

PREVENTION OF SIGNIFICANT DETERIORATION ANALYSIS FOR THE PROPOSED FLY ASH HANDLING FACILITIES FOR CRYSTAL RIVER UNITS 1 & 2

FLORIDA POWER CORPORATION
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SUBMITTED TO:
FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION



**ESE ENVIRONMENTAL SCIENCE
AND ENGINEERING, INC.**

PREVENTION OF SIGNIFICANT DETERIORATION ANALYSIS
FOR THE PROPOSED FLY ASH HANDLING SYSTEM
AT THE CRYSTAL RIVER PLANT

D.E.R.

OCT 20 1978

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SOUTHWEST DISTRICT
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1.0 SUMMARY

Florida Power Corporation (FPC) of St. Petersburg, Florida, is proposing to construct a fly ash handling system at its existing Crystal River power plant. The plant is located in Citrus County, Florida, adjacent to the Gulf of Mexico (see Figure 1.1). Emissions from the proposed system consist of only particulate matter.

The State of Florida Department of Environmental Regulation (FDER) has recently (March 1, 1978) enacted regulations concerning the Prevention of Significant Deterioration (PSD). All new sources of air pollution must undergo a Florida PSD review to determine if significant deterioration will be caused by the proposed new source.

In response to these requirements, Environmental Science and Engineering, Inc. (ESE) of Gainesville, Florida, conducted a PSD analysis on behalf of FPC. The analysis, which was conducted by utilizing suggested and approved EPA atmospheric dispersion models and modeling techniques, showed that allowable PSD increments and National Ambient Air Quality Standards (AAQS) of the U.S. EPA will not be violated as a result of operation of the proposed system. The analysis was based upon the maximum allowable emissions from the proposed sources.

This report provides a comprehensive evaluation of the PSD analysis for the FDER and provides a complete description of the methods, data bases, results and conclusions of the study. The report is being submitted to

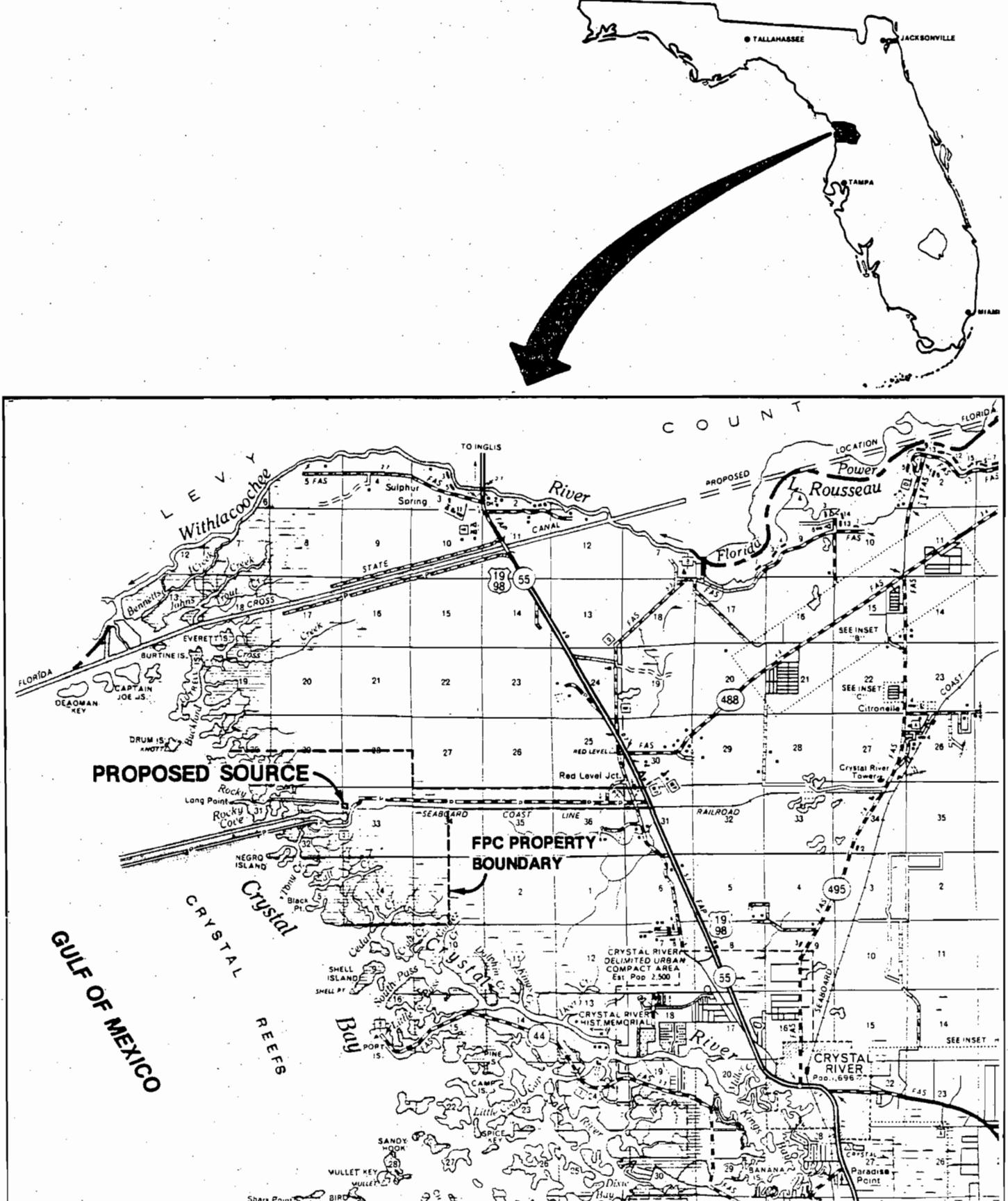


Figure 1.1
LOCATION OF THE FPC CRYSTAL RIVER POWER PLANT,
CITRUS COUNTY, FLORIDA

the FDER. Concurrently, a PSD report and construction permit applications are also being submitted to the U.S. Environmental Protection Agency (EPA).

2.0 INTRODUCTION

Florida Power Corporation of St. Petersburg, Florida is proposing to construct and operate a fly ash handling system to convey, in a dry state, the fly ash generated by the coal-firing of existing Units 1 and 2. At the present time only Unit 2 is coal-fired. The current system of ash handling is to hydraulically sluice the ash to a holding pond. The new system will modify the present Unit 2 system and also service Unit 1. Unit 1 is to be converted from oil to coal in March of 1979. The proposed system will be located adjacent to the existing Units 1 and 2.

Operation of the new system will commence in March 1979, when Unit 1 begins using coal. The fly ash handling system will run on a continuous basis to insure an efficient ash collection operation from the two coal-fired units. Trucks will be used to transfer the dry fly ash from the silos. Dry fly ash can be used as an aggregate in concrete, and as such, has a commercial value of from five to six dollars per ton.

FDER regulations require that all new sources of air pollution undergo a PSD review. Such a review entails an analysis of the degradation of sulfur dioxide and suspended particulate matter concentrations expected to occur in the vicinity of the new source since the baseline year. The FDER defines baseline air quality as "ambient concentration levels existing during 1974" plus the additional affect of those sources permitted for construction but not operating prior to January 1, 1975. In the case of short-term concentrations, the baseline is defined as the

second highest concentrations, which is consistent with the AAQS for short-term averaging times. For projection of future conditions with the proposed units in operation, maximum permitted or allowable emission rates must be used since the source could legally emit up to that limit.

Increases in ambient TSP concentration levels above the baseline year are limited to specified increments (Table 2.1) for each area classification. Citrus County is currently classified for PSD analysis as a Class II area. The Chassahowitzka Wilderness Area, some 20 kilometers south of the plant, is a Class I area. The FDER regulations specifically require the use of approved atmospheric dispersion models to determine changes in baseline concentrations.

The U.S. EPA Region IV has not delegated PSD review authority to the State of Florida. In addition, revised PSD regulations were recently promulgated (June 19, 1978) by EPA and the revised regulations differ somewhat from the FDER regulations. The most significant difference between the two sets of regulations is in EPA's definition of baseline air quality as those ambient concentrations existing on August 7, 1977, whereas the FDER baseline is calendar year 1974.

For these reasons, independent PSD review will be conducted by FDER and the EPA and separate PSD analyses are needed. This report presents the methodology, data bases, results, and conclusions of the PSD analysis for the proposed system relative to the FDER regulations.

Table 2.1. Prevention of Significant Deterioration Suspended Particulate Matter Increments ($\mu\text{g}/\text{m}^3$).

Averaging Time	Class		
	I	II	III
Annual Geometric Mean	5	19	37
24-hour Maximum *	10	37	75

* Increment may be exceeded once per year.

Sources: Public Law 95-95, Clean Air Amendments of 1977.
Federal Register, Vo. 43, No. 118, June 19, 1978.

3.0 DESCRIPTION OF THE PROPOSED SYSTEM

As an essential part of the coal conversion process of Crystal River Units 1 and 2, a new fly ash handling system is to be constructed by Florida Power Corporation. This system will modify an existing system for Unit 2 by which fly ash is mixed with sea water and hydraulically sluiced into a holding pond. The modification to handle dry fly ash will also include Unit 1 and will allow for the transfer of the ash to a dry storage silo for truck disposal. The major components of the system are outlined below.

From the Unit 1 precipitator and gas recirculation dust collector hoppers, dry fly ash will be evacuated by two vacuum blowers and then discharged at a maximum design rate of 44 tons per hour into a common Unit 1 and 2 transfer silo. The discharging mixture of air and ash will run through the transfer silo's primary and secondary separator and a bag dust collector before exhausting into the atmosphere by means of the vacuum blower. This exhaust is referred to as Source 1 for the proposed system.

Fly ash will be evacuated from the Unit 2 precipitator and economizer hoppers at the maximum design rate of 55 tons per hour by means of a dry vacuum and discharges into a common Unit 1 and 2 transfer silo. The vacuum will be created by the operation of dual jet hydroevacuators using high pressure sea water. The discharging air-ash mixture will be channeled through a primary and secondary separator and sluiced with sea water into the existing elevated air separator and then into an ash pond by means of a 12-inch pipeline.

Dry ash from Units 1 and 2 will be fed under pressure into a common transfer silo through two 8-inch pipelines. The air displaced in the transfer silo by the incoming air and ash will be vented through a bag dust collector to the atmosphere (Source 2). The fly ash will enter the storage silo by means of two 8-inch outlet boxes with conveying air vented through an additional dust bag collector (Source 3).

Computer outputs containing the emissions and stack parameters for the above three sources are included in Appendix A.

4.0 ATMOSPHERIC DISPERSION MODELING METHODOLOGY

4.1 GENERAL

To completely evaluate the impact of emissions and determine compliance with Ambient Air Quality Standards and other regulations, the relationship between atmospheric emissions and air quality must be established and the spatial distribution of atmospheric pollution in the vicinity of pollution sources must be determined. One approach to determine this relationship is to assume that a change in emissions would cause a proportionate change in air quality. This approach, however, does not explicitly include the effects of meteorology, topography, and stack gas parameters and therefore does not insure an accurate estimate of the impact of emissions on the overall air quality.

In response to this deficiency, the air quality "dispersion model" has become an accepted method for estimating the spatial distribution of pollutant concentrations. Currently, the dispersion models are generally restricted to nonreactive or slow reacting pollutants, such as sulfur dioxide, suspended particulate matter, and carbon monoxide. Current state-of-the-art techniques in dispersion modeling cannot accurately predict concentrations for reactive pollutant species such as nitrogen dioxide, hydrocarbon, and photochemical oxidants.

Mathematical dispersion models simulate the effects of stack height, stack flow parameters, source distributions, and atmospheric elements, such as air flow and mixing, on the transport and dispersion of

pollutants emitted into the atmosphere. Dispersion models are useful for calculating the spatial distribution of concentrations that result from various sources and can be manipulated to estimate ground-level concentrations for extreme meteorological conditions. Figure 4.1, which illustrates the procedure to follow in applying a mathematical model, shows that by compiling existing emission, meteorological, and air quality data, a dispersion model can estimate the spatial distribution of air quality. If calibrated, the model can be used to predict concentrations for future expected emissions and meteorological situations. If uncalibrated, the model is useful for predicting the relative change in air quality as a result of varying emission parameters, meteorological conditions, and source distributions.

The Federal Environmental Protection Agency (EPA) has developed several dispersion models which use the Gaussian diffusion equation. The basic formulation of the Gaussian equation assumes that the ground-level concentration is inversely proportional to the mean wind speed. The Gaussian distribution describes the horizontal and vertical pollutant dispersion in a plane normal to the wind direction.

