
7.200	80.0	17.200	214.7	27.200	281.3	37.200	372.0	47.200	472.0	57.200	572.0
7.400	82.2	17.400	216.0	27.400	282.7	37.400	374.0	47.400	474.0	57.400	574.0
7.600	84.4	17.600	217.3	27.600	284.0	37.600	376.0	47.600	476.0	57.600	576.0
7.800	86.7	17.800	218.7	27.800	285.3	37.800	378.0	47.800	478.0	57.800	578.0
8.000	88.9	18.000	220.0	28.000	286.7	38.000	380.0	48.000	480.0	58.000	580.0
8.200	91.1	18.200	221.3	28.200	288.0	38.200	382.0	48.200	482.0	58.200	582.0
8.400	93.3	18.400	222.7	28.400	289.3	38.400	384.0	48.400	484.0	58.400	584.0
8.600	95.6	18.600	224.0	28.600	290.7	38.600	386.0	48.600	486.0	58.600	586.0
8.800	97.8	18.800	225.3	28.800	292.0	38.800	388.0	48.800	488.0	58.800	588.0
9.000	100.0	19.000	226.7	29.000	293.3	39.000	390.0	49.000	490.0	59.000	590.0
9.200	103.3	19.200	228.0	29.200	294.7	39.200	392.0	49.200	492.0	59.200	592.0
9.400	106.7	19.400	229.3	29.400	296.0	39.400	394.0	49.400	494.0	59.400	594.0
9.600	110.0	19.600	230.7	29.600	297.3	39.600	396.0	49.600	496.0	59.600	596.0
9.300	113.3	19.800	232.0	29.800	298.7	39.800	398.0	49.800	498.0	59.800	598.0
10.000	116.7	20.000	233.3	30.000	300.0	40.000	400.0	50.000	500.0	60.000	600.0

Table A-7

REFERENCE TABLE: PSI VALUES FOR O_3 ($\mu g/m^3$) AT EQUALLY SPACED CONCENTRATIONS

03	PSI	03	PSI	03	PSI	03	PSI	03	PSI	03	PSI
4.000	1.7	204.000	85.0	404.000	201.0	604.000	251.0	804.000	302.0	1004.000	402.0
8.000	3.3	208.000	86.7	408.000	202.0	608.000	252.0	808.000	304.0	1008.000	404.0
12.000	5.0	212.000	88.3	412.000	203.0	612.000	253.0	812.000	306.0	1012.000	406.0
16.000	6.7	216.000	90.0	416.000	204.0	616.000	254.0	816.000	308.0	1016.000	408.0
20.000	8.3	220.000	91.7	420.000	205.0	620.000	255.0	820.000	310.0	1020.000	410.0
24.000	10.0	224.000	93.3	424.000	206.0	624.000	256.0	824.000	312.0	1024.000	412.0
28.000	11.7	228.000	95.0	428.000	207.0	628.000	257.0	828.000	314.0	1028.000	414.0
32.000	13.3	232.000	96.7	432.000	208.0	632.000	258.0	832.000	316.0	1032.000	416.0
36.000	15.0	236.000	98.3	436.000	209.0	636.000	259.0	836.000	318.0	1036.000	418.0
40.000	16.7	240.000	100.0	440.000	210.0	640.000	260.0	840.000	320.0	1040.000	420.0
44.000	18.3	244.000	102.5	444.000	211.0	644.000	261.0	844.000	322.0	1044.000	422.0
48.000	20.0	248.000	105.0	448.000	212.0	648.000	262.0	848.000	324.0	1048.000	424.0
52.000	21.7	252.000	107.5	452.000	213.0	652.000	263.0	852.000	326.0	1052.000	426.0
56.000	23.3	256.000	110.0	456.000	214.0	656.000	264.0	856.000	328.0	1056.000	428.0
60.000	25.0	260.000	112.5	460.000	215.0	660.000	265.0	860.000	330.0	1060.000	430.0
64.000	26.7	264.000	115.0	464.000	216.0	664.000	266.0	864.000	332.0	1064.000	432.0
68.000	28.3	268.000	117.5	468.000	217.0	668.000	267.0	868.000	334.0	1068.000	434.0
72.000	30.0	272.000	120.0	472.000	218.0	672.000	268.0	872.000	336.0	1072.000	436.0
76.000	31.7	276.000	122.5	476.000	219.0	676.000	269.0	876.000	338.0	1076.000	438.0
80.000	33.3	280.000	125.0	480.000	220.0	680.000	270.0	880.000	340.0	1080.000	440.0
84.000	35.0	284.000	127.5	484.000	221.0	684.000	271.0	884.000	342.0	1084.000	442.0
88.000	36.7	288.000	130.0	488.000	222.0	688.000	272.0	888.000	344.0	1088.000	444.0
92.000	38.3	292.000	132.5	492.000	223.0	692.000	273.0	892.000	346.0	1092.000	446.0
96.000	40.0	296.000	135.0	496.000	224.0	696.000	274.0	896.000	348.0	1096.000	448.0
100.000	41.7	300.000	137.5	500.000	225.0	700.000	275.0	900.000	350.0	1100.000	450.0
104.000	43.3	304.000	140.0	504.000	226.0	704.000	276.0	904.000	352.0	1104.000	452.0
108.000	45.0	308.000	142.5	508.000	227.0	708.000	277.0	908.000	354.0	1108.000	454.0
112.000	46.7	312.000	145.0	512.000	228.0	712.000	278.0	912.000	356.0	1112.000	456.0
116.000	48.3	316.000	147.5	516.000	229.0	716.000	279.0	916.000	358.0	1116.000	458.0
120.000	50.0	320.000	150.0	520.000	230.0	720.000	280.0	920.000	360.0	1120.000	460.0
124.000	51.7	324.000	152.5	524.000	231.0	724.000	281.0	924.000	362.0	1124.000	462.0
128.000	53.3	328.000	155.0	528.000	232.0	728.000	282.0	928.000	364.0	1128.000	464.0
132.000	55.0	332.000	157.5	532.000	233.0	732.000	283.0	932.000	366.0	1132.000	466.0
136.000	56.7	336.000	160.0	536.000	234.0	736.000	284.0	936.000	368.0	1136.000	468.0
140.000	58.3	340.000	162.5	540.000	235.0	740.000	285.0	940.000	370.0	1140.000	470.0
144.000	60.0	344.000	165.0	544.000	236.0	744.000	286.0	944.000	372.0	1144.000	472.0
148.000	61.7	348.000	167.5	548.000	237.0	748.000	287.0	948.000	374.0	1148.000	474.0
152.000	63.3	352.000	170.0	552.000	238.0	752.000	288.0	952.000	376.0	1152.000	476.0
156.000	65.0	356.000	172.5	556.000	239.0	756.000	289.0	956.000	378.0	1156.000	478.0
160.000	66.7	360.000	175.0	560.000	240.0	760.000	290.0	960.000	380.0	1160.000	480.0
164.000	68.3	364.000	177.5	564.000	241.0	764.000	291.0	964.000	382.0	1164.000	482.0
168.000	70.0	368.000	180.0	568.000	242.0	768.000	292.0	968.000	384.0	1168.000	484.0
172.000	71.7	372.000	182.5	572.000	243.0	772.000	293.0	972.000	386.0	1172.000	486.0
176.000	73.3	376.000	185.0	576.000	244.0	776.000	294.0	976.000	388.0	1176.000	488.0
180.000	75.0	380.000	187.5	580.000	245.0	780.000	295.0	980.000	390.0	1180.000	490.0
184.000	76.7	384.000	190.0	584.000	246.0	784.000	296.0	984.000	392.0	1184.000	492.0
188.000	78.3	388.000	192.5	588.000	247.0	788.000	297.0	988.000	394.0	1188.000	494.0
192.000	80.0	392.000	195.0	592.000	248.0	792.000	298.0	992.000	396.0	1192.000	496.0
196.000	81.7	396.000	197.5	596.000	249.0	796.000	299.0	996.000	398.0	1196.000	498.0
200.000	83.3	400.000	200.0	600.000	250.0	800.000	300.0	1000.000	400.0	1200.000	500.0

Table A-8

REFERENCE TABLE: PSI VALUES FOR O_3 (ppm) AT EQUALLY SPACED CONCENTRATIONS

03	PSI	03	PSI	03	PSI	03	PSI	03	PSI	03	PSI
0.002	1.7	0.102	85.0	0.202	201.0	0.302	251.0	0.402	302.0	0.502	402.0
0.004	3.3	0.104	86.7	0.204	202.0	0.304	252.0	0.404	304.0	0.504	404.0
0.006	5.0	0.106	88.3	0.206	203.0	0.306	253.0	0.406	306.0	0.506	406.0
0.008	6.7	0.108	90.0	0.208	204.0	0.308	254.0	0.408	308.0	0.508	408.0
0.010	8.3	0.110	91.7	0.210	205.0	0.310	255.0	0.410	310.0	0.510	410.0
0.012	10.0	0.112	93.3	0.212	206.0	0.312	256.0	0.412	312.0	0.512	412.0
0.014	11.7	0.114	95.0	0.214	207.0	0.314	257.0	0.414	314.0	0.514	414.0
0.016	13.3	0.116	96.7	0.216	208.0	0.316	258.0	0.416	316.0	0.516	416.0
0.018	15.0	0.118	98.3	0.218	209.0	0.318	259.0	0.418	318.0	0.518	418.0
0.020	16.7	0.120	100.0	0.220	210.0	0.320	260.0	0.420	320.0	0.520	420.0
0.022	18.3	0.122	102.5	0.222	211.0	0.322	261.0	0.422	322.0	0.522	422.0
0.024	20.0	0.124	105.0	0.224	212.0	0.324	262.0	0.424	324.0	0.524	424.0
0.026	21.7	0.126	107.5	0.226	213.0	0.326	263.0	0.426	326.0	0.526	426.0
0.028	23.3	0.128	110.0	0.228	214.0	0.328	264.0	0.428	328.0	0.528	428.0
0.030	25.0	0.130	112.5	0.230	215.0	0.330	265.0	0.430	330.0	0.530	430.0
0.032	26.7	0.132	115.0	0.232	216.0	0.332	266.0	0.432	332.0	0.532	432.0
0.034	28.3	0.134	117.5	0.234	217.0	0.334	267.0	0.434	334.0	0.534	434.0
0.036	30.0	0.136	120.0	0.236	218.0	0.336	268.0	0.436	336.0	0.536	436.0
0.038	31.7	0.138	122.5	0.238	219.0	0.338	269.0	0.438	338.0	0.538	438.0
0.040	33.3	0.140	125.0	0.240	220.0	0.340	270.0	0.440	340.0	0.540	440.0
0.042	35.0	0.142	127.5	0.242	221.0	0.342	271.0	0.442	342.0	0.542	442.0
0.044	36.7	0.144	130.0	0.244	222.0	0.344	272.0	0.444	344.0	0.544	444.0
0.046	38.3	0.146	132.5	0.246	223.0	0.346	273.0	0.446	346.0	0.546	446.0
0.048	40.0	0.148	135.0	0.248	224.0	0.348	274.0	0.448	348.0	0.548	448.0
0.050	41.7	0.150	137.5	0.250	225.0	0.350	275.0	0.450	350.0	0.550	450.0
0.052	43.3	0.152	140.0	0.252	226.0	0.352	276.0	0.452	352.0	0.552	452.0
0.054	45.0	0.154	142.5	0.254	227.0	0.354	277.0	0.454	354.0	0.554	454.0
0.056	46.7	0.156	145.0	0.256	228.0	0.356	278.0	0.456	356.0	0.556	456.0
0.058	48.3	0.158	147.5	0.258	229.0	0.358	279.0	0.458	358.0	0.558	458.0
0.060	50.0	0.160	150.0	0.260	230.0	0.360	280.0	0.460	360.0	0.560	460.0
0.062	51.7	0.162	152.5	0.262	231.0	0.362	281.0	0.462	362.0	0.562	462.0
0.064	53.3	0.164	155.0	0.264	232.0	0.364	282.0	0.464	364.0	0.564	464.0
0.066	55.0	0.166	157.5	0.266	233.0	0.366	283.0	0.466	366.0	0.566	466.0
0.068	56.7	0.168	160.0	0.268	234.0	0.368	284.0	0.468	368.0	0.568	468.0
0.070	58.3	0.170	162.5	0.270	235.0	0.370	285.0	0.470	370.0	0.570	470.0
0.072	60.0	0.172	165.0	0.272	236.0	0.372	286.0	0.472	372.0	0.572	472.0
0.074	61.7	0.174	167.5	0.274	237.0	0.374	287.0	0.474	374.0	0.574	474.0
0.076	63.3	0.176	170.0	0.276	238.0	0.376	288.0	0.476	376.0	0.576	476.0
0.078	65.0	0.178	172.5	0.278	239.0	0.378	289.0	0.478	378.0	0.578	478.0
0.080	66.7	0.180	175.0	0.280	240.0	0.380	290.0	0.480	380.0	0.580	480.0
0.082	68.3	0.182	177.5	0.282	241.0	0.382	291.0	0.482	382.0	0.582	482.0
0.084	70.0	0.184	180.0	0.284	242.0	0.384	292.0	0.484	384.0	0.584	484.0
0.086	71.7	0.186	182.5	0.286	243.0	0.386	293.0	0.486	386.0	0.586	486.0
0.088	73.3	0.188	185.0	0.288	244.0	0.388	294.0	0.488	388.0	0.588	488.0
0.090	75.0	0.190	187.5	0.290	245.0	0.390	295.0	0.490	390.0	0.590	490.0
0.092	76.7	0.192	190.0	0.292	246.0	0.392	296.0	0.492	392.0	0.592	492.0
0.094	78.3	0.194	192.5	0.294	247.0	0.394	297.0	0.494	394.0	0.594	494.0
0.096	80.0	0.196	195.0	0.296	248.0	0.396	298.0	0.496	396.0	0.596	496.0
0.098	81.7	0.198	197.5	0.298	249.0	0.398	299.0	0.498	398.0	0.598	498.0
0.100	83.3	0.200	200.0	0.300	250.0	0.400	300.0	0.500	400.0	0.600	500.0

Table A-9

REFERENCE TABLE: PSI VALUES FOR NO_2 ($\mu g/m^3$) AT EQUALLY SPACED CONCENTRATIONS

NO2	PSI	NO2	PSI	NO2	PSI	NO2	PSI	NO2	PSI	NO2	PSI
1130.000	200.0	1630.000	244.2	2130.000	288.5	2630.000	350.0	3130.000	417.3	3630.000	484.0
1140.000	200.9	1640.000	245.1	2140.000	289.4	2640.000	351.4	3140.000	418.7	3640.000	485.3
1150.000	201.8	1650.000	246.0	2150.000	290.3	2650.000	352.7	3150.000	420.0	3650.000	486.7
1160.000	202.7	1660.000	246.9	2160.000	291.2	2660.000	354.1	3160.000	421.3	3660.000	488.0
1170.000	203.5	1670.000	247.8	2170.000	292.0	2670.000	355.4	3170.000	422.7	3670.000	489.3
1180.000	204.4	1680.000	248.7	2180.000	292.9	2680.000	356.8	3180.000	424.0	3680.000	490.7
1190.000	205.3	1690.000	249.6	2190.000	293.8	2690.000	358.1	3190.000	425.3	3690.000	492.0
1200.000	206.2	1700.000	250.4	2200.000	294.7	2700.000	359.5	3200.000	426.7	3700.000	493.3
1210.000	207.1	1710.000	251.3	2210.000	295.6	2710.000	360.8	3210.000	428.0	3710.000	494.7
1220.000	208.0	1720.000	252.2	2220.000	296.5	2720.000	362.2	3220.000	429.3	3720.000	496.0
1230.000	208.8	1730.000	253.1	2230.000	297.3	2730.000	363.5	3230.000	430.7	3730.000	497.3
1240.000	209.7	1740.000	254.0	2240.000	298.2	2740.000	364.9	3240.000	432.0	3740.000	498.7
1250.000	210.6	1750.000	254.9	2250.000	299.1	2750.000	366.2	3250.000	433.3	3750.000	500.0
1260.000	211.5	1760.000	255.8	2260.000	300.0	2760.000	367.6	3260.000	434.7	3760.000	501.3
1270.000	212.4	1770.000	256.6	2270.000	301.4	2770.000	368.9	3270.000	436.0	3770.000	502.7
1280.000	213.3	1780.000	257.5	2280.000	302.7	2780.000	370.3	3280.000	437.3	3780.000	504.0
1290.000	214.2	1790.000	258.4	2290.000	304.1	2790.000	371.6	3290.000	438.7	3790.000	505.3
1300.000	215.0	1800.000	259.3	2300.000	305.4	2800.000	373.0	3300.000	440.0	3800.000	506.7
1310.000	215.9	1810.000	260.2	2310.000	306.8	2810.000	374.3	3310.000	441.3	3810.000	508.0
1320.000	216.8	1820.000	261.1	2320.000	308.1	2820.000	375.7	3320.000	442.7	3820.000	509.3
1330.000	217.7	1830.000	261.9	2330.000	309.5	2830.000	377.0	3330.000	444.0	3830.000	510.7
1340.000	218.6	1840.000	262.8	2340.000	310.8	2840.000	378.4	3340.000	445.3	3840.000	512.0
1350.000	219.5	1850.000	263.7	2350.000	312.2	2850.000	379.7	3350.000	446.7	3850.000	513.3
1360.000	220.4	1860.000	264.6	2360.000	313.5	2860.000	381.1	3360.000	448.0	3860.000	514.7
1370.000	221.2	1870.000	265.5	2370.000	314.9	2870.000	382.4	3370.000	449.3	3870.000	516.0
1380.000	222.1	1880.000	266.4	2380.000	316.2	2880.000	383.8	3380.000	450.7	3880.000	517.3
1390.000	223.0	1890.000	267.3	2390.000	317.6	2890.000	385.1	3390.000	452.0	3890.000	518.7
1400.000	223.9	1900.000	268.1	2400.000	318.9	2900.000	386.5	3400.000	453.3	3900.000	520.0
1410.000	224.8	1910.000	269.0	2410.000	320.3	2910.000	387.8	3410.000	454.7	3910.000	521.3
1420.000	225.7	1920.000	269.9	2420.000	321.6	2920.000	389.2	3420.000	456.0	3920.000	522.7
1430.000	226.5	1930.000	270.8	2430.000	323.0	2930.000	390.5	3430.000	457.3	3930.000	524.0
1440.000	227.4	1940.000	271.7	2440.000	324.3	2940.000	391.9	3440.000	458.7	3940.000	525.3
1450.000	228.3	1950.000	272.6	2450.000	325.7	2950.000	393.2	3450.000	460.0	3950.000	526.7
1460.000	229.2	1960.000	273.5	2460.000	327.0	2960.000	394.6	3460.000	461.3	3960.000	528.0
1470.000	230.1	1970.000	274.3	2470.000	328.4	2970.000	395.9	3470.000	462.7	3970.000	529.3
1480.000	231.0	1980.000	275.2	2480.000	329.7	2980.000	397.3	3480.000	464.0	3980.000	530.7
1490.000	231.9	1990.000	276.1	2490.000	331.1	2990.000	398.6	3490.000	465.3	3990.000	532.0
1500.000	232.7	2000.000	277.0	2500.000	332.4	3000.000	400.0	3500.000	466.7	4000.000	533.3
1510.000	233.6	2010.000	277.9	2510.000	333.8	3010.000	401.3	3510.000	468.0	4010.000	534.7
1520.000	234.5	2020.000	278.8	2520.000	335.1	3020.000	402.7	3520.000	469.3	4020.000	536.0
1530.000	235.4	2030.000	279.6	2530.000	336.5	3030.000	404.0	3530.000	470.7	4030.000	537.3
1540.000	236.3	2040.000	280.5	2540.000	337.8	3040.000	405.3	3540.000	472.0	4040.000	538.7
1550.000	237.2	2050.000	281.4	2550.000	339.2	3050.000	406.7	3550.000	473.3	4050.000	540.0
1560.000	238.1	2060.000	282.3	2560.000	340.5	3060.000	408.0	3560.000	474.7	4060.000	541.3
1570.000	238.9	2070.000	283.2	2570.000	341.9	3070.000	409.3	3570.000	476.0	4070.000	542.7
1580.000	239.8	2080.000	284.1	2580.000	343.2	3080.000	410.7	3580.000	477.3	4080.000	544.0
1590.000	240.7	2090.000	285.0	2590.000	344.6	3090.000	412.0	3590.000	478.7	4090.000	545.3
1600.000	241.6	2100.000	285.8	2600.000	345.9	3100.000	413.3	3600.000	480.0	4100.000	546.7
1610.000	242.5	2110.000	286.7	2610.000	347.3	3110.000	414.7	3610.000	481.3	4110.000	548.0
1620.000	243.4	2120.000	287.6	2620.000	348.6	3120.000	416.0	3620.000	482.7	4120.000	549.3