It should be recognized, however, that such dispersion models have rather severe limitations in that they cannot reasonably predict expected ground-level pollutant concentrations from a multitude of sources under meteorological conditions for which the Gaussian equation is not applicable (i.e., calm winds, aerodynamic downwash, or fumigation).

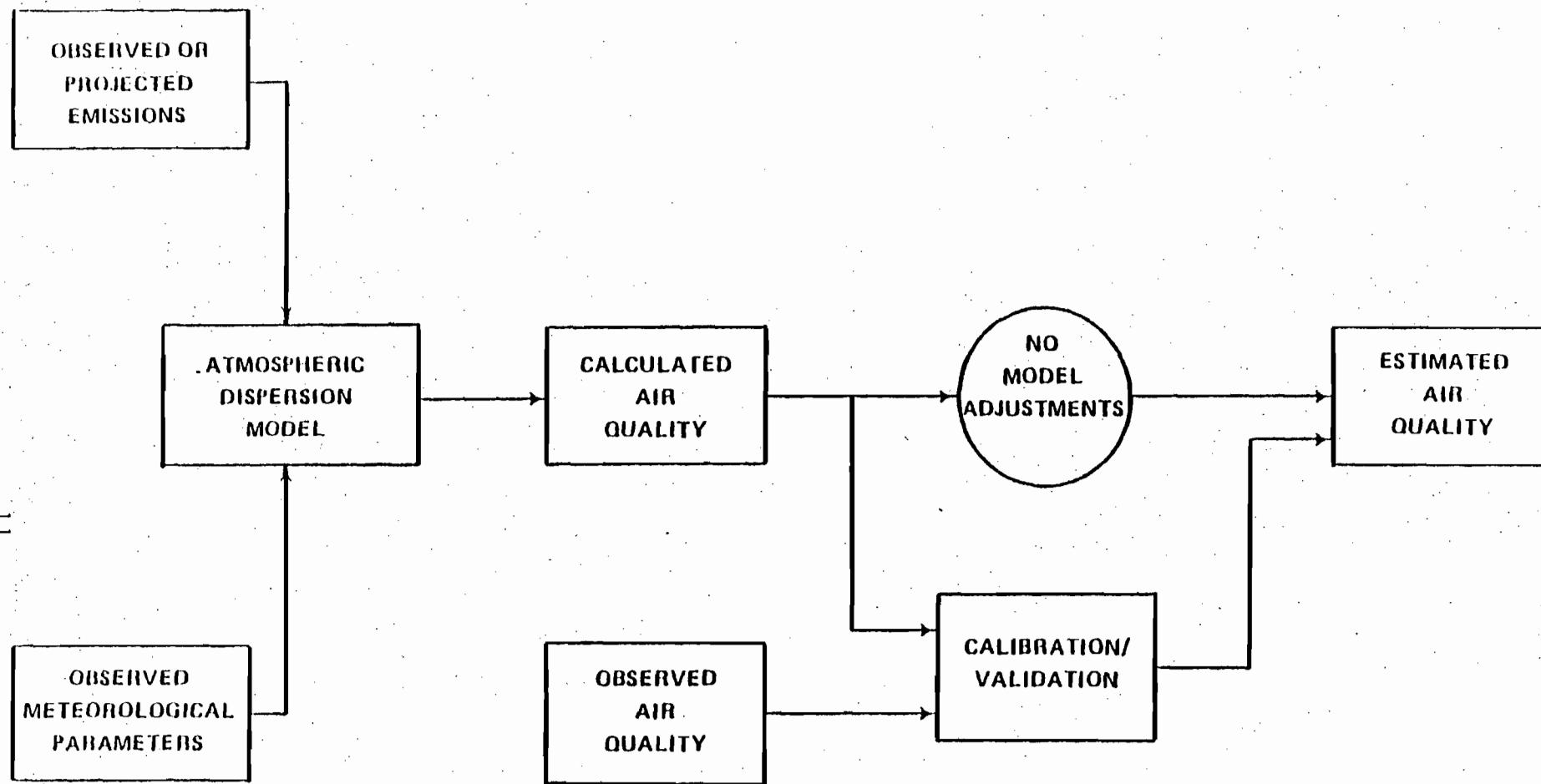


FIGURE 4.1
FLOW DIAGRAM FOR THE APPLICATION OF ATMOSPHERIC DISPERSION MODELS.

An atmospheric dispersion model can be defined as a mathematical description of the transport, dispersion, and transformation processes that occur in the atmosphere. In the case of sulfur dioxide, it is generally assumed that chemical conversion of this substance is small with respect to its average residence time in the atmosphere. In the case of particulate matter, it is assumed that no particles are scavenged from the atmosphere by fallout or washout. These assumptions, which are conservative, tend to result in predicted concentrations being higher than actual measured concentrations.

The Florida Department of Environmental Regulation (FDER) and the U.S. EPA Ambient Air Quality Standards for suspended particulate matter are for annual and 24-hour periods of time; therefore, the dispersion models must predict concentrations for various averaging times. However, most dispersion models estimate concentrations for a one-hour period or for seasonal or annual time periods. If an average concentration for an intermediate period is required, two options are available:

1. The short-term model can be used to estimate concentrations hour-by-hour for the period of interest and an average of all hours can be taken with consideration given to an appropriate calibration factor.
2. Statistical techniques suggested by Larsen (1971) for log-normally distributed data or empirical techniques as summarized by Strom (1976) for point sources can be utilized to convert a concentration from one averaging time to another.

In this study, Method 1, above, was utilized.

Several widely recognized techniques for estimating or predicting groundlevel pollutant concentrations were utilized in this study. These techniques are discussed in detail in the following sections. Three EPA-approved models were utilized--the Air Quality Display Model (AQDM), the Point Multiple Model with wind shear effects (PTMTPW), and the CRSTER Single Source Model.

The AQDM, which determines annual average levels of atmospheric pollution from annual emissions and meteorological data, was used to conduct the long-term impact evaluation. The short-term impact assessment was conducted using the PTMTPW and CRSTER, which calculate hourly pollutant concentrations from hourly emissions and meteorological parameters. These hourly levels can be averaged over any longer time period to facilitate comparisons of estimated air quality with air quality standards. A more thorough description of the models is included in Appendix B.

The long-term ambient air quality standard for TSP is expressed in terms of annual geometric mean. The long-term air dispersion models, however, calculate annual arithmetic mean concentrations. Therefore, a method of conversion from arithmetic mean to geometric mean concentration is necessary in order to compare estimates with air quality standards. Larsen (1971) has developed an equation which expresses the relationship for log-normally distributed data:

$$M_g = \frac{M_{aa}}{\exp(0.5 \ln^2 S_g)}$$

where: M_g = geometric mean

M_{aa} = arithmetic mean

S_g = standard geometric deviation

An analysis of many years of ambient TSP data indicates that the log-normal assumption is a good approximation for suspended particulates in suburban and rural areas. This analysis also showed that S_g values normally range from 1.0 to 2.0 for an annual period, with a typical value of 1.5. Inserting an S_g of 1.5 into the above equation results in a M_g/M_{aa} ratio of 0.92. This ratio was used to convert arithmetic mean TSP levels to geometric mean TSP levels, based upon the modeling results.

A calibration or adjustment to model calculated concentrations was not performed. Therefore, all reported results for both sulfur dioxide and suspended particulate matter reflect a calibration factor of 1.0 for both short-term and long-term models.

The emissions inventories utilized in the modeling included all significant man-made sources of particulate matter in the area of interest. Several natural background sources of TSP do exist, including vehicular traffic over roadways and windblown dust. It is generally estimated that an average natural background concentration of 35 ug/m³ exists over the southeastern United States (McCormick and Holzworth, 1976). ESE's past experience in the study area indicates the background is actually between 25 and 30 ug/m³. To be conservative, a background of 35 ug/m³ was utilized in the modeling results.

4.2 METEOROLOGICAL DATA

Meteorological data used in the long-term model AQDM consisted of 1971-75 hourly stability wind rose data from Tampa, Florida, obtained from the National Climatic Center in Asheville, North Carolina. The wind rose which reflects these data is shown in Figure 4.2. The same hourly data was utilized in the CRSTER model to determine the worst day meteorological conditions with a five-year data base. The Tampa data are the most representative and complete data available for the Crystal River site.

4.3 INCREMENTAL IMPACT

Maximum annual and 24-hour TSP concentrations due to operation of the proposed facility only were determined at its maximum permitted emissions. Stack parameters for the new sources were calculated from the FDER construction permit application. All emission rates for the proposed units were calculated at the maximum expected rate. Year-round and 24-hour per day operation for all three new sources was assumed.

For the annual modeling, a 13 x 11 kilometer grid with 1 kilometer spacing centered at Unit 1 and 2 was used to determine the incremental impact of the proposed system. Worst 24-hour periods were determined with the Single Source (CRSTER) model with a receptor spacing of 0.5 kilometers or less. This spacing was further narrowed to

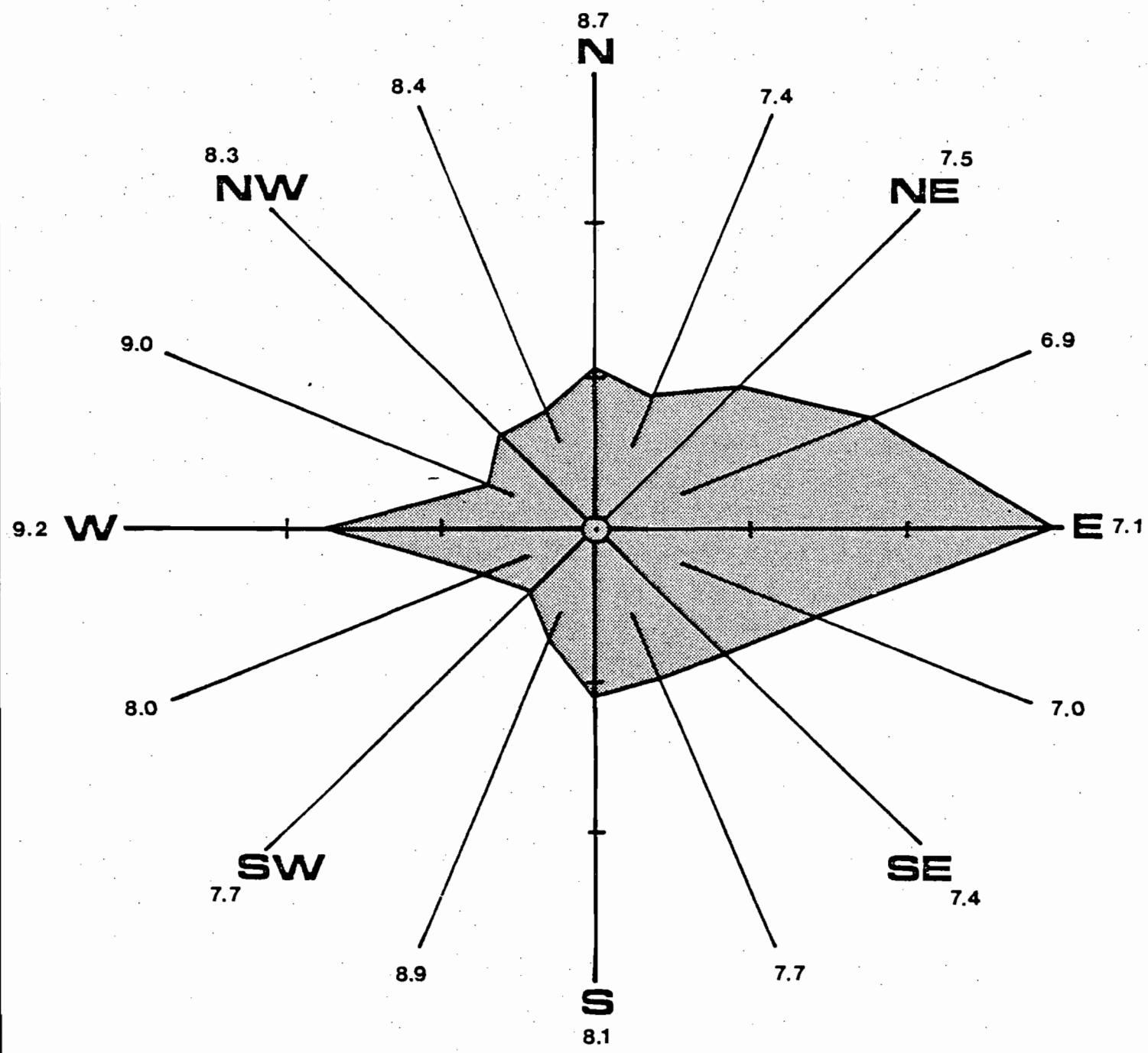


FIGURE 4.2 FIVE YEAR AVERAGED WIND ROSE FOR TAMPA, FLORIDA,
1971-1975. SCALE: 1"=5%, CALM=4.4%. AVERAGE
SPEEDS GIVEN IN KNOTS.

0.1 kilometers by using the PTMTPW model which inputs the appropriate worst-case meteorological conditions.

A listing of the CRSTER and PTMTPW runs executed for the incremental impact analysis are shown below:

CRSTER Runs

1. Proposed fly ash handling system only--Maximum TSP emissions

PTMTPW Runs

Day = 15 (1973) Direction* = 310--Maximum Particulate Emissions

*In the downwind direction

4.4 PSD ANALYSIS--CLASS II

The maximum annual average TSP increment was determined graphically from concentration isopleth maps. The air quality of the baseline year (1974) was subtracted grid-by-grid from the projected air quality of the period the proposed system plus Units 4 and 5 will be operational (1980's). The maximum difference at any given grid point receptor is the maximum increment.

The maximum 24-hour TSP increment was determined by examining the second highest increment at three receptors:

1. At the point of maximum incremental contribution of the proposed system,
2. On the northern end of the axis line connecting Units 1 and 2 with Units 4 and 5, and

3. On the southern end of the axis line connecting Units 1 and 2 with Units 4 and 5.

All analyses were confined to the area outside FPC's property boundary.

The particulate matter emissions from the existing units at the Crystal River plant were determined as follows:

1. For the baseline year (1974), maximum emissions were utilized.

Particulate emissions were based upon 0.1 lb/ 10^6 Btu for Units 1 and 2 with Unit 1 on oil and Unit 2 on coal. Annual load factors were used for the annual emissions while short-term emissions were calculated on the basis of 100 percent load conditions.

2. In order to project future conditions, maximum allowable emission rates were utilized for all sources, both existing and proposed. The sources included Units 1 through 4 as coal-fired units and the addition of the coal/ash handling operation of Units 4 and 5. All pertinent information was supplied by FPC.

The CRSTER and PTMTPW runs which were executed for this phase are shown below:

CRSTER

1. Crystal River Units 1 and 2 on oil--Baseline TSP
2. Crystal River Units 1 and 2 on coal plus proposed sources--Projected TSP
3. Crystal River Units 4 and 5 on coal--Projected TSP.

PTMTPW

1. Day = 15 (1973) Direction = 310--TSP projected emissions.

2. Day = 136 (1974) Direction = 310--TSP Baseline emissions.

The above runs were from the point of maximum impact of the proposed system. All runs, however, can be found in Appendix B. Short-term impacts were determined with the FPC plant only since no other major sources are located within 15 kilometers of the site. Annual impacts were determined with all source interactions up to 50 kilometers from the site. This includes all sizable particulate matter sources in Citrus, Marion, and Hernando counties.

Receptors for the annual isopleth maps extended 6 kilometers in all directions from the plant. Short-term receptors included 8 or 9 concentric circles for each of 36 wind direction sectors up to a distance of 5 kilometers from the plant.

Increment consumption was determined for the annual and 24-hour averaging times. For short-term increments, the highest, second-highest concentration in 5 years at every receptor was utilized.

4.5 PSD ANALYSIS--CLASS I AREAS

The Clean Air Act Amendments of 1977 require that all national wilderness areas which exceed 5,000 acres in size be designated as Class I areas for PSD analysis. The Chassahowitzka Wilderness Area, a

required Class I area, is 20 kilometers from the site at the nearest point.

It should be noted that, although concentration calculations can be obtained from the models for large downwind distances, the accuracy of the calculations are highly uncertain. Variations in air flow, including wind speed and wind direction, and in terrain characteristics over such distances can cause these estimations to be very inaccurate.

To determine compliance with the annual Class I TSP increments, one receptor 20 kilometers to the south of Units 1 and 2 was included in all annual runs. This is the upper border and closest approach of the Class I area to the site and is sufficient for determining annual degradation.

To determine compliance with the 24-hour TSP Class I increment, a 20-kilometer ring was incorporated in all CRSTER models and a line of closest receptors in the PTMTPW. Class I worst days were determined at the 20-kilometer ring from CRSTER directions of 17, 18, and 19. All other methodology is the same as for the Class II increment.

CRSTER

Same as Class II.

PTMTPW

1. Day = 320 (1972) Direction = 180--Maximum projected TSP emissions.
2. Day = 328 (1972) Direction = 180--Maximum baseline emissions.

4.6 AMBIENT AIR QUALITY STANDARDS

In addition to the determination of increment consumption, the maximum TSP concentration beyond the property boundaries was compared with the respective AAQS. This methodology utilized the highest, second-highest concentrations at each receptor, since these values could be directly related to short-term AAQS, which can be exceeded once per year (as can the PSD increments). The CRSTER and PTMTPW runs utilized to determine compliance with AAQS are listed below:

CRSTER

1. All FPC Sources--Projected TSP

PTMTPW

1. Day = 15 (1973) Direction = 310--Maximum projected 24-hour TSP.
2. Day = 105 (1972) Direction = 20--Maximum projected 24-hour TSP.
3. Day = 326 (1975) Direction = 200--Maximum projected 24-hour TSP.

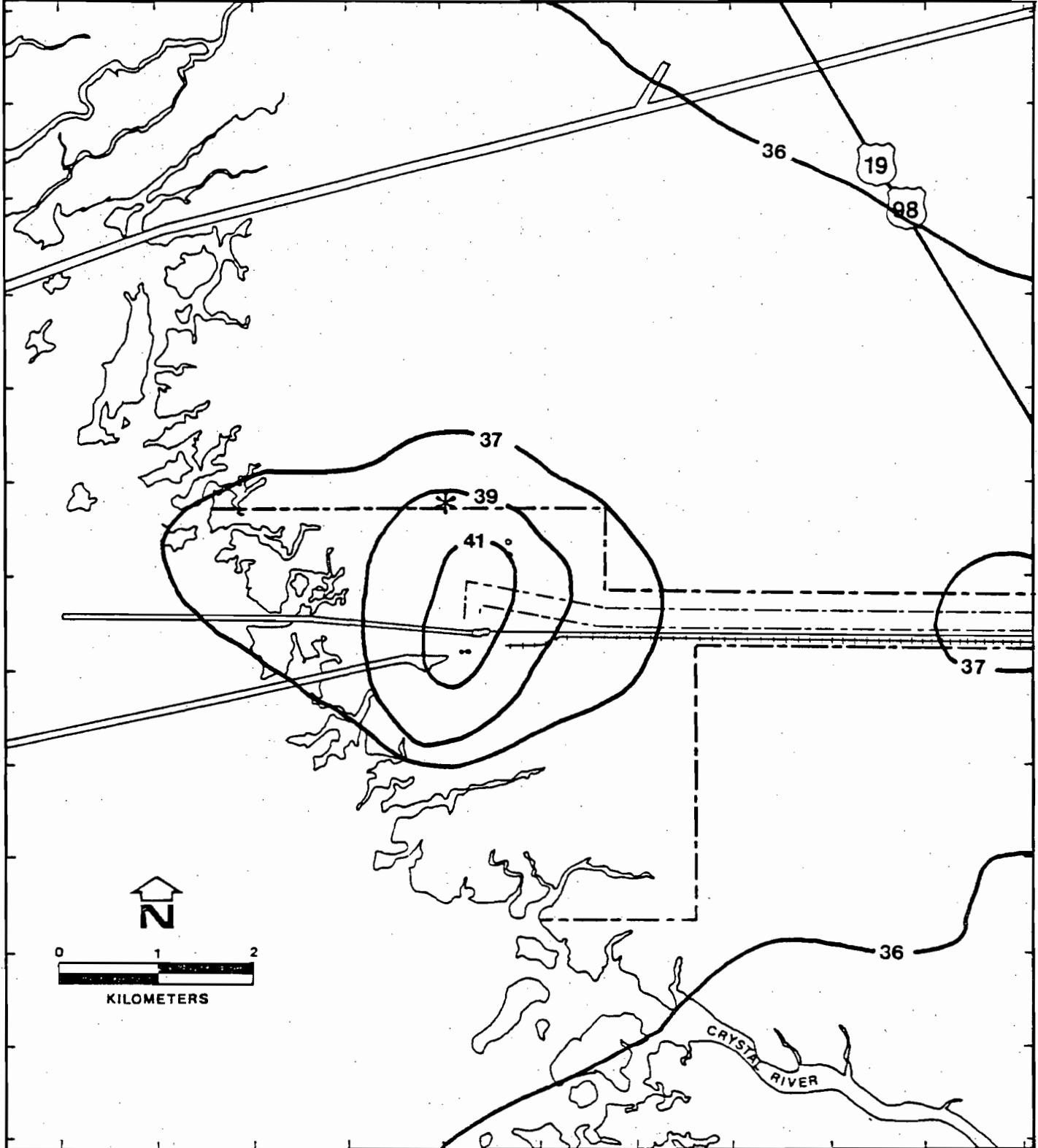
5.0 RESULTS

5.1 AMBIENT AIR QUALITY

Figure 5.1 presents annual average TSP isopleths reflective of all sources in the 1980's, including the proposed system. The maximum concentration beyond the plant boundaries is predicted to be 39 ug/m³, which is well below the 60 ug/m³ AAQS. A spatial distribution of all second-highest 24-hour TSP concentrations for the proposed facility only is portrayed in Figure 5.2. A maximum of 50 ug/m³ is located just outside and northwest of the plant boundaries. The 24-hour TSP AAQS is 150 ug/m³. These results, summarized in Table 5.1, include a background concentration of 35 ug/m³.

5.2 PSD RESULTS--CLASS II

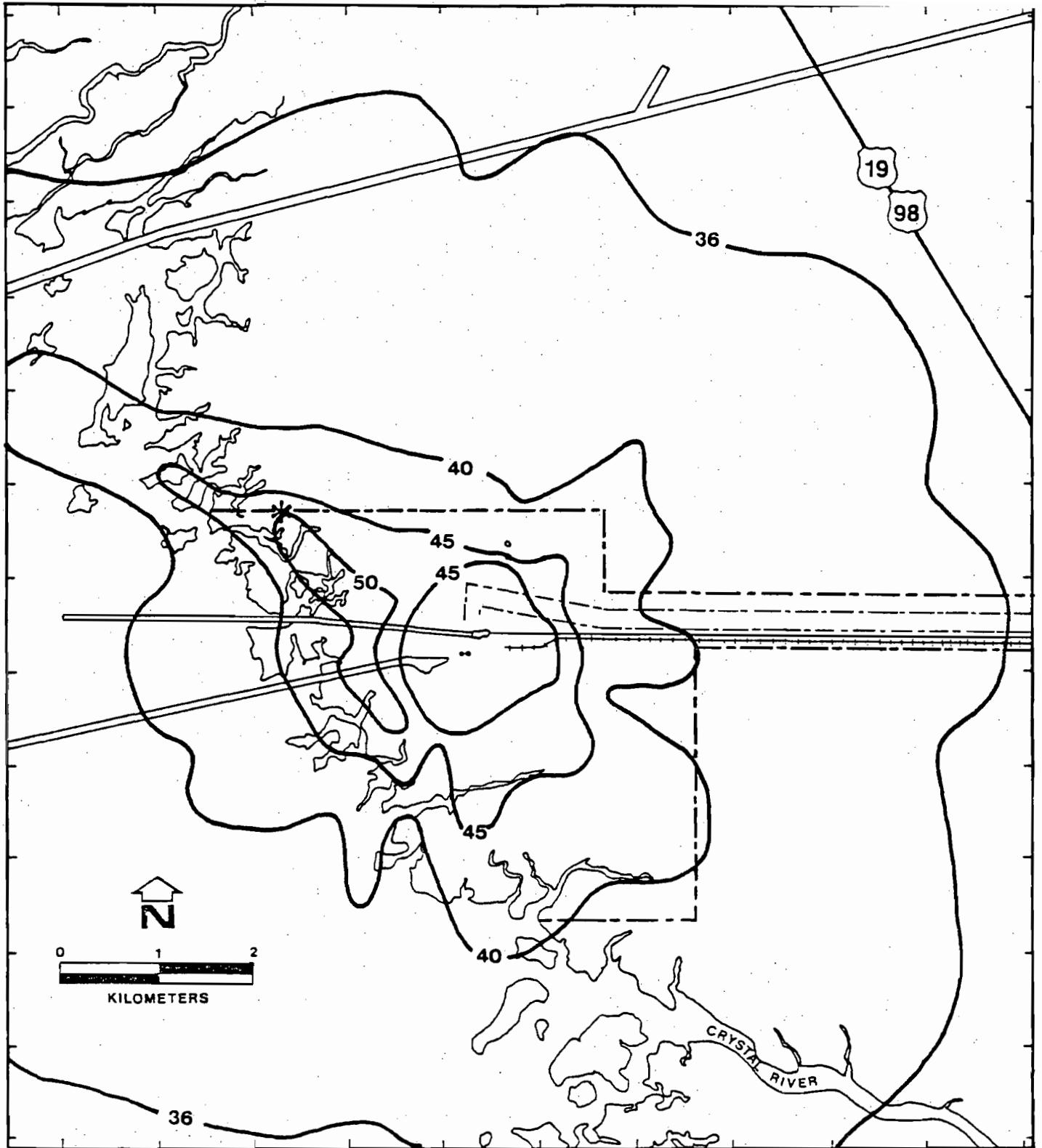
Figure 5.3 shows the annual average TSP air quality in the baseline year (1974). The maximum incremental increase between Figures 5.3 and Figures 5.1 (projected air quality) is at the point of maximum impact, or 4 ug/m³. The 24-hour TSP baseline air quality is shown in Figure 5.4. Since Units 4 and 5 are at a different location than Units 1 and 2, a CRSTER could not be run with all the proposed sources together. Therefore, isopleths of projected 24-hour air quality were not developed and a maximum increment could not be determined graphically (see Section 4.4). The maximum increment is located at the point of maximum impact of the proposed system and is equal to 14 ug/m³. This is less than one-half of the allowable PSD increment of 37 ug/m³.