Table A-10

REFERENCE TABLE: PSI VALUES FOR NO_2 (ppm) AT EQUALLY SPACED CONCENTRATIONS

NO2	PSI	NO2	PSI	NO2	PSI	NO2	PSI	NO2	PSI	NO2	PSI
0.600	200.0	0.850	241.7	1.100	283.3	1.350	337.5	1.600	400.0	1.850	462.5
0.605	200.8	0.855	242.5	1.105	284.2	1.355	338.7	1.605	401.2	1.855	463.7
0.610	201.7	0.860	243.3	1.110	285.0	1.360	340.0	1.610	402.5	1.860	465.0
0.615	202.5	0.865	244.2	1.115	285.8	1.365	341.2	1.615	403.7	1.865	466.2
0.620	203.3	0.870	245.0	1.120	286.7	1.370	342.5	1.620	405.0	1.870	467.5
0.625	204.2	0.875	245.8	1.125	287.5	1.375	343.7	1.625	406.2	1.875	468.7
0.630	205.0	0.880	246.7	1.130	288.3	1.380	345.0	1.630	407.5	1.880	470.0
0.635	205.8	0.885	247.5	1.135	289.2	1.385	346.2	1.635	408.7	1.885	471.2
0.640	206.7	0.890	248.3	1.140	290.0	1.390	347.5	1.640	410.0	1.890	472.5
0.645	207.5	0.895	249.2	1.145	290.8	1.395	348.7	1.645	411.2	1.895	473.7
0.650	208.3	0.900	250.0	1.150	291.7	1.400	350.0	1.650	412.5	1.900	475.0
0.655	209.2	0.905	250.8	1.155	292.5	1.405	351.2	1.655	413.7	1.905	476.2
0.660	210.0	0.910	251.7	1.160	293.3	1.410	352.5	1.660	415.0	1.910	477.5
0.665	210.8	0.915	252.5	1.165	294.2	1.415	353.7	1.665	416.2	1.915	478.7
0.670	211.7	0.920	253.3	1.170	295.0	1.420	355.0	1.670	417.5	1.920	480.0
0.675	212.5	0.925	254.2	1.175	295.8	1.425	356.2	1.675	418.7	1.925	481.2
0.680	213.3	0.930	255.0	1.180	296.7	1.430	357.5	1.680	420.0	1.930	482.5
0.685	214.2	0.935	255.8	1.185	297.5	1.435	358.7	1.685	421.2	1.935	483.7
0.690	215.0	0.940	256.7	1.190	298.3	1.440	360.0	1.690	422.5	1.940	485.0
0.695	215.8	0.945	257.5	1.195	299.2	1.445	361.2	1.695	423.7	1.945	486.2
0.700	216.7	0.950	258.3	1.200	300.0	1.450	362.5	1.700	425.0	1.950	487.5
0.705	217.5	0.955	259.2	1.205	301.2	1.455	363.7	1.705	426.2	1.955	488.7
0.710	218.3	0.960	260.0	1.210	302.5	1.460	365.0	1.710	427.5	1.960	490.0
0.715	219.2	0.965	260.8	1.215	303.7	1.465	366.2	1.715	428.7	1.965	491.2
0.720	220.0	0.970	261.7	1.220	305.0	1.470	367.5	1.720	430.0	1.970	492.5
0.725	220.8	0.975	262.5	1.225	306.2	1.475	368.7	1.725	431.2	1.975	493.7
0.730	221.7	0.980	263.3	1.230	307.5	1.480	370.0	1.730	432.5	1.980	495.0
0.735	222.5	0.985	264.2	1.235	308.7	1.485	371.2	1.735	433.7	1.985	496.2
0.740	223.3	0.990	265.0	1.240	310.0	1.490	372.5	1.740	435.0	1.990	497.5
0.745	224.2	0.995	265.8	1.245	311.2	1.495	373.7	1.745	436.2	1.995	498.7
0.750	225.0	1.000	266.7	1.250	312.5	1.500	375.0	1.750	437.5	2.000	500.0
0.755	225.8	1.005	267.5	1.255	313.7	1.505	376.2	1.755	438.7	2.005	501.2
0.760	226.7	1.010	268.3	1.260	315.0	1.510	377.5	1.760	440.0	2.010	502.5
0.765	227.5	1.015	269.2	1.265	316.2	1.515	378.7	1.765	441.2	2.015	503.7
0.770	228.3	1.020	270.0	1.270	317.5	1.520	380.0	1.770	442.5	2.020	505.0
0.775	229.2	1.025	270.8	1.275	318.7	1.525	381.2	1.775	443.7	2.025	506.2
0.780	230.0	1.030	271.7	1.280	320.0	1.530	382.5	1.780	445.0	2.030	507.5
0.785	230.8	1.035	272.5	1.285	321.2	1.535	383.7	1.785	446.2	2.035	508.7
0.790	231.7	1.040	273.3	1.290	322.5	1.540	385.0	1.790	447.5	2.040	510.0
0.795	232.5	1.045	274.2	1.295	323.7	1.545	386.2	1.795	448.7	2.045	511.2
0.800	233.3	1.050	275.0	1.300	325.0	1.550	387.5	1.800	450.0	2.050	512.5
0.805	234.2	1.055	275.8	1.305	326.2	1.555	388.7	1.805	451.2	2.055	513.7
0.810	235.0	1.060	276.7	1.310	327.5	1.560	390.0	1.810	452.5	2.060	515.0
0.815	235.8	1.065	277.5	1.315	328.7	1.565	391.2	1.815	453.7	2.065	516.2
0.820	236.7	1.070	278.3	1.320	330.0	1.570	392.5	1.820	455.0	2.070	517.5
0.825	237.5	1.075	279.2	1.325	331.3	1.575	393.7	1.825	456.2	2.075	518.7
0.830	238.3	1.080	280.0	1.330	332.5	1.580	395.0	1.830	457.5	2.080	520.0
0.835	239.2	1.085	280.8	1.335	333.7	1.585	396.2	1.835	458.7	2.085	521.2
0.840	240.0	1.090	281.7	1.340	335.0	1.590	397.5	1.840	460.0	2.090	522.5
0.845	240.8	1.095	282.5	1.345	336.2	1.595	398.7	1.845	461.2	2.095	523.7