* POINT OF MAXIMUM CONCENTRATION = $39 \mu\text{g}/\text{m}^3$

FIGURE 5.1 MAXIMUM PROJECTED ANNUAL AVERAGE TSP CONCENTRATIONS*
 $(\mu\text{g}/\text{m}^3)$ WITH UNITS 1-4 ON COAL AND PROPOSED
 SYSTEMS, 1980's.

* INCLUDES A $35 \mu\text{g}/\text{m}^3$ BACKGROUND CONCENTRATION.



* POINT OF MAXIMUM CONCENTRATION=50 $\mu\text{g}/\text{m}^3$

FIGURE 5.2 SPACIAL DISTRIBUTION OF 24-HOUR SECOND HIGHEST
TSP CONCENTRATIONS* ($\mu\text{g}/\text{m}^3$), INCREMENTAL IMPACT
OF PROPOSED SYSTEM ONLY.

*INCLUDES A 35 $\mu\text{g}/\text{m}^3$ BACKGROUND CONCENTRATION.

Table 5.1. Maximum TSP Ambient Air Quality Results* ($\mu\text{g}/\text{m}^3$).

	Annual	24-Hour
All Sources (1980's)	39	50
AAQS	60	150

* Includes a background concentration of 35 $\mu\text{g}/\text{m}^3$.

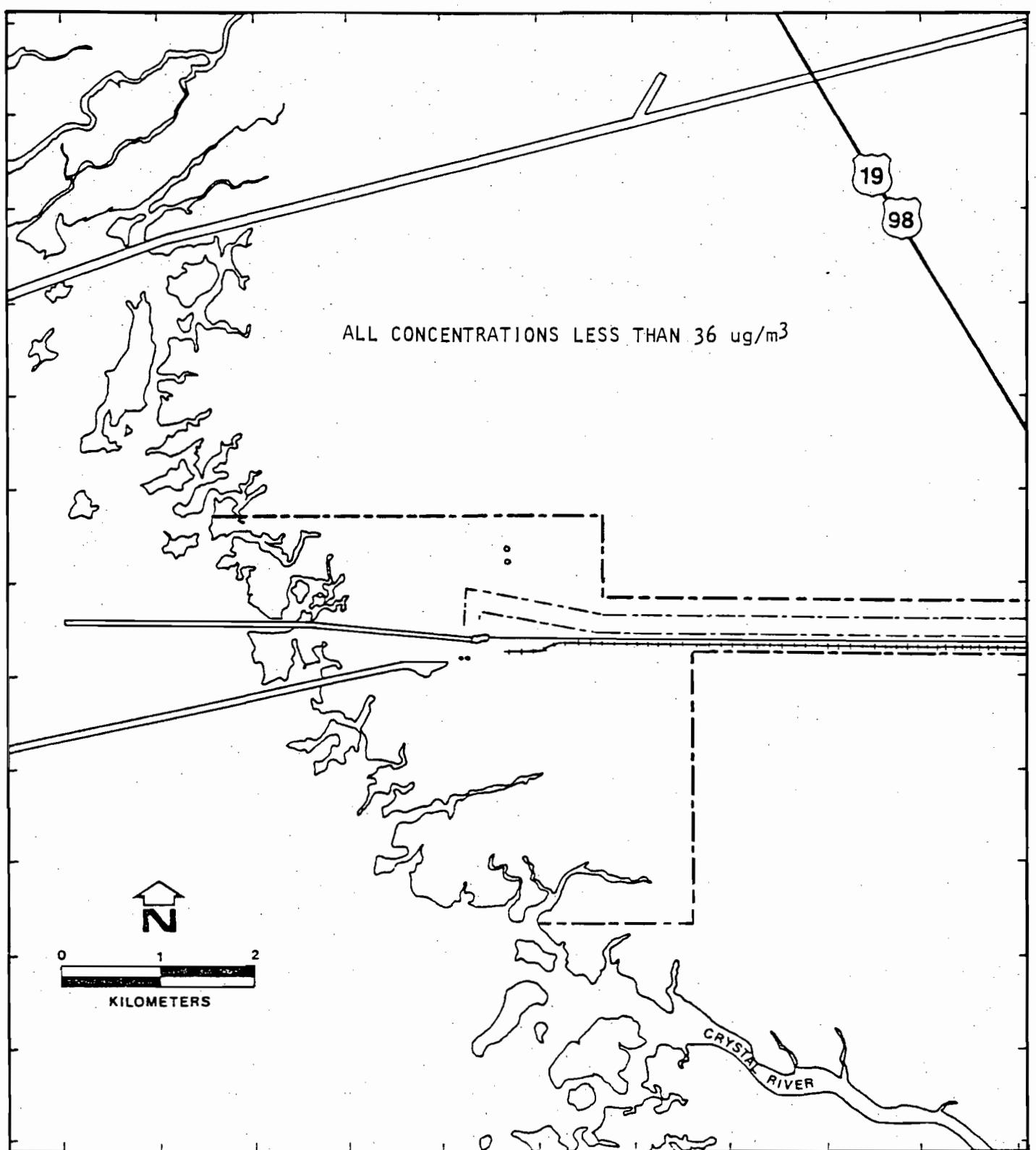


FIGURE 5.3 MAXIMUM ESTIMATED ANNUAL AVERAGE TSP CONCENTRATIONS*
(ug/m³), BASELINE CONDITIONS, 1974.
*INCLUDES A 35 ug/m³ BACKGROUND CONCENTRATION.

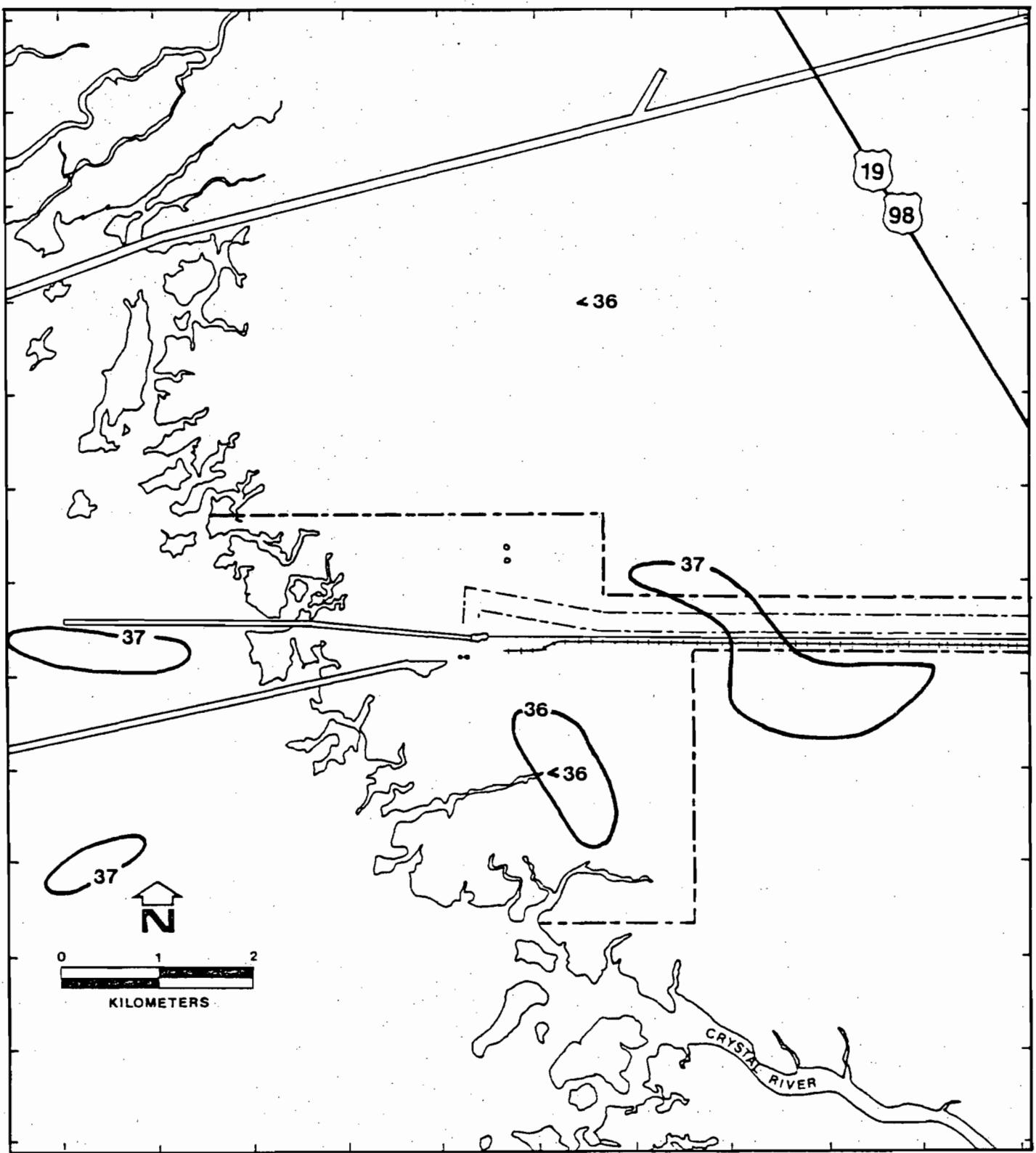


FIGURE 5.4 SPACIAL DISTRIBUTION OF SECOND HIGHEST 24-HOUR
TSP CONCENTRATIONS* ($\mu\text{g}/\text{m}^3$), BASELINE CONDITIONS,
1974.

* INCLUDES A $35 \mu\text{g}/\text{m}^3$ BACKGROUND CONCENTRATION.

5.3 PSD RESULTS - CLASS I

The maximum Class I increments were determined at the Chassahowitzka Wilderness Area, 20 kilometers south of the site. Maximum increments are much less than 1 ug/m³ for the annual average and are 2 ug/m³ for the 24-hour TSP increment. All PSD results are summarized in Table 5.2.

FPC-MISC.4
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FLY/DER/TB5.2

Table 5.2. PSD Results--Total Suspended Particulates

	Class I	Class II
Maximum Annual Average Increment	<<1	4
Allowable Annual-Average Increment	5	19
Maximum 24-Hour Increment	2	14
Allowable 24-Hour Increment	10	37

6.0 CONCLUSIONS

Based upon the atmospheric dispersion modeling analysis presented in this report, it is not expected that any allowable Class I or Class II PSD increment will be exceeded as a result of operation of the proposed fly ash system at the FPC Crystal River plant. In addition, National Ambient Air Quality Standards are not expected to be exceeded. These results are based upon the modeling of worst-case meteorological conditions, 100 percent load conditions, and maximum allowable emissions from all FPC Sources (including the proposed units), which have a very low probability of simultaneous occurrence.

The above conclusions are based upon atmospheric dispersion models which have not been calibrated or validated for the area of interest. It has been ESE's experience that these models tend to overcalculate concentrations for meteorological conditions for which the models are appropriate, i.e., Gaussian plume dispersion.

REFERENCES

Briggs, G.A. 1973. Diffusion Estimation for Small Emissions. Draft, National Oceanic and Atmospheric Administration, Oak Ridge, Tennessee.

Larsen, R.I. 1971. A Mathematical Model for Relating Air Quality Measurements to Air Quality Standards. Pub. No. AP-89. U.S. EPA, Office of Air Programs, Research Triangle Park, North Carolina.

McCormick, R.A. and Holzworth, G.C. 1976. Air Pollution Climatology. In: Air Pollution, 3rd Edition. Stern, A.C., Editor. I:692-695.

Strom, G.H. 1976. Transport and Diffusion of Stack Effluents. In: Air Pollution, Third Edition. Stern, A.C., Editor. I:480-486.

U.S. Environmental Protection Agency. 1977. Interim Guidelines on Air Quality Models. October, 1977. Office of Air Quality Planning and Standards, Research Triangle, North Carolina.

APPENDIX A

AQDM MODEL OUTPUT

PLANT NAME: EPC OR FLY ASH
INCREMENTAL IMPACT OF PROPOSED UNITS

POLLUTANTS FSP EMISSION UNITS: GM/SEC AIR QUALITY UNITS: GM/M**3

NET FILE REQUESTED
STN NO. YR **STN NO. YR**

SURFACE	12842	71	12842	71
UPPER AIR	12842	71	12842	71

PLANT LOCATIONS: RURAL

PLANT LOCATIONS: RURAL NSI 5.1 郊区 5.2 乡村

NO TAPE OUTPUT
ME1 DATA/DM

MET DATA WILL NOT BE PRINTED

DAY--

ALL TABLES, INCLUDING SOURCE CONTRIBUTION, THAT CONTAIN "ANNUAL" IN THE HEADING ARE BASED ONLY ON THOSE DAYS
MARKED BY "1" IN THE ABOVE TABLE

RING DISTANCES(KM)= 2.50 3.00 4.00 5.00 20.00

STACK # 1--FLY ASH TRANSFER SILO

STACK # 2--FLY ASH TRANSFER SILO

STACK # 3--FLY ASH STORAGE SILO

STACK	MUNTH	EMISSION RATE (GMS/SEC)	HEIGHT (METERS)	DIAMETER (METERS)	EXIT VELOCITY (M/SEC)	TEMP (DEG.K)	VOLUMETRIC FLOW (M**3/SEC)
1	ALL	0.0660	2.44	0.20	37.19	339.00	1.17
2	ALL	0.0060	10.70	0.59	0.46	339.00	0.13
3	ALL	0.1120	28.30	0.48	13.72	339.00	2.48

Best Available Copy

PLANT NAME: FPC CR FLY ASH

POLLUTANT: TSP EMISSION UNITS: GM/SEC AIR QUALITY UNITS: GM/M**3

YEARLY SECOND MAXIMUM 24-HOUR CONC= 8.0152E-06 DIRECTION= 18 DISTANCE= 2.5 KM DAY=129

YEARS= 71

SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTUR

RANK	2.5 KM	3.0 KM	4.0 KM	5.0 KM	20.0 KM
1	2.9174E-06 (28)	2.4068E-06 (28)	1.7568E-06 (28)	1.3609E-06 (28)	2.6122E-07 (28)
2	2.3696E-06 (228)	1.8079E-06 (228)	1.2200E-06 (24)	8.9381E-07 (24)	1.2306E-07 (24)
3	1.8551E-06 (197)	1.4930E-06 (197)	1.0620E-06 (197)	8.2092E-07 (112)	1.1348E-07 (112)
4	1.8921E-06 (116)	1.4539E-06 (116)	9.5671E-07 (116)	6.9474E-07 (116)	1.4168E-07 (254)
5	5.7100E-06 (82)	4.6287E-06 (82)	3.3025E-06 (82)	2.5217E-06 (82)	4.6529E-07 (82)
6	4.6063E-06 (119)	3.8089E-06 (119)	2.8192E-06 (23)	2.1507E-06 (23)	3.6109E-07 (23)
7	2.2327E-06 (31)	1.6986E-06 (31)	1.1106E-06 (31)	7.9688E-07 (31)	1.6959E-07 (196)
8	2.5499E-06 (167)	1.9625E-06 (167)	1.2937E-06 (167)	9.4355E-07 (167)	1.3342E-07 (167)
9	3.1536E-06 (91)	2.4950E-06 (91)	1.7242E-06 (73)	1.2980E-06 (73)	2.0945E-07 (166)
10	4.1790E-06 (195)	3.2975E-06 (195)	2.2733E-06 (195)	1.6998E-06 (195)	2.8156E-07 (195)
11	2.7539E-06 (324)	2.1969E-06 (324)	1.5356E-06 (324)	1.1532E-06 (324)	1.8626E-07 (324)
12	4.1457E-06 (123)	3.2750E-06 (123)	2.2663E-06 (123)	1.6987E-06 (141)	2.2997E-07 (141)
13	3.5779E-06 (107)	2.9748E-06 (107)	2.1805E-06 (107)	1.6900E-06 (107)	3.1220E-07 (107)
14	4.9055E-06 (194)	3.9102E-06 (194)	2.7019E-06 (194)	2.0027E-06 (194)	2.9441E-07 (70)
15	4.3721E-06 (70)	3.4907E-06 (70)	2.4321E-06 (70)	1.8326E-06 (70)	3.0817E-07 (70)
16	5.1664E-06 (18)	4.1681E-06 (18)	2.9268E-06 (18)	2.2174E-06 (259)	3.9107E-07 (259)
17	3.4617E-06 (13)	2.7954E-06 (13)	1.9615E-06 (13)	1.4773E-06 (13)	2.6231E-07 (98)
18	8.0152E-06 (129)	6.4876E-06 (129)	4.6043E-06 (129)	3.5079E-06 (129)	7.5885E-07 (171)
19	4.0962E-06 (191)	3.3575E-06 (191)	2.4187E-06 (191)	1.8548E-06 (191)	3.2767E-07 (191)
20	2.0433E-06 (342)	1.6508E-06 (342)	1.1741E-06 (342)	8.9323E-07 (342)	1.5605E-07 (342)
21	3.5314E-06 (329)	2.7688E-06 (329)	1.9006E-06 (329)	1.4234E-06 (329)	2.5483E-07 (329)
22	3.8497E-06 (311)	3.1132E-06 (311)	2.2280E-06 (311)	1.7170E-06 (311)	3.5960E-07 (311)
23	4.6443E-06 (270)	3.5602E-06 (270)	2.3313E-06 (270)	1.7626E-06 (47)	3.1155E-07 (47)
24	6.1507E-06 (359)	4.8437E-06 (2)	3.4042E-06 (2)	2.5660E-06 (2)	4.1505E-07 (2)
25	5.1439E-06 (290)	4.1450E-06 (290)	2.9535E-06 (290)	2.2701E-06 (290)	4.5722E-07 (290)
26	5.5342E-06 (161)	4.5989E-06 (161)	3.4217E-06 (161)	2.7075E-06 (161)	6.3338E-07 (161)
27	7.1719E-06 (265)	5.6694E-06 (265)	3.9098E-06 (265)	2.9239E-06 (265)	4.8185E-07 (265)
28	7.5093E-06 (235)	6.1879E-06 (235)	4.4486E-06 (306)	3.4071E-06 (306)	6.2745E-07 (306)
29	4.9777E-06 (258)	4.0702E-06 (258)	2.9126E-06 (11)	2.0985E-06 (11)	3.2472E-07 (279)
30	6.1869E-06 (185)	4.9911E-06 (185)	3.4982E-06 (348)	2.6063E-06 (348)	4.8189E-07 (185)
31	5.8873E-06 (345)	4.7280E-06 (345)	3.3387E-06 (345)	2.5286E-06 (345)	4.3859E-07 (345)
32	4.5031E-06 (361)	3.6443E-06 (361)	2.6033E-06 (361)	1.9901E-06 (361)	3.6746E-07 (361)
33	5.8073E-06 (5)	4.5476E-06 (5)	3.0738E-06 (5)	2.2574E-06 (5)	3.7709E-07 (193)
34	3.9912E-06 (88)	3.2328E-06 (88)	2.2913E-06 (88)	1.7333E-06 (88)	2.8123E-07 (88)
35	2.9987E-06 (61)	2.3554E-06 (61)	1.6113E-06 (61)	1.1995E-06 (61)	2.0697E-07 (254)
36	4.3407E-06 (237)	3.6095E-06 (237)	2.6520E-06 (237)	2.0223E-06 (25)	3.5370E-07 (25)

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PLANT NAME: FPC CR FLY ASH

POLLUTANT: TSP EMISSION UNITS: GM/SFC AIR QUALITY UNITS: GM/M**3

YEARLY SECOND MAXIMUM 24-HOUR CONCEN: 7.2652E-06 DIRECTION: 25 DISTANCE: 2.5 KM DAY=2/16

YEAR: 72

SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTOR

RANGE	2.5 KM	3.0 KM	4.0 KM	5.0 KM	20.0 KM
1	2.4007E-06 (9)	1.9487E-06 (9)	1.3978E-06 (9)	1.1210E-06 (210)	1.9917E-07 (10)
2	3.7035E-06 (105)	2.9325E-06 (105)	2.0296E-06 (105)	1.5162E-06 (105)	2.4430E-07 (105)
3	3.1649E-06 (56)	2.5748E-06 (56)	1.8552E-06 (56)	1.4244E-06 (56)	2.6594E-07 (56)
4	3.5694E-06 (33)	2.8419E-06 (33)	1.9614E-06 (33)	1.4581E-06 (33)	2.2125E-07 (4)
5	3.6385E-06 (221)	2.8654E-06 (221)	1.9805E-06 (106)	1.4946E-06 (106)	2.4966E-07 (106)
6	2.8069E-06 (239)	2.1845E-06 (239)	1.4560E-06 (239)	1.0686E-06 (37)	1.7673E-07 (37)
7	4.7258E-06 (180)	3.7041E-06 (180)	2.5239E-06 (180)	1.8629E-06 (180)	2.7381E-07 (180)
8	3.0269E-06 (181)	2.3519E-06 (181)	1.5796E-06 (181)	1.1611E-06 (181)	1.9053E-07 (180)
9	3.5981E-06 (144)	2.7981E-06 (144)	1.8853E-06 (144)	1.3913E-06 (144)	2.2018E-07 (144)
10	3.0310E-06 (84)	2.4422E-06 (84)	1.7342E-06 (84)	1.3273E-06 (84)	2.9565E-07 (84)
11	2.5821E-06 (144)	2.0098E-06 (84)	1.3972E-06 (84)	1.0454E-06 (84)	1.6640E-07 (84)
12	3.7786E-06 (5)	2.9773E-06 (5)	2.0290E-06 (5)	1.5027E-06 (5)	2.1916E-07 (5)
13	2.4653E-06 (63)	1.9952E-06 (63)	1.4249E-06 (63)	1.0890E-06 (63)	2.0014E-07 (63)
14	6.8125E-06 (184)	5.5188E-06 (184)	3.9243E-06 (184)	2.9973E-06 (184)	5.5334E-07 (184)
15	3.1687E-06 (93)	2.5878E-06 (93)	1.8666E-06 (93)	1.4352E-06 (93)	2.3666E-07 (51)
16	3.7506E-06 (78)	3.0130E-06 (78)	2.1008E-06 (78)	1.5736E-06 (78)	2.3390E-07 (78)
17	2.6154E-06 (300)	2.1280E-06 (300)	1.5252E-06 (300)	1.1658E-06 (300)	2.0660E-07 (300)
18	3.8132E-06 (281)	3.0605E-06 (281)	2.1373E-06 (320)	1.6221E-06 (313)	2.8887E-07 (281)
19	3.0796E-06 (25)	2.4875E-06 (25)	1.7477E-06 (25)	1.3163E-06 (25)	2.0183E-07 (25)
20	2.1080E-06 (263)	1.6941E-06 (263)	1.1978E-06 (263)	9.0793E-07 (263)	1.5685E-07 (263)
21	3.5758E-06 (53)	2.9262E-06 (55)	2.1532E-06 (55)	1.6727E-06 (55)	2.9277E-07 (53)
22	4.1676E-06 (279)	3.3499E-06 (279)	2.3717E-06 (279)	1.8010E-06 (279)	3.2087E-07 (279)
23	4.7822E-06 (59)	3.9109E-06 (59)	2.8150E-06 (59)	2.1590E-06 (59)	4.5270E-07 (289)
24	4.5789E-06 (339)	3.5852E-06 (339)	2.4183E-06 (339)	1.7783E-06 (339)	2.8156E-07 (147)
25	7.2652E-06 (246)	5.8805E-06 (219)	4.1909E-06 (219)	3.1897E-06 (219)	5.3519E-07 (219)
26	5.5885E-06 (59)	4.6002E-06 (59)	3.3268E-06 (59)	2.5158E-06 (264)	4.0459E-07 (257)
27	6.4845E-06 (57)	5.3717E-06 (57)	3.7609E-06 (306)	2.7928E-06 (306)	4.4447E-07 (306)
28	4.8284E-06 (242)	3.8234E-06 (242)	2.6220E-06 (242)	1.9492E-06 (242)	3.2100E-07 (231)
29	5.3231E-06 (260)	4.1894E-06 (260)	2.8160E-06 (260)	2.0916E-06 (260)	4.2993E-07 (290)
30	5.5789E-06 (262)	4.4490E-06 (262)	3.1154E-06 (262)	2.3818E-06 (214)	5.1850E-07 (61)
31	4.8097E-06 (15)	3.9425E-06 (15)	2.8379E-06 (15)	2.1793E-06 (15)	4.1555E-07 (284)
32	4.1673E-06 (335)	3.4213E-06 (333)	2.4688E-06 (333)	1.8959E-06 (333)	3.3643E-07 (333)
33	4.3124E-06 (158)	3.4315E-06 (158)	2.3868E-06 (158)	1.7846E-06 (158)	3.1644E-07 (22)
34	2.7714E-06 (13)	2.1734E-06 (13)	1.5354E-06 (136)	1.1722E-06 (136)	2.0697E-07 (136)
35	2.5201E-06 (159)	2.0325E-06 (159)	1.4463E-06 (159)	1.1026E-06 (159)	1.6801E-07 (186)
36	2.8274E-06 (30)	2.2299E-06 (30)	1.5343E-06 (30)	1.1473E-06 (30)	1.8885E-07 (30)