Table A-11

REFERENCE TABLE: PSI VALUES FOR SO_2 (ppm) AT EQUALLY SPACED CONCENTRATIONS

SO2	PSI	SO2	PSI	SO2	PSI	SO2	PSI	SO2	PSI	SO2	PSI
0.004	6.7	0.204	140.0	0.404	234.7	0.604	302.0	0.804	402.0	1.004	502.0
0.008	13.3	0.208	142.5	0.408	236.0	0.608	304.0	0.808	404.0	1.008	504.0
0.012	20.0	0.212	145.0	0.412	237.3	0.612	306.0	0.812	406.0	1.012	506.0
0.016	26.7	0.216	147.5	0.416	238.7	0.616	308.0	0.816	408.0	1.016	508.0
0.020	33.3	0.220	150.0	0.420	240.0	0.620	310.0	0.820	410.0	1.020	510.0
0.024	40.0	0.224	152.5	0.424	241.3	0.624	312.0	0.824	412.0	1.024	512.0
0.028	46.7	0.228	155.0	0.428	242.7	0.628	314.0	0.828	414.0	1.028	514.0
0.032	50.9	0.232	157.5	0.432	244.0	0.632	316.0	0.832	416.0	1.032	516.0
0.036	52.7	0.236	160.0	0.436	245.3	0.636	318.0	0.836	418.0	1.036	518.0
0.040	54.5	0.240	162.5	0.440	246.7	0.640	320.0	0.840	420.0	1.040	520.0
0.044	56.4	0.244	165.0	0.444	248.0	0.644	322.0	0.844	422.0	1.044	522.0
0.048	58.2	0.248	167.5	0.448	249.3	0.648	324.0	0.848	424.0	1.048	524.0
0.052	60.0	0.252	170.0	0.452	250.7	0.652	326.0	0.852	426.0	1.052	526.0
0.056	61.8	0.256	172.5	0.456	252.0	0.656	328.0	0.856	428.0	1.056	528.0
0.060	63.6	0.260	175.0	0.460	253.3	0.660	330.0	0.860	430.0	1.060	530.0
0.064	65.5	0.264	177.5	0.464	254.7	0.664	332.0	0.864	432.0	1.064	532.0
0.068	67.3	0.268	180.0	0.468	256.0	0.668	334.0	0.868	434.0	1.068	534.0
0.072	69.1	0.272	182.5	0.472	257.3	0.672	336.0	0.872	436.0	1.072	536.0
0.076	70.9	0.276	185.0	0.476	258.7	0.676	338.0	0.876	438.0	1.076	538.0
0.080	72.7	0.280	187.5	0.480	260.0	0.680	340.0	0.880	440.0	1.080	540.0
0.084	74.5	0.284	190.0	0.484	261.3	0.684	342.0	0.884	442.0	1.084	542.0
0.088	76.4	0.288	192.5	0.488	262.7	0.688	344.0	0.888	444.0	1.088	544.0
0.092	78.2	0.292	195.0	0.492	264.0	0.692	346.0	0.892	446.0	1.092	546.0
0.096	80.0	0.296	197.5	0.496	265.3	0.696	348.0	0.896	448.0	1.096	548.0
0.100	81.8	0.300	200.0	0.500	266.7	0.700	350.0	0.900	450.0	1.100	550.0
0.104	83.6	0.304	201.3	0.504	268.0	0.704	352.0	0.904	452.0	1.104	552.0
0.108	85.5	0.308	202.7	0.508	269.3	0.708	354.0	0.908	454.0	1.108	554.0
0.112	87.3	0.312	204.0	0.512	270.7	0.712	356.0	0.912	456.0	1.112	556.0
0.116	89.1	0.316	205.3	0.516	272.0	0.716	358.0	0.916	458.0	1.116	558.0
0.120	90.9	0.320	206.7	0.520	273.3	0.720	360.0	0.920	460.0	1.120	560.0
0.124	92.7	0.324	208.0	0.524	274.7	0.724	362.0	0.924	462.0	1.124	562.0
0.128	94.5	0.328	209.3	0.528	276.0	0.728	364.0	0.928	464.0	1.128	564.0
0.132	96.4	0.332	210.7	0.532	277.3	0.732	366.0	0.932	466.0	1.132	566.0
0.136	98.2	0.336	212.0	0.536	278.7	0.736	368.0	0.936	468.0	1.136	568.0
0.140	100.0	0.340	213.3	0.540	280.0	0.740	370.0	0.940	470.0	1.140	570.0
0.144	102.5	0.344	214.7	0.544	281.3	0.744	372.0	0.944	472.0	1.144	572.0
0.148	105.0	0.348	216.0	0.548	282.7	0.748	374.0	0.948	474.0	1.148	574.0
0.152	107.5	0.352	217.3	0.552	284.0	0.752	376.0	0.952	476.0	1.152	576.0
0.156	110.0	0.356	218.7	0.556	285.3	0.756	378.0	0.956	478.0	1.156	578.0
0.160	112.5	0.360	220.0	0.560	286.7	0.760	380.0	0.960	480.0	1.160	580.0
0.164	115.0	0.364	221.3	0.564	288.0	0.764	382.0	0.964	482.0	1.164	582.0
0.168	117.5	0.368	222.7	0.568	289.3	0.768	384.0	0.968	484.0	1.168	584.0
0.172	120.0	0.372	224.0	0.572	290.7	0.772	386.0	0.972	486.0	1.172	586.0
0.176	122.5	0.376	225.3	0.576	292.0	0.776	388.0	0.976	488.0	1.176	588.0
0.180	125.0	0.380	226.7	0.580	293.3	0.780	390.0	0.980	490.0	1.180	590.0
0.184	127.5	0.384	228.0	0.584	294.7	0.784	392.0	0.984	492.0	1.184	592.0
0.188	130.0	0.388	229.3	0.588	296.0	0.788	394.0	0.988	494.0	1.188	594.0
0.192	132.5	0.392	230.7	0.592	297.3	0.792	396.0	0.992	496.0	1.192	596.0
0.196	135.0	0.396	232.0	0.596	298.7	0.796	398.0	0.996	498.0	1.196	598.0
0.200	137.5	0.400	233.3	0.600	300.0	0.800	400.0	1.000	500.0	1.200	600.0

Table A-12

REFERENCE TABLE: PSI VALUES FOR SO_2 ($\mu g/m^3$) AT EQUALLY SPACED CONCENTRATIONS

SO2	PSI	SO2	PSI	SO2	PSI	SO2	PSI	SO2	PSI	SO2	PSI
10.000	6.3	510.000	133.3	1010.000	226.3	1510.000	288.8	2010.000	382.0	2510.000	478.8
20.000	12.5	520.000	135.6	1020.000	227.5	1520.000	290.0	2020.000	384.0	2520.000	480.8
30.000	18.8	530.000	137.9	1030.000	228.8	1530.000	291.3	2030.000	386.0	2530.000	482.7
40.000	25.0	540.000	140.2	1040.000	230.0	1540.000	292.5	2040.000	388.0	2540.000	484.6
50.000	31.3	550.000	142.5	1050.000	231.3	1550.000	293.8	2050.000	390.0	2550.000	486.5
60.000	37.5	560.000	144.8	1060.000	232.5	1560.000	295.0	2060.000	392.0	2560.000	488.5
70.000	43.8	570.000	147.1	1070.000	233.8	1570.000	296.3	2070.000	394.0	2570.000	490.4
80.000	50.0	580.000	149.4	1080.000	235.0	1580.000	297.5	2080.000	396.0	2580.000	492.3
90.000	51.8	590.000	151.7	1090.000	236.3	1590.000	298.8	2090.000	398.0	2590.000	494.2
100.000	53.5	600.000	154.0	1100.000	237.5	1600.000	300.0	2100.000	400.0	2600.000	496.2
110.000	55.3	610.000	156.3	1110.000	238.8	1610.000	302.0	2110.000	401.9	2610.000	498.1
120.000	57.0	620.000	158.6	1120.000	240.0	1620.000	304.0	2120.000	403.8	2620.000	500.0
130.000	58.8	630.000	160.9	1130.000	241.3	1630.000	306.0	2130.000	405.8	2630.000	501.9
140.000	60.5	640.000	163.2	1140.000	242.5	1640.000	308.0	2140.000	407.7	2640.000	503.8
150.000	62.3	650.000	165.5	1150.000	243.8	1650.000	310.0	2150.000	409.6	2650.000	505.8
160.000	64.0	660.000	167.8	1160.000	245.0	1660.000	312.0	2160.000	411.5	2660.000	507.7
170.000	65.8	670.000	170.1	1170.000	246.3	1670.000	314.0	2170.000	413.5	2670.000	509.6
180.000	67.5	680.000	172.4	1180.000	247.5	1680.000	316.0	2180.000	415.4	2680.000	511.5
190.000	69.3	690.000	174.7	1190.000	248.8	1690.000	318.0	2190.000	417.3	2690.000	513.5
200.000	71.1	700.000	177.0	1200.000	250.0	1700.000	320.0	2200.000	419.2	2700.000	515.4
210.000	72.8	710.000	179.3	1210.000	251.3	1710.000	322.0	2210.000	421.2	2710.000	517.3
220.000	74.6	720.000	181.6	1220.000	252.5	1720.000	324.0	2220.000	423.1	2720.000	519.2
230.000	76.3	730.000	183.9	1230.000	253.8	1730.000	326.0	2230.000	425.0	2730.000	521.2
240.000	78.1	740.000	186.2	1240.000	255.0	1740.000	328.0	2240.000	426.9	2740.000	523.1
250.000	79.8	750.000	188.5	1250.000	256.3	1750.000	330.0	2250.000	428.8	2750.000	525.0
260.000	81.6	760.000	190.8	1260.000	257.5	1760.000	332.0	2260.000	430.8	2760.000	526.9
270.000	83.3	770.000	193.1	1270.000	258.8	1770.000	334.0	2270.000	432.7	2770.000	528.8
280.000	85.1	780.000	195.4	1280.000	260.0	1780.000	336.0	2280.000	434.6	2780.000	530.8
290.000	86.8	790.000	197.7	1290.000	261.3	1790.000	338.0	2290.000	436.5	2790.000	532.7
300.000	88.6	800.000	200.0	1300.000	262.5	1800.000	340.0	2300.000	438.5	2800.000	534.6
310.000	90.4	810.000	201.3	1310.000	263.8	1810.000	342.0	2310.000	440.4	2810.000	536.5
320.000	92.1	820.000	202.5	1320.000	265.0	1820.000	344.0	2320.000	442.3	2820.000	538.5
330.000	93.9	830.000	203.8	1330.000	266.3	1830.000	346.0	2330.000	444.2	2830.000	540.4
340.000	95.6	840.000	205.0	1340.000	267.5	1840.000	348.0	2340.000	446.2	2840.000	542.3
350.000	97.4	850.000	206.3	1350.000	268.8	1850.000	350.0	2350.000	448.1	2850.000	544.2
360.000	99.1	860.000	207.5	1360.000	270.0	1860.000	352.0	2360.000	450.0	2860.000	546.2
370.000	101.1	870.000	208.8	1370.000	271.3	1870.000	354.0	2370.000	451.9	2870.000	548.1
380.000	103.4	880.000	210.0	1380.000	272.5	1880.000	356.0	2380.000	453.8	2880.000	550.0
390.000	105.7	890.000	211.3	1390.000	273.8	1890.000	358.0	2390.000	455.8	2890.000	551.9
400.000	108.0	900.000	212.5	1400.000	275.0	1900.000	360.0	2400.000	457.7	2900.000	553.8
410.000	110.3	910.000	213.8	1410.000	276.3	1910.000	362.0	2410.000	459.6	2910.000	555.8
420.000	112.6	920.000	215.0	1420.000	277.5	1920.000	364.0	2420.000	461.5	2920.000	557.7
430.000	114.9	930.000	216.3	1430.000	278.8	1930.000	366.0	2430.000	463.5	2930.000	559.6
440.000	117.2	940.000	217.5	1440.000	280.0	1940.000	368.0	2440.000	465.4	2940.000	561.5
450.000	119.5	950.000	218.8	1450.000	281.3	1950.000	370.0	2450.000	467.3	2950.000	563.5
460.000	121.8	960.000	220.0	1460.000	282.5	1960.000	372.0	2460.000	469.2	2960.000	565.4
470.000	124.1	970.000	221.3	1470.000	283.8	1970.000	374.0	2470.000	471.2	2970.000	567.3
480.000	126.4	980.000	222.5	1480.000	285.0	1980.000	376.0	2480.000	473.1	2980.000	569.2
490.000	128.7	990.000	223.8	1490.000	286.3	1990.000	378.0	2490.000	475.0	2990.000	571.2
500.000	131.0	1000.000	225.0	1500.000	287.5	2000.000	380.0	2500.000	476.9	3000.000	573.1