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PLANT NAME: FPC CR FLY ASH

POLLUTANT: TSP

EMISSION UNITS: GM/SEC

AIR QUALITY UNITS: GM/MAX3

YEARLY SECOND MAXIMUM 24-HOUR CONC= 1.4286E-05 DIRECTION= 31 DISTANCE= 2.5 KM DAY= 15

YEAR= 73

SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTOR

RANGE	2.5 KM	3.0 KM	4.0 KM	5.0 KM	20.0 KM
DIR					
1	2.0689E-06 (127)	1.9534E-06 (127)	1.3336E-06 (127)	9.9259E-07 (127)	1.5045E-07 (127)
2	2.0620E-06 (365)	2.0893E-06 (365)	1.3702E-06 (146)	9.7889E-07 (146)	1.2120E-07 (146)
3	2.1007E-06 (187)	1.6890E-06 (187)	1.1951E-06 (187)	9.0628E-07 (187)	1.5680E-07 (187)
4	2.6233E-06 (56)	2.0089E-06 (197)	1.4313E-06 (197)	1.0923E-06 (197)	2.0829E-07 (80)
5	4.3962E-06 (129)	3.4846E-06 (129)	2.4023E-06 (129)	1.7959E-06 (129)	2.8690E-07 (129)
6	3.1363E-06 (187)	2.5395E-06 (161)	1.8311E-06 (161)	1.4078E-06 (161)	2.6470E-07 (161)
7	4.3970E-06 (114)	3.5123E-06 (114)	2.4331E-06 (114)	1.8202E-06 (114)	2.7471E-07 (114)
8	1.7858E-06 (322)	1.4191E-06 (322)	9.7878E-07 (322)	7.2617E-07 (322)	1.0324E-07 (174)
9	3.2820E-06 (168)	2.6120E-06 (168)	1.8202E-06 (168)	1.3667E-06 (168)	2.2603E-07 (168)
10	2.8266E-06 (141)	2.1871E-06 (141)	1.4662E-06 (141)	1.0733E-06 (141)	1.7155E-07 (161)
11	2.6755E-06 (139)	2.1428E-06 (139)	1.5256E-06 (139)	1.1841E-06 (139)	1.7653E-07 (222)
12	2.4811E-06 (362)	4.3297E-06 (362)	2.9395E-06 (362)	2.1591E-06 (362)	4.5446E-07 (268)
13	6.0826E-06 (363)	4.6603E-06 (363)	3.0675E-06 (363)	2.2143E-06 (363)	3.6182E-07 (118)
14	5.1738E-06 (167)	4.1479E-06 (167)	2.9092E-06 (167)	2.1975E-06 (167)	3.7588E-07 (167)
15	6.2299E-06 (319)	5.1265E-06 (319)	3.7195E-06 (319)	2.8646E-06 (319)	5.1945E-07 (319)
16	2.6049E-06 (7)	1.9788E-06 (7)	1.3837E-06 (125)	1.0427E-06 (125)	1.7335E-07 (125)
17	3.6437E-06 (175)	2.9084E-06 (175)	2.0096E-06 (175)	1.4952E-06 (175)	2.4121E-07 (53)
18	5.1595E-06 (297)	2.4634E-06 (297)	1.6639E-06 (297)	1.2330E-06 (297)	1.9839E-07 (25)
19	5.4128E-06 (333)	2.6804E-06 (333)	1.8572E-06 (278)	1.4023E-06 (278)	2.4372E-07 (278)
20	5.2415E-06 (343)	2.5461E-06 (343)	1.7365E-06 (343)	1.2840E-06 (343)	1.8408E-07 (13)
21	3.5818E-06 (299)	2.8941E-06 (37)	2.1349E-06 (37)	1.6611E-06 (37)	3.1210E-07 (37)
22	4.2679E-06 (135)	3.5541E-06 (135)	2.6205E-06 (135)	2.04125E-06 (135)	3.9945E-07 (135)
23	2.8545E-06 (316)	2.2315E-06 (316)	1.5419E-06 (183)	1.1759E-06 (183)	2.0708E-07 (183)
24	5.2780E-06 (242)	4.1827E-06 (242)	2.9006E-06 (242)	2.1676E-06 (242)	3.6520E-07 (262)
25	4.8495E-06 (205)	3.8609E-06 (205)	2.6871E-06 (237)	2.0336E-06 (205)	3.5013E-07 (205)
26	6.0366E-06 (327)	4.7953E-06 (327)	3.3346E-06 (327)	2.5008E-06 (327)	4.1193E-07 (327)
27	4.5561E-06 (107)	3.5668E-06 (107)	2.4227E-06 (107)	1.7971E-06 (107)	3.0087E-07 (232)
28	5.6279E-06 (290)	4.5111E-06 (290)	3.1661E-06 (290)	2.3927E-06 (290)	4.0395E-07 (290)
29	6.1803E-06 (257)	4.9587E-06 (257)	3.4725E-06 (257)	2.6203E-06 (257)	4.3577E-07 (257)
30	4.9799E-06 (304)	3.9988E-06 (304)	2.8221E-06 (304)	2.1363E-06 (304)	3.6894E-07 (304)
31	4.4286E-05 (15)	1.1783E-05 (15)	8.5584E-06 (15)	6.6065E-06 (15)	1.2513E-06 (15)
32	4.6585E-06 (255)	3.7205E-06 (255)	2.6665E-06 (256)	2.0718E-06 (256)	4.0132E-07 (256)
33	5.5125E-06 (207)	2.8113E-06 (207)	1.9679E-06 (207)	1.4784E-06 (207)	2.7309E-07 (252)
34	4.3715E-06 (150)	3.4605E-06 (150)	2.4052E-06 (150)	1.8121E-06 (150)	3.1631E-07 (150)
35	4.1280E-06 (40)	3.2345E-06 (40)	2.2174E-06 (40)	1.6508E-06 (40)	2.7530E-07 (73)
36	3.9328E-06 (149)	3.1387E-06 (134)	2.3389E-06 (134)	1.8691E-06 (134)	3.7468E-07 (146)

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PLANT NAME: FPC CLK FLY ASH

POLLUTANT: TSP EMISSION UNITS: GM/SEC AIR QUALITY UNITS: GM/M³

YEARLY SECOND MAXIMUM 24-HOUR CONC = 7.0046E-06 DIRECTION = 25 DISTANCE = 2.5 KM DAY = 61

YEAR = 74

SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTOR

DIR	RANGE	2.5 KM		3.0 KM		4.0 KM		5.0 KM		20.0 KM	
		VAL	CT	VAL	CT	VAL	CT	VAL	CT	VAL	CT
1	3.4065E-06 (28)	2.6807E-06 (28)		1.8409E-06 (28)		1.3668E-06 (28)		2.1020E-07 (28)			
2	1.9501E-06 (78)	1.5492E-06 (78)		1.0794E-06 (78)		8.1046E-07 (78)		1.1173E-07 (28)			
3	2.3636E-06 (125)	1.9090E-06 (125)		1.3419E-06 (125)		1.0074E-06 (125)		1.6310E-07 (271)			
4	2.6219E-06 (30)	2.0575E-06 (30)		1.3935E-06 (30)		1.0290E-06 (30)		1.5988E-07 (43)			
5	1.9659E-06 (90)	1.5309E-06 (90)		1.0359E-06 (90)		7.6166E-07 (90)		1.1604E-07 (90)			
6	2.0604E-06 (87)	1.6109E-06 (87)		1.0993E-06 (87)		8.1433E-07 (87)		1.2788E-07 (87)			
7	4.4686E-06 (210)	3.6931E-06 (210)		2.6991E-06 (210)		2.0922E-06 (210)		4.0211E-07 (210)			
8	2.4728E-06 (231)	1.9495E-06 (231)		1.3439E-06 (231)		1.0068E-06 (231)		1.7068E-07 (231)			
9	4.6231E-06 (228)	3.7544E-06 (228)		2.6872E-06 (6)		2.0599E-06 (6)		3.6294E-07 (6)			
10	3.0593E-06 (271)	2.4555E-06 (271)		1.7311E-06 (271)		1.3095E-06 (271)		2.2299E-07 (271)			
11	3.1410E-06 (113)	2.5622E-06 (113)		1.8453E-06 (113)		1.4170E-06 (113)		2.6421E-07 (113)			
12	2.4710E-06 (242)	1.9958E-06 (242)		1.4240E-06 (242)		1.0876E-06 (242)		2.1088E-07 (351)			
13	3.0652E-06 (19)	2.5071E-06 (19)		1.8131E-06 (19)		1.3965E-06 (19)		2.2111E-07 (189)			
14	4.7077E-06 (190)	3.8703E-06 (190)		2.8101E-06 (190)		2.1687E-06 (190)		4.0868E-07 (190)			
15	5.1080E-06 (51)	4.1657E-06 (51)		2.9788E-06 (51)		2.2716E-06 (51)		3.8714E-07 (51)			
16	4.6925E-06 (363)	3.8560E-06 (363)		2.7807E-06 (363)		2.1360E-06 (363)		3.7714E-07 (363)			
17	4.2777E-06 (290)	3.4403E-06 (290)		2.3940E-06 (290)		1.7954E-06 (290)		2.9717E-07 (290)			
18	5.4081E-06 (325)	2.6990E-06 (325)		1.8641E-06 (325)		1.4073E-06 (169)		2.6413E-07 (169)			
19	3.1724E-06 (364)	2.5215E-06 (364)		1.7534E-06 (364)		1.3131E-06 (364)		2.1123E-07 (364)			
20	3.2241E-06 (204)	2.5942E-06 (204)		1.8141E-06 (204)		1.3623E-06 (204)		2.0632E-07 (204)			
21	6.1603E-06 (239)	5.0156E-06 (239)		3.5925E-06 (239)		2.7463E-06 (239)		4.8449E-07 (239)			
22	4.1604E-06 (116)	3.3032E-06 (116)		2.2910E-06 (116)		1.7288E-06 (212)		3.1466E-07 (212)			
23	5.3416E-06 (315)	4.3188E-06 (315)		3.0863E-06 (315)		2.3670E-06 (315)		4.5265E-07 (315)			
24	5.2295E-06 (352)	4.2582E-06 (301)		3.0347E-06 (301)		2.3150E-06 (352)		3.9416E-07 (352)			
25	7.0046E-06 (61)	5.6713E-06 (61)		4.0414E-06 (61)		3.0826E-06 (61)		5.3846E-07 (117)			
26	4.0839E-06 (306)	3.2414E-06 (306)		2.2584E-06 (306)		1.6980E-06 (306)		2.9082E-07 (306)			
27	6.1920E-06 (257)	5.0529E-06 (257)		3.6226E-06 (257)		2.7794E-06 (257)		5.0553E-07 (257)			
28	4.8088E-06 (167)	3.8355E-06 (139)		2.6476E-06 (139)		1.9846E-06 (139)		3.5539E-07 (309)			
29	6.0315E-06 (197)	4.9273E-06 (197)		3.5751E-06 (197)		2.7905E-06 (197)		5.7904E-07 (69)			
30	5.0689E-06 (245)	4.0948E-06 (245)		2.8965E-06 (245)		2.1991E-06 (245)		3.7832E-07 (245)			
31	3.3894E-06 (238)	2.7422E-06 (238)		1.9060E-06 (4)		1.3842E-06 (4)		2.6701E-07 (309)			
32	4.1859E-06 (123)	3.3170E-06 (359)		2.3254E-06 (359)		1.7556E-06 (359)		3.0919E-07 (359)			
33	5.7315E-06 (213)	3.0106E-06 (213)		2.1618E-06 (213)		1.6822E-06 (213)		3.8716E-07 (213)			
34	5.3308E-06 (359)	4.3911E-06 (113)		3.1746E-06 (359)		2.4507E-06 (359)		4.5998E-07 (359)			
35	3.5146E-06 (190)	2.8215E-06 (190)		1.9923E-06 (190)		1.5087E-06 (190)		2.6043E-07 (190)			
36	2.8642E-06 (47)	2.3122E-06 (47)		1.6402E-06 (47)		1.2453E-06 (47)		2.1437E-07 (47)			