Table A-13

REFERENCE TABLE: PSI VALUES FOR TSP ($\mu g/m^3$) AT EQUALLY SPACED CONCENTRATIONS

TSP	PSI	TSP	PSI	TSP	PSI	TSP	PSI	TSP	PSI	TSP	PSI
4.000	2.7	204.000	84.9	404.000	211.6	604.000	291.6	804.000	371.6	1004.000	503.2
8.000	5.3	208.000	85.9	408.000	213.2	608.000	293.2	808.000	373.2	1008.000	506.4
12.000	8.0	212.000	87.0	412.000	214.8	612.000	294.8	812.000	374.8	1012.000	509.6
16.000	10.7	216.000	88.1	416.000	216.4	616.000	296.4	816.000	376.4	1016.000	512.8
20.000	13.3	220.000	89.2	420.000	218.0	620.000	298.0	820.000	378.0	1020.000	516.0
24.000	16.0	224.000	90.3	424.000	219.6	624.000	299.6	824.000	379.6	1024.000	519.2
28.000	18.7	228.000	91.4	428.000	221.2	628.000	301.2	828.000	381.2	1028.000	522.4
32.000	21.3	232.000	92.4	432.000	222.8	632.000	302.8	832.000	382.8	1032.000	525.6
36.000	24.0	236.000	93.5	436.000	224.4	636.000	304.4	836.000	384.4	1036.000	528.8
40.000	26.7	240.000	94.6	440.000	226.0	640.000	306.0	840.000	386.0	1040.000	532.0
44.000	29.3	244.000	95.7	444.000	227.6	644.000	307.6	844.000	387.6	1044.000	535.2
48.000	32.0	248.000	96.8	448.000	229.2	648.000	309.2	848.000	389.2	1048.000	538.4
52.000	34.7	252.000	97.8	452.000	230.8	652.000	310.8	852.000	390.8	1052.000	541.6
56.000	37.3	256.000	98.9	456.000	232.4	656.000	312.4	856.000	392.4	1056.000	544.8
60.000	40.0	260.000	100.0	460.000	234.0	660.000	314.0	860.000	394.0	1060.000	548.0
64.000	42.7	264.000	103.5	464.000	235.6	664.000	315.6	864.000	395.6	1064.000	551.2
68.000	45.3	268.000	107.0	468.000	237.2	668.000	317.2	868.000	397.2	1068.000	554.4
72.000	48.0	272.000	110.4	472.000	238.8	672.000	318.8	872.000	398.8	1072.000	557.6
76.000	50.3	276.000	113.9	476.000	240.4	676.000	320.4	876.000	400.8	1076.000	560.8
80.000	51.4	280.000	117.4	480.000	242.0	680.000	322.0	880.000	404.0	1080.000	564.0
84.000	52.4	284.000	120.9	484.000	243.6	684.000	323.6	884.000	407.2	1084.000	567.2
88.000	53.5	288.000	124.3	488.000	245.2	688.000	325.2	888.000	410.4	1088.000	570.4
92.000	54.6	292.000	127.8	492.000	246.8	692.000	326.8	892.000	413.6	1092.000	573.6
96.000	55.7	296.000	131.3	496.000	248.4	696.000	328.4	896.000	416.8	1096.000	576.8
100.000	56.8	300.000	134.8	500.000	250.0	700.000	330.0	900.000	420.0	1100.000	580.0
104.000	57.8	304.000	138.3	504.000	251.6	704.000	331.6	904.000	423.2	1104.000	583.2
108.000	58.9	308.000	141.7	508.000	253.2	708.000	333.2	908.000	426.4	1108.000	586.4
112.000	60.0	312.000	145.2	512.000	254.8	712.000	334.8	912.000	429.6	1112.000	589.6
116.000	61.1	316.000	148.7	516.000	256.4	716.000	336.4	916.000	432.8	1116.000	592.8
120.000	62.2	320.000	152.2	520.000	258.0	720.000	338.0	920.000	436.0	1120.000	596.0
124.000	63.2	324.000	155.7	524.000	259.6	724.000	339.6	924.000	439.2	1124.000	599.2
128.000	64.3	328.000	159.1	528.000	261.2	728.000	341.2	928.000	442.4	1128.000	602.4
132.000	65.4	332.000	162.6	532.000	262.8	732.000	342.8	932.000	445.6	1132.000	605.6
136.000	66.5	336.000	166.1	536.000	264.4	736.000	344.4	936.000	448.8	1136.000	608.8
140.000	67.6	340.000	169.6	540.000	266.0	740.000	346.0	940.000	452.0	1140.000	612.0
144.000	68.6	344.000	173.0	544.000	267.6	744.000	347.6	944.000	455.2	1144.000	615.2
148.000	69.7	348.000	176.5	548.000	269.2	748.000	349.2	948.000	458.4	1148.000	618.4
152.000	70.8	352.000	180.0	552.000	270.8	752.000	350.8	952.000	461.6	1152.000	621.6
156.000	71.9	356.000	183.5	556.000	272.4	756.000	352.4	956.000	464.8	1156.000	624.8
160.000	73.0	360.000	187.0	560.000	274.0	760.000	354.0	960.000	468.0	1160.000	628.0
164.000	74.1	364.000	190.4	564.000	275.6	764.000	355.6	964.000	471.2	1164.000	631.2
168.000	75.1	368.000	193.9	568.000	277.2	768.000	357.2	968.000	474.4	1168.000	634.4
172.000	76.2	372.000	197.4	572.000	278.8	772.000	358.8	972.000	477.6	1172.000	637.6
176.000	77.3	376.000	200.4	576.000	280.4	776.000	360.4	976.000	480.8	1176.000	640.8
180.000	78.4	380.000	202.0	580.000	282.0	780.000	362.0	980.000	484.0	1180.000	644.0
184.000	79.5	384.000	203.6	584.000	283.6	784.000	363.6	984.000	487.2	1184.000	647.2
188.000	80.5	388.000	205.2	588.000	285.2	788.000	365.2	988.000	490.4	1188.000	650.4
192.000	81.6	392.000	206.8	592.000	286.8	792.000	366.8	992.000	493.6	1192.000	653.6
196.000	82.7	396.000	208.4	596.000	288.4	796.000	368.4	996.000	496.8	1196.000	656.8
200.000	83.8	400.000	210.0	600.000	290.0	800.000	370.0	1000.000	500.0	1200.000	660.0

Table A-14

REFERENCE TABLE: PSI VALUES FOR TSP x SO_2 (ppm-$\mu g/m^3$) AT EQUALLY SPACED CONCENTRATIONS

TSPXSO2	PSI	TSPXSO2	PSI	TSPXSO2	PSI	TSPXSO2	PSI	TSPXSO2	PSI	TSPXSO2	PSI
25.000	200.2	75.000	267.1	125.000	350.2	175.000	467.3	225.000	602.5	275.000	737.6
26.000	201.6	76.000	268.4	126.000	352.2	176.000	470.0	226.000	605.2	276.000	740.3
27.000	202.9	77.000	269.8	127.000	354.2	177.000	472.7	227.000	607.9	277.000	743.0
28.000	204.3	78.000	271.1	128.000	356.2	178.000	475.4	228.000	610.6	278.000	745.7
29.000	205.6	79.000	272.4	129.000	358.2	179.000	478.1	229.000	613.3	279.000	748.4
30.000	206.9	80.000	273.8	130.000	360.1	180.000	480.8	230.000	616.0	280.000	751.1
31.000	208.3	81.000	275.1	131.000	362.1	181.000	483.5	231.000	618.7	281.000	753.8
32.000	209.6	82.000	276.4	132.000	364.1	182.000	486.2	232.000	621.4	282.000	756.5
33.000	210.9	83.000	277.8	133.000	366.1	183.000	488.9	233.000	624.1	283.000	759.2
34.000	212.3	84.000	279.1	134.000	368.1	184.000	491.6	234.000	626.8	284.000	761.9
35.000	213.6	85.000	280.5	135.000	370.0	185.000	494.3	235.000	629.5	285.000	764.6
36.000	214.9	86.000	281.8	136.000	372.0	186.000	497.0	236.000	632.2	286.000	767.3
37.000	216.3	87.000	283.1	137.000	374.0	187.000	499.7	237.000	634.9	287.000	770.0
38.000	217.6	88.000	284.5	138.000	376.0	188.000	502.4	238.000	637.6	288.000	772.7
39.000	219.0	89.000	285.8	139.000	378.0	189.000	505.1	239.000	640.3	289.000	775.4
40.000	220.3	90.000	287.1	140.000	380.0	190.000	507.8	240.000	643.0	290.000	778.1
41.000	221.6	91.000	288.5	141.000	381.9	191.000	510.6	241.000	645.7	291.000	780.9
42.000	223.0	92.000	289.8	142.000	383.9	192.000	513.3	242.000	648.4	292.000	783.6
43.000	224.3	93.000	291.2	143.000	385.9	193.000	516.0	243.000	651.1	293.000	786.3
44.000	225.6	94.000	292.5	144.000	387.9	194.000	518.7	244.000	653.8	294.000	789.0
45.000	227.0	95.000	293.8	145.000	389.9	195.000	521.4	245.000	656.5	295.000	791.7
46.000	228.3	96.000	295.2	146.000	391.8	196.000	524.1	246.000	659.2	296.000	794.4
47.000	229.7	97.000	296.5	147.000	393.8	197.000	526.8	247.000	661.9	297.000	797.1
48.000	231.0	98.000	297.8	148.000	395.8	198.000	529.5	248.000	664.6	298.000	799.8
49.000	232.3	99.000	299.2	149.000	397.8	199.000	532.2	249.000	667.3	299.000	802.5
50.000	233.7	100.000	300.7	150.000	399.8	200.000	534.9	250.000	670.0	300.000	805.2
51.000	235.0	101.000	302.7	151.000	402.4	201.000	537.6	251.000	672.7	301.000	807.9
52.000	236.3	102.000	304.6	152.000	405.1	202.000	540.3	252.000	675.4	302.000	810.6
53.000	237.7	103.000	306.6	153.000	407.8	203.000	543.0	253.000	678.1	303.000	813.3
54.000	239.0	104.000	308.6	154.000	410.5	204.000	545.7	254.000	680.8	304.000	816.0
55.000	240.4	105.000	310.6	155.000	413.2	205.000	548.4	255.000	683.5	305.000	818.7
56.000	241.7	106.000	312.6	156.000	415.9	206.000	551.1	256.000	686.2	306.000	821.4
57.000	243.0	107.000	314.5	157.000	418.7	207.000	553.8	257.000	689.0	307.000	824.1
58.000	244.4	108.000	316.5	158.000	421.4	208.000	556.5	258.000	691.7	308.000	826.8
59.000	245.7	109.000	318.5	159.000	424.1	209.000	559.2	259.000	694.4	309.000	829.5
60.000	247.0	110.000	320.5	160.000	426.8	210.000	561.9	260.000	697.1	310.000	832.2
61.000	248.4	111.000	322.5	161.000	429.5	211.000	564.6	261.000	699.8	311.000	834.9
62.000	249.7	112.000	324.5	162.000	432.2	212.000	567.3	262.000	702.5	312.000	837.6
63.000	251.0	113.000	326.4	163.000	434.9	213.000	570.0	263.000	705.2	313.000	840.3
64.000	252.4	114.000	328.4	164.000	437.6	214.000	572.7	264.000	707.9	314.000	843.0
65.000	253.7	115.000	330.4	165.000	440.3	215.000	575.4	265.000	710.6	315.000	845.7
66.000	255.1	116.000	332.4	166.000	443.0	216.000	578.1	266.000	713.3	316.000	848.4
67.000	256.4	117.000	334.4	167.000	445.7	217.000	580.8	267.000	716.0	317.000	851.1
68.000	257.7	118.000	336.3	168.000	448.4	218.000	583.5	268.000	718.7	318.000	853.8
69.000	259.1	119.000	338.3	169.000	451.1	219.000	586.2	269.000	721.4	319.000	856.5
70.000	260.4	120.000	340.3	170.000	453.8	220.000	588.9	270.000	724.1	320.000	859.2
71.000	261.7	121.000	342.3	171.000	456.5	221.000	591.6	271.000	726.8	321.000	861.9
72.000	263.1	122.000	344.3	172.000	459.2	222.000	594.3	272.000	729.5	322.000	864.6
73.000	264.4	123.000	346.3	173.000	461.9	223.000	597.0	273.000	732.2	323.000	867.3
74.000	265.8	124.000	348.2	174.000	464.6	224.000	599.8	274.000	734.9	324.000	870.1