Best Available Copy

PLANT NAME: FPC CR FLY ASH

POLLUTANT: TSP EMISSION UNITS: GM/SFC AIR QUALITY UNITS: GM/M**3

YEARLY SECOND MAXIMUM 24-HOUR CONC= 7.9204E-06 DIRECTION= 27 DISTANCE= 2.5 KM DAY=255

YEAR= 75

SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTOR

RANGE	DIR	2.5 KM	3.0 KM	4.0 KM	5.0 KM	20.0 KM
1		3.5485E-06 (110)	2.7844E-06 (110)	1.9055E-06 (110)	1.4345E-06 (133)	2.6977E-07 (133)
2		2.4200E-06 (133)	1.9616E-06 (133)	1.4049E-06 (133)	1.0756E-06 (133)	1.9228E-07 (81)
3		3.4437E-06 (76)	2.7485E-06 (76)	1.9171E-06 (76)	1.4434E-06 (76)	2.4166E-07 (76)
4		3.4140E-06 (66)	2.7394E-06 (66)	1.9371E-06 (66)	1.4698E-06 (66)	2.5993E-07 (66)
5		2.5265E-06 (191)	1.9751E-06 (187)	1.4110E-06 (66)	1.0795E-06 (66)	1.7001E-07 (190)
6		4.2872E-06 (351)	3.5706E-06 (351)	2.6309E-06 (351)	2.0492E-06 (351)	3.9932E-07 (351)
7		2.1737E-06 (91)	1.7140E-06 (91)	1.1805E-06 (91)	8.8104E-07 (91)	1.4416E-07 (192)
8		2.9119E-06 (118)	2.3103E-06 (118)	1.5941E-06 (118)	1.1831E-06 (118)	1.7424E-07 (118)
9		4.1787E-06 (180)	3.4036E-06 (180)	2.4355E-06 (180)	1.8380E-06 (6)	2.4531E-07 (6)
10.		2.3945E-06 (159)	1.8721E-06 (159)	1.2582E-06 (159)	9.2441E-07 (159)	1.2873E-07 (159)
11.		1.6826E-06 (95)	1.3526E-06 (96)	9.5676E-07 (95)	7.2612E-07 (67)	1.2541E-07 (95)
12.		4.5301E-06 (297)	3.6735E-06 (297)	2.6144E-06 (297)	1.9918E-06 (297)	3.5680E-07 (297)
13.		4.7684E-06 (73)	3.8407E-06 (73)	2.5594E-06 (335)	1.8709E-06 (311)	3.2846E-07 (311)
14.		4.9622E-06 (299)	3.9956E-06 (299)	2.8305E-06 (299)	2.1493E-06 (299)	3.7623E-07 (299)
15.		4.7960E-06 (165)	3.7683E-06 (165)	2.7329E-06 (207)	2.1147E-06 (207)	4.0529E-07 (207)
16.		5.4577E-06 (180)	4.3645E-06 (203)	3.1137E-06 (203)	2.3784E-06 (203)	4.3550E-07 (129)
17.		6.6605E-06 (356)	5.4587E-06 (18)	3.9810E-06 (18)	3.0785E-06 (18)	5.7527E-07 (18)
18.		5.3210E-06 (90)	4.2465F-06 (90)	2.9469E-06 (90)	2.2048E-06 (90)	3.4391E-07 (90)
19.		4.7824E-06 (297)	3.9101E-06 (354)	2.7637E-06 (354)	2.1188E-06 (354)	4.2743E-07 (297)
20.		3.2503E-06 (326)	2.6113E-06 (326)	1.8223E-06 (326)	1.3661E-06 (326)	2.0444E-07 (326)
21.		5.3751E-06 (248)	4.3911F-06 (248)	3.1557E-06 (248)	2.4219E-06 (248)	4.4142E-07 (248)
22.		3.4756E-06 (252)	2.7862E-06 (252)	1.9624F-06 (252)	1.5019E-06 (252)	3.5496E-07 (353)
23.		5.2690E-06 (17)	4.1429E-06 (17)	2.8330E-06 (17)	2.0947E-06 (17)	3.3639E-07 (302)
24.		6.7667E-06 (183)	5.3850F-06 (183)	3.7698F-06 (183)	2.8423E-06 (183)	4.8538E-07 (147)
25.		6.1706E-06 (213)	4.9365E-06 (213)	3.4720E-06 (213)	2.6230E-06 (213)	4.2469E-07 (238)
26.		5.0485F-06 (321)	4.0781E-06 (229)	2.8144E-06 (309)	2.1591E-06 (143)	3.6004E-07 (349)
27.		7.9204E-06 (255)	6.3820E-06 (255)	4.4935E-06 (255)	3.3896E-06 (255)	5.4473E-07 (255)
28.		6.9641F-06 (249)	5.5736E-06 (249)	3.9156E-06 (249)	2.9528E-06 (249)	4.9326E-07 (249)
29.		6.4577E-06 (157)	5.2293E-06 (157)	3.7164E-06 (157)	2.8341E-06 (157)	4.8841E-07 (311)
30.		3.2487E-06 (219)	3.1590E-06 (219)	2.2214E-06 (219)	1.6787E-06 (219)	2.9078E-07 (219)
31.		4.4816E-06 (75)	3.6745E-06 (161)	2.5934E-06 (161)	1.9676E-06 (161)	3.5316E-07 (161)
32.		7.7064E-06 (231)	6.3319E-06 (231)	4.5828E-06 (231)	3.5241E-06 (231)	6.3423E-07 (231)
33.		3.9019E-06 (4)	3.1002E-06 (4)	2.1583E-06 (4)	1.6255E-06 (4)	2.7781E-07 (4)
34.		4.4073E-06 (207)	3.4946E-06 (9)	2.4370E-06 (9)	1.8298E-06 (9)	3.0284E-07 (9)
35.		2.7020E-06 (203)	2.3022E-06 (203)	1.7055E-06 (126)	1.2900E-06 (126)	2.2174E-07 (126)
36.		2.1729E-06 (100)	1.6764F-06 (137)	1.1882E-06 (137)	9.0199E-07 (137)	1.6097E-07 (118)

RING DISTANCES (KM) = 0.20 0.50 1.00 1.50 2.00

STACK # 1--FLY ASH TRANSFER SILO
STACK # 2--FLY ASH TRANSFER SILO
STACK # 3--FLY ASH STORAGE SILO

STACK	MONTH	EMISSION RATE (GM/S/SEC)	HEIGHT (METERS)	DIAMETER (METERS)	EXIT VELOCITY (M/SEC)	TEMP (DEG.K)	VOLUMETRIC FLOW (MA^3/SEC)
1	ALL	0.6650	2.44	0.20	37.19	339.00	1.17
2	ALL	0.0060	10.70	0.59	0.46	339.00	0.13
3	ALL	0.1120	28.30	0.40	13.72	339.00	2.48

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PLANT NAME: FPC CR FLY ASH

POLLUTANT:

TSP

EMISSION UNITS: GM/SEC

AIR QUALITY UNITS: GM/M**3

YEARLY SECOND MAXIMUM 24-HOUR CONC= 1.0197E-04 DIRECTION= 30 DISTANCE= 0.2 KM DAY=353

YEAR= 71

SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTOR

RANGE	0.2 KM	0.5 KM	1.0 KM	1.5 KM	2.0 KM
1	6.893E-05 (72)	1.9149E-05 (31)	7.7630E-06 (56)	4.5597E-06 (28)	3.6220E-06 (28)
2	7.7396E-05 (228)	1.7860E-05 (61)	8.6668E-06 (228)	4.9679E-06 (228)	3.2838E-06 (228)
3	4.2659E-05 (69)	1.5186E-05 (75)	5.8241E-06 (355)	3.4030E-06 (197)	2.4174E-06 (197)
4	3.2016E-05 (180)	9.0351E-06 (112)	6.6108E-06 (119)	3.8880E-06 (116)	2.5989E-06 (116)
5	4.2258E-05 (111)	1.5168E-05 (251)	1.2721E-05 (82)	9.6133E-06 (82)	7.2743E-06 (82)
6	7.5775E-05 (114)	2.5531E-05 (119)	1.1636E-05 (118)	7.4442E-06 (23)	5.8246E-06 (119)
7	5.1465E-05 (118)	1.5323E-05 (117)	6.1747E-06 (111)	4.4440E-06 (111)	3.1084E-06 (31)
8	5.5806E-05 (174)	1.4039E-05 (174)	7.5168E-06 (254)	5.2541E-06 (167)	3.4978E-06 (167)
9	9.9111E-05 (167)	2.6750E-05 (167)	9.3688E-06 (167)	5.7619E-06 (91)	4.1484E-06 (91)
10	7.6738E-05 (165)	2.2204E-05 (195)	1.2000E-05 (351)	7.8812E-06 (195)	5.5431E-06 (195)
11	5.3275E-05 (40)	1.4524E-05 (226)	7.6598E-06 (141)	5.0171E-06 (141)	3.5829E-06 (324)
12	6.9770E-05 (40)	1.6461E-05 (50)	1.1214E-05 (141)	7.8581E-06 (141)	5.5200E-06 (123)
13	4.6673E-05 (40)	1.4512E-05 (165)	1.0756E-05 (18)	6.2884E-06 (18)	4.3873E-06 (107)
14	5.1397E-05 (136)	1.2244E-05 (136)	1.1141E-05 (194)	8.4825E-06 (194)	6.3538E-06 (194)
15	5.6280E-05 (121)	2.0132E-05 (299)	1.1760E-05 (299)	7.8148E-06 (70)	5.6914E-06 (70)
16	5.6727E-05 (9)	1.4974E-05 (76)	1.0989E-05 (133)	8.6331E-06 (18)	6.5935E-06 (18)
17	4.7784E-05 (19)	1.1356E-05 (19)	7.4313E-06 (13)	5.7746E-06 (13)	4.4138E-06 (13)
18	5.1826E-05 (71)	1.7564E-05 (129)	1.8268E-05 (129)	1.3578E-05 (129)	1.0232E-05 (129)
19	4.8709E-05 (338)	1.3981E-05 (276)	9.6134E-06 (20)	6.5008E-06 (191)	5.1232E-06 (191)
20	4.5831E-05 (308)	1.1788E-05 (338)	5.5271E-06 (76)	3.5810E-06 (76)	2.6136E-06 (342)
21	8.3260E-05 (7)	2.1156E-05 (7)	8.9038E-06 (9)	6.8187E-06 (17)	4.7438E-06 (329)
22	7.2330E-05 (292)	2.1887E-05 (358)	1.0116E-05 (272)	6.8966E-06 (311)	4.9968E-06 (311)
23	8.8278E-05 (320)	2.6377E-05 (163)	1.4754E-05 (306)	9.5960E-06 (270)	6.3913E-06 (270)
24	7.8122E-05 (293)	3.1053E-05 (319)	1.7995E-05 (21)	1.2087E-05 (359)	8.2910E-06 (359)
25	6.5358E-05 (93)	2.0166E-05 (360)	1.2699E-05 (221)	9.1827E-06 (290)	6.6585E-06 (290)
26	9.6347E-05 (33)	2.2569E-05 (304)	1.1622E-05 (48)	8.8702E-06 (161)	6.8756E-06 (161)
27	8.2315E-05 (13)	3.0060E-05 (54)	2.0342E-05 (265)	1.3369E-05 (265)	9.4769E-06 (265)
28	5.7026E-05 (90)	2.4010E-05 (305)	1.3537E-05 (235)	1.1667E-05 (235)	9.3213E-06 (235)
29	6.1776E-05 (134)	1.9903E-05 (305)	1.1965E-05 (231)	8.0478E-06 (258)	6.2580E-06 (258)
30	1.0197E-04 (353)	3.1102E-05 (11)	1.6501E-05 (11)	1.0705E-05 (185)	7.9475E-06 (185)
31	5.5441E-05 (209)	1.7514E-05 (348)	1.4003E-05 (345)	1.0266E-05 (345)	7.5966E-06 (345)
32	4.4692E-05 (332)	1.3496E-05 (35)	1.1200E-05 (297)	7.7027E-06 (297)	5.7591E-06 (361)
33	7.8741E-05 (38)	2.5852E-05 (5)	1.6654E-05 (5)	1.0652E-05 (203)	7.6978E-06 (203)
34	4.5332E-05 (5)	2.2235E-05 (120)	8.8552E-06 (332)	6.5937E-06 (88)	5.0694E-06 (88)
35	4.4171E-05 (59)	1.8780E-05 (60)	9.0330E-06 (61)	5.7407E-06 (61)	3.9992E-06 (61)
36	7.2351E-05 (227)	1.9545E-05 (8)	1.0938E-05 (8)	6.8278E-06 (8)	5.3493E-06 (237)