Table A-15

REFERENCE TABLE: PSI VALUES FOR TSP x SO_2 $(\mu g/m^3)^2$ AT EQUALLY SPACED CONCENTRATIONS*

TSPXSO2	PSI	TSPXSO2	PSI	TSPXSO2	PSI	TSPXSO2	PSI	TSPXSO2	PSI	TSPXSO2	PSI
64.000	0.0	164.000	250.5	264.000	302.3	364.000	378.0	464.000	473.2	564.000	576.3
66.000	200.5	166.000	251.5	266.000	303.8	366.000	379.5	466.000	475.3	566.000	578.4
68.000	201.5	168.000	252.6	268.000	305.3	368.000	381.1	468.000	477.3	568.000	580.4
70.000	202.6	170.000	253.6	270.000	306.8	370.000	382.6	470.000	479.4	570.000	582.5
72.000	203.6	172.000	254.6	272.000	308.3	372.000	384.1	472.000	481.4	572.000	584.5
74.000	204.6	174.000	255.6	274.000	309.8	374.000	385.6	474.000	483.5	574.000	586.6
76.000	205.6	176.000	256.6	276.000	311.4	376.000	387.1	476.000	485.6	576.000	588.7
78.000	206.6	178.000	257.7	278.000	312.9	378.000	388.6	478.000	487.6	578.000	590.7
80.000	207.7	180.000	258.7	280.000	314.4	380.000	390.2	480.000	489.7	580.000	592.8
82.000	208.7	182.000	259.7	282.000	315.9	382.000	391.7	482.000	491.8	582.000	594.8
84.000	209.7	184.000	260.7	284.000	317.4	384.000	393.2	484.000	493.8	584.000	596.9
86.000	210.7	186.000	261.7	286.000	318.9	386.000	394.7	486.000	495.9	586.000	599.0
88.000	211.7	188.000	262.8	288.000	320.5	388.000	396.2	488.000	497.9	588.000	601.0
90.000	212.8	190.000	263.8	290.000	322.0	390.000	397.7	490.000	500.0	590.000	603.1
92.000	213.8	192.000	264.8	292.000	323.5	392.000	399.2	492.000	502.1	592.000	605.2
94.000	214.8	194.000	265.8	294.000	325.0	394.000	401.0	494.000	504.1	594.000	607.2
96.000	215.8	196.000	266.8	296.000	326.5	396.000	403.1	496.000	506.2	596.000	609.3
98.000	216.8	198.000	267.9	298.000	328.0	398.000	405.2	498.000	508.2	598.000	611.3
100.000	217.9	200.000	268.9	300.000	329.5	400.000	407.2	500.000	510.3	600.000	613.4
102.000	218.9	202.000	269.9	302.000	331.1	402.000	409.3	502.000	512.4	602.000	615.5
104.000	219.9	204.000	270.9	304.000	332.6	404.000	411.3	504.000	514.4	604.000	617.5
106.000	220.9	206.000	271.9	306.000	334.1	406.000	413.4	506.000	516.5	606.000	619.6
108.000	221.9	208.000	273.0	308.000	335.6	408.000	415.5	508.000	518.6	608.000	621.6
110.000	223.0	210.000	274.0	310.000	337.1	410.000	417.5	510.000	520.6	610.000	623.7
112.000	224.0	212.000	275.0	312.000	338.6	412.000	419.6	512.000	522.7	612.000	625.8
114.000	225.0	214.000	276.0	314.000	340.2	414.000	421.6	514.000	524.7	614.000	627.8
116.000	226.0	216.000	277.0	316.000	341.7	416.000	423.7	516.000	526.8	616.000	629.9
118.000	227.0	218.000	278.1	318.000	343.2	418.000	425.8	518.000	528.9	618.000	632.0
120.000	228.1	220.000	279.1	320.000	344.7	420.000	427.8	520.000	530.9	620.000	634.0
122.000	229.1	222.000	280.1	322.000	346.2	422.000	429.9	522.000	533.0	622.000	636.1
124.000	230.1	224.000	281.1	324.000	347.7	424.000	432.0	524.000	535.1	624.000	638.1
126.000	231.1	226.000	282.1	326.000	349.2	426.000	434.0	526.000	537.1	626.000	640.2
128.000	232.1	228.000	283.2	328.000	350.8	428.000	436.1	528.000	539.2	628.000	642.3
130.000	233.2	230.000	284.2	330.000	352.3	430.000	438.1	530.000	541.2	630.000	644.3
132.000	234.2	232.000	285.2	332.000	353.8	432.000	440.2	532.000	543.3	632.000	646.4
134.000	235.2	234.000	286.2	334.000	355.3	434.000	442.3	534.000	545.4	634.000	648.5
136.000	236.2	236.000	287.2	336.000	356.8	436.000	444.3	536.000	547.4	636.000	650.5
138.000	237.2	238.000	288.3	338.000	358.3	438.000	446.4	538.000	549.5	638.000	652.6
140.000	238.3	240.000	289.3	340.000	359.8	440.000	448.5	540.000	551.5	640.000	654.6
142.000	239.3	242.000	290.3	342.000	361.4	442.000	450.5	542.000	553.6	642.000	656.7
144.000	240.3	244.000	291.3	344.000	362.9	444.000	452.6	544.000	555.7	644.000	658.8
146.000	241.3	246.000	292.3	346.000	364.4	446.000	454.6	546.000	557.7	646.000	660.8
148.000	242.3	248.000	293.4	348.000	365.9	448.000	456.7	548.000	559.8	648.000	662.9
150.000	243.4	250.000	294.4	350.000	367.4	450.000	458.8	550.000	561.9	650.000	664.9
152.000	244.4	252.000	295.4	352.000	368.9	452.000	460.8	552.000	563.9	652.000	667.0
154.000	245.4	254.000	296.4	354.000	370.5	454.000	462.9	554.000	566.0	654.000	669.1
156.000	246.4	256.000	297.4	356.000	372.0	456.000	464.9	556.000	568.0	656.000	671.1
158.000	247.4	258.000	298.5	358.000	373.5	458.000	467.0	558.000	570.1	658.000	673.2
160.000	248.5	260.000	299.5	360.000	375.0	460.000	469.1	560.000	572.2	660.000	675.3
162.000	249.5	262.000	300.8	362.000	376.5	462.000	471.1	562.000	574.2	662.000	677.3

*Expressed in 1000's.

APPENDIX B

COMPUTER PROGRAMS FOR CALCULATING THE POLLUTANT STANDARDS INDEX (PSI) TABLES

B1. Program for Producing "Rapid Survey" and "Working" Tables (Tables A-1, A-2, A-3, A-4, or desired variations) for Rapid Calculation of PSI.

```
C*****************************************************
C . . . . . THIS PROGRAM PRODUCES A TABLE OF POLLUTANT
C. . . . .CONCENTRATIONS CORRESPONDING TO ANY DESIRED
C . . . . VALUES AND INCREMENTS OF THE POLLUTANT
C. . . . .STANDARDS INDEX (PSI). CHANGING A SINGLE
C . . . . STATEMENT ALLOWS INTEGER OR HALF-INTEGER
C . . . . VALUES OF PSI, IN INCREMENTS OF ONE, FIVE,
C . . . . OR TEN UNITS, TO BE CHOSEN FOR DISPLAY.
C*****************************************************
      IMPLICIT REAL*8(A-H,O-Z)
      WRITE (6,200)
  200 FORMAT (1H1,20X,
     + 'TABLE FOR RAPID CALCULATION OF POLLUTANT STANDARDS INDEX:',
     + 1X,'PSI = 1-200'/)
      WRITE (6,2001)
 2001 FORMAT ('0',22X,'UNITS IN MICROGRAMS/CUBIC METER',
     + 12X, 'UNITS IN PARTS PER MILLION')
      WRITE (6,201)
  201 FORMAT (1H0,5X,'PSI',97X,'PSI')
      WRITE (6,202)
  202 FORMAT (1H ,2X,'(NEAREST',2X,'PSI',8X,'CO',7X,'O3',8X,'SO2',
     + 7X,'TSP',13X,          'CO',8X,'O3',7X,'SO2', 7X,
     + 'PSI',2X,'(NEAREST')
      WRITE (6,203)
  203 FORMAT (1H ,4X,'UNIT)', 9X,2X,'(MG/M3)',77X,'UNIT)'/)
C*****************************************************
C . . . . SELECT NUMBER OF LINES IN TABLE
C*****************************************************
      DO 10 I=1,201
      REALI = DFLOAT(I)
C*****************************************************
C . . . . SELECT STARTING VALUE AND INCREMENTS FOR PSI
C*****************************************************
      PSI = 1.*REALI-0.5
      IF (PSI.GT.50.) GO TO 50
      CONTINUE
      SO2 = 80.*PSI/50.
      SO2PPM = 0.03*PSI/50.
      TSP = 75.*PSI/50.
      CO = PSI/10.
      COPPM = 9.*PSI/100.
      O3 = 160.*PSI/100.
      O3PPM = 0.08*PSI/100.
      GO TO 5000
   50 CONTINUE
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```
IF (PSI.GT.100.) GO TO 60
SO2 = 285.*(PSI-50.)/50. + 80.
SO2PPM = .11*(PSI-50.)/50. + 0.03
TSP = 185.*(PSI-50.)/50. + 75.
CO = PSI/10.
COPPM = 9.*PSI/100.
O3 = 240.*PSI/100.
O3PPM = 0.12*PSI/100.
GO TO 5000
60 CONTINUE
IF (PSI.GT.200.) GO TO 70
SO2 = 435.*(PSI-100.)/100. + 365.
SO2PPM = 0.16*(PSI-100.)/100. + 0.14
TSP = 115.*(PSI-100.)/100. + 260.
CO = 7.*PSI/100. + 3.
COPPM = 6.*(PSI-100.)/100. + 9.
O3 = 160.*(PSI-100.)/100. + 240.
O3PPM = 0.08*(PSI-100.)/100. + 0.12
GO TO 5000
70 CONTINUE
IF (PSI.GT.300.) GO TO 80
SO2 = 800.*(PSI-200.)/100. + 800.
SO2PPM = 0.30 * (PSI-200.)/100. + 0.30
TSP = 500.*(PSI-200.)/200. + 375.
CO = 17.*(PSI-200.)/100. + 17.
COPPM = 15.*(PSI-200.)/100. + 15.
O3 = 400.*(PSI-200.)/100. + 400.
O3PPM = .2*(PSI-200.)/100. + .2
NO2 = 1130.*(PSI-200.)/100. + 1130.
NO2PPM = 0.6*(PSI-200.)/100. +0.6
TS = 196.*(PSI-200.)/100. + 65.
TSPPM = 74.64*(PSI-200.)/100. + 24.82
GO TO 5000
80 CONTINUE
IF (PSI.GT.400) GO TO 90
SO2 = 500.*(PSI-300.)/100. + 1600.
SO2PPM = 0.2*(PSI-300.)/100. + .6
TSP = 500.*(PSI-200.)/200. + 375.
CO = 12.*(PSI-300.)/100. + 34.
COPPM= 10.*(PSI-300.)/100. + 30.
O3 = 200.*(PSI-300.)/100. + 800.
O3PPM = .1*(PSI-300.)/100. + .4
NO2 = 740.*(PSI-300.)/100. + 2260.
NO2PPM = .4*(PSI-300.)/100. + 1.2
TS =132.*(PSI-300.)/100.+261.
TSPPM = 50.44 *(PSI-300.)/100. + 99.66
GO TO 5000
90 CONTINUE
```

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SO2 = 520.*(PSI-400.)/100. + 2100.
SO2PPM = 0.2*(PSI-300.)/100. + .6
TSP = 125.*(PSI-400.)/100. + 875.
CO = 11.5*(PSI-400.)/100. + 46.
COPPM= 10.*(PSI-300.)/100. + 30.
O3 = 200.*(PSI-300.)/100. + 800.
O3PPM = .1*(PSI-300.)/100. + .4
NO2 = 750.*(PSI-400.)/100. + 3000.
NO2PPM = .4*(PSI-300.)/100. + 1.2
TS = 97.*(PSI - 400.)/100. + 393.
TSPPM = 37.*(PSI-400.)/100. + 150.1
5000 CONTINUE
.....................................................
C . . . . SELECT SPACING AND NUMBER OF LINES PER PAGE
.....................................................
K = I-1
J = I
IF (K/5*5.NE.K) GO TO 6470
IF (K.EQ.0) GO TO 6470
6450 WRITE (6,650)
650 FORMAT (1H )
IF(K/40*40.NE.K) GO TO 6470
WRITE (6,640)
640 FORMAT (1H1)
WRITE (6,2001)
WRITE(6,201)
WRITE (6,202)
WRITE (6,203)
6470 CONTINUE
WRITE (6,302)J, PSI,CO,O3,SO2,TSP,    COPPM,O3PPM,SO2PPM,PSI,J
302 FORMAT (1H ,5X,I3,2X,F6.1,4F10.2, 6X, 3F10.4,3X,F6.1,4X,I3)
10 CONTINUE
END
```

B2. Program for Producing "Reference" Tables of PSI Values for Individual Pollutants (Tables A-5 through A-15, or desired variations).

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C.....
C ........THIS PROGRAM PRODUCES A TABLE OF PSI
C ........VALUES CORRESPONDING TO ANY DESIRED
C.........POLLUTANT CONCENTRATIONS AND INCREMENTS.
C.........ELEVEN SUBROUTINES COVER ALL POLLUTANTS
C.........AND POSSIBLE COMBINATIONS OF UNITS.
C.....
IMPLICIT REAL*8(A-H,O-Z), INTEGER (I-N)
C.....
C . . . . SELECT SIZE OF TABLE: (# OF LINES, # OF COLUMNS)
C.....
DIMENSION SINDEX (50,12)
DO 60 M=1,11
IF (M.EQ.1) WRITE (6,101)
101 FORMAT (1H1, 55X,'CO(UG/M3)'//' ',1X,6(3X,'CO',6X,'PSI',5X))
IF(M.EQ.2) WRITE (6,102)
102 FORMAT (1H1,55X,'CO(PPM)'//' ',1X,6(3X,'CO',6X,'PSI',5X))
IF (M.EQ.3) WRITE (6,1003)
1003 FORMAT (1H1,55X,'O3(UG/M3)'//' ',1X,6(3X,'O3',6X,'PSI',5X))
IF (M.EQ.4) WRITE (6,104)
104 FORMAT (1H1,55X,'O3(PPM)'//' ',1X,6(3X,'O3',6X,'PSI',5X))
IF (M.EQ.5) WRITE (6,105)
105 FORMAT (1H1,55X,'NO2(UG/M3)'//' ',1X,6(3X,'NO2',5X,'PSI',5X))
IF (M.EQ.6) WRITE (6,106)
106 FORMAT (1H1,55X,'NO2(PPM)'//' ',1X,6(3X,'NO2',5X,'PSI',5X))
IF (M.EQ.7) WRITE (6,107)
107 FORMAT (1H1,55X, 'SO2(UG/M3)'//' ',1X,6(3X,'SO2',5X,'PSI',5X)
IF (M.EQ.8) WRITE (6,108)
108 FORMAT(1HI,55X,'SO2(PPM)'//' ',1X,6(3X,'SO2',5X,'PSI',5X))
IF (M.EQ.9) WRITE (6,109)
109 FORMAT (1H1,55X,'TSP(UG/M3)'//' ',1X,6(3X,'TSP',5X,'PSI',5X))
IF (M.EQ.10) WRITE (6,110)
110 FORMAT (1H1,42X, 'TSPXSO2(UG/M3)(UG/M3)(IN THOUSANDS)')
IF (M.EQ.10) WRITE (6,1110)
1110 FORMAT ('0',1X,6('TSPXSO2',4X,'PSI',5X))
IF  (M.EQ.11) WRITE (6,111)
111 FORMAT (1H1,52X, 'TSPXSO2(UG/M3)(PPM)')
IF (M.EQ.11) WRITE (6,1110)
103 FORMAT (1H )
K = 1
J=0
C.....
C. . . .LET T = POLLUTANT CONCENTRATION; INITIALIZE TO ZERO
C.....
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T = 0.0
PSI = 0.0
DO 10 I = 1,300
REALI = DFLOAT(I)
IF (M.EQ.1) CALL CO(REALI,T,SUBCO,PSI)
IF (M.EQ.2) CALL COPPM(REALI,T,SUBCO,PSI)
IF (M.EQ.3) CALL O3(REALI,T,SUBO3,PSI)
IF (M.EQ.4) CALL O3PPM(REALI,T,SUBO3,PSI)
IF (M.EQ.5) CALL NO2(REALI,T,SUBNO2,PSI)
IF (M.EQ.6) CALL NO2PPM(REALI,T,SUBNO2,PSI)
IF (M.EQ.7) CALL SO2(REALI,T,SUBSO2,PSI)
IF (M.EQ.8) CALL SO2PPM(REALI,T,SUBSO2,PSI)
IF (M.EQ.9) CALL TSP(REALI,T,SUBTSP,PSI)
IF(M.EQ.10) CALL TS(REALI,T,S,PSI)
IF (M.EQ.11)CALL TSPPM(REALI,T,S,PSI)
J = J+1
SINDEX (J,K) = T
L = K+1
SINDEX (J,L) = PSI
IF (J.EQ.50) K = K+2
IF (J.EQ.50) J = 0
10 CONTINUE
DO 25 N=1,10
DO 20 JONE = 1,5
J = 5 *(N-1) + JONE
WRITE (6,1002) (SINDEX(J,K),K=1,12)
1002 FORMAT (1X, 6(F8.3,2X,F6.1,3X))
20 CONTINUE
WRITE (6,103)
25 CONTINUE
60 CONTINUE
END
SUBROUTINE CO(REALI,T,SUBCO,PSI)
T = 0.2*REALI
      IF(T.GE.0.0.AND.T.LT.10.0)   SUBCO=10.0*T
      IF(T.GE.10.0.AND.T.LT.17.0)  SUBCO=14.285714*(T-10.0) + 100.0
      IF(T.GE.17.0.AND.T.LT.34.0)  SUBCO=5.8823529*(T-17.0) + 200.0
      IF(T.GE.34.0.AND.T.LT.46.0)  SUBCO=8.3333333*(T-34.0) + 300.0
      IF(T.GE.46.0)                SUBCO=8.695652*(T-46.0) + 400.0
PSI = SUBCO
RETURN
END
SUBROUTINE COPPM(REALI,T,SUBCO,PSI)
T = 0.2*REALI
      IF(T.GE.0.0.AND.T.LT.9.0)    SUBCO=11.111111*T
      IF(T.GE.9.0.AND.T.LT.15.0)   SUBCO=16.666667*(T-9.0) + 100.0
      IF(T.GE.15.0.AND.T.LT.30.0)  SUBCO=6.6666667*(T-15.0) + 200.0
      IF(T.GE.30.0)                SUBCO=10.0*(T-30.0) + 300.0
PSI = SUBCO
RETURN
END
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SUBROUTINE O3(REALI,T,SUBO3,PSI)
T = 4.*REALI
      IF(T.GE.0.0.AND.T.LT.240.0)      SUBO3=T/2.4
      IF(T.GE.240.0.AND.T.LT.400.0)    SUBO3=(T-240.0)/1.6 +100.0
      IF(T.GE.400.0.AND.T.LT.800.0)    SUBO3=0.25*(T-400.) + 200.0
      IF(T.GE.800.0)                   SUBO3=0.5*(T-800.0) + 300.0
PSI =SUBO3
RETURN
END
SUBROUTINE O3PPM (REALI,T,SUBO3,PSI)
T = 0.002*REALI
      IF(T.GE.0.0.AND.T.LT.0.12)    SUBO3=833.33333*T
      IF(T.GE.0.12.AND.T.LT.0.2)    SUBO3=1250.0000*(T-0.12) + 100.0
      IF(T.GE.0.2.AND.T.LT.0.4)     SUBO3=500.0*(T-0.2) + 200.0
      IF(T.GE.0.4)                  SUBO3=1000.0*(T-0.4) + 300.0
PSI = SUBO3
RETURN
END
SUBROUTINE NO2(REALI,T,SUBNO2,PSI)
T = 1120. + 10.*REALI
   31 IF(T.GE.1130.0.AND.T.LT.2260.0) SUBNO2=.088495575*(T-1130.) + 200.
      IF(T.GE.2260.0.AND.T.LT.3000.0) SUBNO2=.135135135*(T-2260.) + 300.
      IF(T.GE.3000.0)                 SUBNO2=.133333333*(T-3000.) + 400.
PSI = SUBNO2
RETURN
END
SUBROUTINE NO2PPM(REALI,T,SUBNO2,PSI)
T = 0.595 + 0.005*REALI
   32 IF(T.GE.0.6.AND.T.LT.1.2)     SUBNO2=166.666667*(T-0.6) + 200.
      IF(T.GE.1.2)                  SUBNO2=250.0*(T-1.2) + 300.
PSI = SUBNO2
RETURN
END
SUBROUTINE SO2(REALI,T,SUBSO2,PSI)
T = 10.*REALI
   41 IF(T.GE.0.0.AND.T.LT.80.0)       SUBSO2=0.625000*T
      IF(T.GE.80.0.AND.T.LT.365.0)     SUBSO2=.17543860*(T-80.0) + 50.
      IF(T.GE.365.0.AND.T.LT.800.0)    SUBSO2=0.229885*(T-365.0) + 100.
      IF(T.GE.800.0.AND.T.LT.1600.0)   SUBSO2=0.125*(T-800.0) + 200.0
      IF(T.GE.1600.0.AND.T.LT.2100.0)  SUBSO2=0.2*(T-1600.0) + 300.0
      IF(T.GE.2100.0)                  SUBSO2=0.192308*(T-2100.0) + 400.
PSI = SUBSO2
RETURN
END
SUBROUTINE SO2PPM(REALI,T,SUBSO2,PSI)
T = .004*REALI
   42 IF(T.GE.0.0.AND.T.LT.0.03)    SUBSO2=1666.66667*T
      IF(T.GE.0.03.AND.T.LT.0.14)   SUBSO2=454.545456*(T-0.03) + 50.0
      IF(T.GE.0.14.AND.T.LT.0.3)    SUBSO2=625.0*(T-0.14) + 100.
      IF(T.GE.0.3.AND.T.LT.0.6)     SUBSO2=333.333333*(T-0.3) + 200.0
      IF(T.GE.0.6)                  SUBSO2=500.0*(T-0.6) + 300.0
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      PSI = SUBSO2
      RETURN
      END
      SUBROUTINE TSP(REALI,T,SUBTSP,PSI)
      T = 4.*REALI
            IF(T.GE.0.0.AND.T.LT.75.0)        SUBTSP=.666666667*T
            IF(T.GE.75.0.AND.T.LT.260.0)      SUBTSP=0.27027027*(T-75.) + 50.
            IF(T.GE.260.0.AND.T.LT.375.0)     SUBTSP=.869565217*(T-260.0) + 100.
            IF(T.GE.375.0.AND.T.LT.875.0)     SUBTSP=0.4*(T-375.0) + 200.0
            IF(T.GE.875.0)                    SUBTSP=0.8*(T-875.0) + 400.0
      PSI = SUBTSP
      RETURN
      END
      SUBROUTINE TS       (REALI,T,S,PSI)
      T = 62000. + 2000.*REALI
         61 IF(T.GE.65000.0.AND.T.LT.261000.0) S=.000510204*(T-65000.0) + 200.
            IF(T.GE.261000.0.AND.T.LT.393000.0) S=.000757576*(T-261000.0)+300.
            IF(T.GE.393000.0)      S=0.001030928*(T-393000.0) + 400
      PSI = S
      T = T/1000.
      RETURN
      END
      SUBROUTINE TSPPM     (REALI, T,S,PSI)
      T = 24.0 +1.0*REALI
         62 IF(T.GE.24.82   .AND.T.LT.99.66    ) S=1.337  *(T-24.82) + 200.
            IF(T.GE.99.66   .AND.T.LT.150.1   )  S=1.982   *(T-99.66    ) + 300.
            IF(T.GE.150.1   )                    S=2.703    *(T-150.1   ) + 400.
      PSI = S
      RETURN
      END
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TECHNICAL REPORT DATA
(Please read Instructions on the reverse before completing)

1. REPORT NO.	2.	3. RECIPIENT'S ACCESSION NO.
EPA-600/4-79-039		

4. TITLE AND SUBTITLE	5. REPORT DATE
RAPID TECHNIQUES FOR CALCULATING THE POLLUTANT STANDARDS INDEX (PSI) REVISED JUNE 1979	June 1979
	6. PERFORMING ORGANIZATION CODE: ORD/OMTS/MTD (RD-680)
7. AUTHOR(S): Lance Wallace and Wayne R. Ott	8. PERFORMING ORGANIZATION REPORT NO.
9. PERFORMING ORGANIZATION NAME AND ADDRESS: N/A	10. PROGRAM ELEMENT NO.: 1HD621
	11. CONTRACT/GRANT NO.: N/A
12. SPONSORING AGENCY NAME AND ADDRESS: Office of Research and Development, U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460	13. TYPE OF REPORT AND PERIOD COVERED: In-house
	14. SPONSORING AGENCY CODE: EPA/600/19
15. SUPPLEMENTARY NOTES: N/A	

16. ABSTRACT

Rapid techniques for calculating the Pollutant Standards Index (PSI) for daily public reporting of air quality are discussed. A complete set of original nomograms for calculating the PSI in gravimetric or volumetric units is presented. The nomograms are recommended for use by all State and local air pollution control agencies as a means of determining the PSI rapidly and accurately. Examples of linear and logarithmic graphs for calculating the PSI are also included.

Tables for rapidly identifying the critical pollutant on a given day and automatically determining its PSI value to the nearest unit are listed in Appendix A. Tables A-2 and A-4 list the precise pollutant concentrations corresponding to consecutive unit values of PSI between 1 and 500, and can, therefore, provide the definitive verification of estimates of PSI obtained from the nomograms or other graphs. Computer programs for creating these or similar tables appear in Appendix B.

This revised edition includes all the changes in tables and nomograms required by the 1979 revision of the National Ambient Air Quality Standard for ozone.

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Mathematical models, -Computer simulation, Systems analysis, Statistical analysis, Pollution - Air pollution, Sanitary engineering, Environmental engineering, Civil engineering	Environmental indices Air quality indices, Data analysis, Computer techniques, Environmental monitoring	04B 05C 06F 12A 12B 13B

18. DISTRIBUTION STATEMENT	19. SECURITY CLASS *(This Report)*	21. NO. OF PAGES
RELEASE TO PUBLIC	UNCLASSIFIED	64
	20. SECURITY CLASS *(This page)*	22. PRICE
	UNCLASSIFIED	

EPA Form 2220-1 (9-73)

*U.S. GOVERNMENT PRINTING OFFICE: 1980 311-132/11 1-3