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PLANT NAME: FPC CR FLY ASH

POLLUTANT: TSP EMISSION UNITS: GM/SEC AIR QUALITY UNITS: GM/M**3

YEARLY SECOND MAXIMUM 24-HOUR CONC= 1.6929E-04 DIRECTION= 9 DISTANCE= 0.2 KM DAY=174

YEAR= 72

RANGE DIR	SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTOR				
	0.2 KM	0.5 KM	1.0 KM	1.5 KM	2.0 KM
1	5.8031E-05 (330)	1.4105E-05 (357)	6.2292E-06 (357)	4.0433E-06 (9)	3.0551E-06 (9)
2	8.1030E-05 (71)	2.1726E-05 (89)	1.0043E-05 (105)	6.8085E-06 (105)	4.8746E-06 (105)
3	8.2095E-05 (89)	2.4466E-05 (243)	9.5567E-06 (243)	5.2791E-06 (243)	4.0056E-06 (56)
4	3.8786E-05 (104)	1.2922E-05 (243)	9.1204E-06 (274)	6.2892E-06 (3)	4.6448E-06 (3)
5	4.40568E-05 (98)	1.3833E-05 (98)	9.1684E-06 (181)	6.8030E-06 (221)	4.8188E-06 (221)
6	4.0232E-05 (107)	1.3564E-05 (239)	7.5441E-06 (334)	5.3942E-06 (239)	3.7715E-06 (239)
7	6.45591E-05 (177)	1.7905E-05 (180)	9.7441E-06 (58)	7.8431E-06 (58)	6.1129E-06 (58)
8	7.7151E-05 (153)	2.6280E-05 (180)	9.9537E-06 (181)	6.0195E-06 (181)	4.0995E-06 (181)
9	1.6929E-04 (174)	3.7910E-05 (174)	1.1754E-05 (174)	6.8622E-06 (67)	4.8662E-06 (144)
10	7.22968E-05 (174)	1.7417E-05 (182)	8.0657E-06 (242)	5.2280E-06 (84)	3.8999E-06 (84)
11	6.3926E-05 (185)	1.5451E-05 (77)	8.3705E-06 (141)	5.2074E-06 (144)	3.5365E-06 (144)
12	4.8241E-05 (77)	1.7142E-05 (138)	1.0024E-05 (25)	7.0281E-06 (5)	5.0009E-06 (5)
13	5.6249E-05 (44)	1.7413E-05 (91)	6.9120E-06 (281)	4.2833E-06 (142)	3.1510E-06 (63)
14	7.8454E-05 (200)	2.1846E-05 (325)	1.6708E-05 (184)	1.1720E-05 (184)	8.7268E-06 (184)
15	8.4293E-05 (6)	2.4492E-05 (50)	9.3973E-06 (6)	5.2309E-06 (6)	3.9960E-06 (93)
16	5.8726E-05 (148)	1.5259E-05 (148)	8.3206E-06 (78)	6.3670E-06 (78)	4.8143E-06 (78)
17	7.7638E-05 (6)	1.8110E-05 (328)	6.5976E-06 (327)	4.3071E-06 (300)	3.3094E-06 (300)
18	8.9519E-05 (328)	2.5359E-05 (326)	1.0542E-05 (328)	6.7089E-06 (281)	4.9296E-06 (281)
19	5.0393E-05 (16)	2.1749E-05 (236)	8.9106E-06 (236)	5.1248E-06 (25)	3.9239E-06 (25)
20	3.4729E-05 (31)	1.1482E-05 (300)	5.7811E-06 (327)	3.7743E-06 (327)	2.7181E-06 (263)
21	5.4306E-05 (92)	1.3846E-05 (193)	8.2075E-06 (53)	6.0967E-06 (53)	4.5688E-06 (53)
22	8.3612E-05 (353)	2.1418E-05 (278)	9.1073E-06 (278)	7.2901E-06 (279)	5.3775E-06 (279)
23	1.0913E-04 (353)	3.2198E-05 (117)	1.2886E-05 (117)	8.4497E-06 (267)	6.1433E-06 (267)
24	8.1132E-05 (100)	2.2659E-05 (311)	1.2129E-05 (311)	8.4877E-06 (305)	6.1107E-06 (339)
25	8.4702E-05 (42)	2.8686E-05 (246)	1.5101E-05 (242)	1.2236E-05 (242)	9.4926E-06 (242)
26	7.4048E-05 (127)	2.1936E-05 (277)	1.3892E-05 (264)	9.8524E-06 (257)	7.0853E-06 (257)
27	1.1432E-04 (306)	3.2206E-05 (167)	1.5270E-05 (283)	1.0803E-05 (283)	7.9764E-06 (57)
28	1.2631E-04 (121)	3.1130E-05 (121)	1.1735E-05 (309)	8.7941E-06 (242)	6.3447E-06 (242)
29	7.3734E-05 (47)	1.8777E-05 (260)	1.4173E-05 (260)	9.7655E-06 (260)	7.0352E-06 (260)
30	5.8071E-05 (120)	1.8629E-05 (365)	1.3787E-05 (214)	9.5729E-06 (61)	7.2752E-06 (262)
31	5.0201E-05 (134)	1.8500E-05 (213)	1.0729E-05 (194)	7.6780E-06 (15)	6.0208E-06 (15)
32	6.0010E-05 (318)	1.7684E-05 (1)	8.6309E-06 (1)	6.5790E-06 (333)	5.2011E-06 (333)
33	9.9522E-05 (301)	3.2076E-05 (12)	1.3479E-05 (12)	7.8752E-06 (12)	5.6247E-06 (158)
34	5.2483E-05 (236)	1.7797E-05 (237)	8.4333E-06 (13)	5.3314E-06 (13)	3.7036E-06 (13)
35	4.3997E-05 (302)	1.0615E-05 (324)	6.9662E-06 (13)	4.3657E-06 (274)	3.2376E-06 (159)
36	6.4196E-05 (357)	1.5321E-05 (357)	8.2068E-06 (30)	5.3231E-06 (30)	3.7489E-06 (30)

Best Available Copy

PLATE NAME: EPC CR FLY ASH

PROFILANT: TSP EMISSION UNITS: GM/SEC AIR QUALITY UNITS: GM/MAX3

YEARLY SECOND MAXIMUM 24-HOUR CONC = 1.057E-04 DIRECTION = 20 DISTANCE = 0.2 KM DAY = 24

YEAR = 73

DIR	SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTOR					
	RANGE	0.2 KM	0.5 KM	1.0 KM	1.5 KM	2.0 KM
1	5.634E-05 (146)	1.7839E-05 (45)	7.7049E-06 (45)	4.5428E-06 (127)	3.2518E-06 (127)	
2	7.4325E-05 (148)	1.7298E-05 (146)	7.9337E-06 (365)	5.0790E-06 (365)	3.5508E-06 (365)	
3	4.9049E-05 (214)	1.4406E-05 (210)	5.4255E-06 (145)	3.6547E-06 (187)	2.7068E-06 (187)	
4	6.2065E-05 (145)	1.9192E-05 (145)	7.2415E-06 (73)	5.5005E-06 (73)	3.6664E-06 (56)	
5	3.7266E-05 (172)	1.2513E-05 (301)	8.6420E-06 (307)	7.3192E-06 (307)	5.7765E-06 (129)	
6	5.7220E-05 (209)	1.5727E-05 (209)	9.0057E-06 (209)	5.8476E-06 (209)	4.1380E-06 (209)	
7	5.5748E-05 (140)	1.4826E-05 (140)	1.0897E-05 (175)	7.7223E-06 (114)	5.7027E-06 (114)	
8	4.2734E-05 (134)	1.2626E-05 (27)	6.0462E-06 (301)	3.5394E-06 (301)	2.3712E-06 (301)	
9	6.6898E-05 (27)	2.4436E-05 (27)	9.0794E-06 (27)	5.9383E-06 (168)	4.2946E-06 (168)	
10	6.9280E-05 (169)	2.2025E-05 (168)	1.0026E-05 (169)	5.6883E-06 (141)	3.8481E-06 (141)	
11	7.4840E-05 (169)	1.7560E-05 (85)	8.5767E-06 (139)	5.1297E-06 (139)	3.5375E-06 (139)	
12	6.8228E-05 (174)	2.0273E-05 (174)	1.1940E-05 (254)	9.2462E-06 (268)	7.2003E-06 (362)	
13	6.9377E-05 (41)	2.2504E-05 (162)	1.3565E-05 (78)	1.1849E-05 (78)	8.3806E-06 (363)	
14	7.3581E-05 (58)	2.0264E-05 (351)	1.2553E-05 (167)	9.0616E-06 (167)	6.6902E-06 (167)	
15	5.5011E-05 (350)	1.6583E-05 (350)	1.1467E-05 (319)	9.7490E-06 (319)	7.7500E-06 (319)	
16	5.9413E-05 (5)	1.8894E-05 (305)	8.2668E-06 (263)	5.4515E-06 (263)	3.6306E-06 (7)	
17	7.9059E-05 (12)	1.8941E-05 (5)	9.3806E-06 (53)	6.3091E-06 (175)	4.7162E-06 (175)	
18	4.7979E-05 (42)	1.5381E-05 (51)	9.9183E-06 (334)	6.2578E-06 (297)	4.2666E-06 (297)	
19	6.6880E-05 (136)	1.5774E-05 (11)	8.8326E-06 (278)	6.1379E-06 (326)	4.4795E-06 (326)	
20	1.0571E-04 (24)	2.9180E-05 (24)	9.5845E-06 (24)	6.1588E-06 (343)	4.3249E-06 (343)	
21	9.2305E-05 (9)	2.4695E-05 (10)	1.1492E-05 (50)	6.4399E-06 (221)	4.6320E-06 (221)	
22	7.7389E-05 (9)	1.8640E-05 (9)	1.1346E-05 (277)	7.1358E-06 (277)	5.2237E-06 (135)	
23	7.0191E-05 (315)	2.0029E-05 (315)	8.6650E-06 (316)	5.5039E-06 (316)	3.8235E-06 (316)	
24	9.0066E-05 (158)	2.5276E-05 (276)	1.4200E-05 (230)	9.6669E-06 (242)	6.9342E-06 (242)	
25	8.2938E-05 (49)	2.2938E-05 (327)	1.2988E-05 (205)	8.8129E-06 (205)	6.3465E-06 (205)	
26	7.4413E-05 (49)	2.2710E-05 (150)	1.6070E-05 (327)	1.0990E-05 (327)	7.9137E-06 (327)	
27	7.7354E-05 (106)	2.3308E-05 (229)	1.3085E-05 (263)	8.8374E-06 (107)	6.1064E-06 (107)	
28	7.5366E-05 (155)	2.0679E-05 (155)	1.3825E-05 (290)	9.8995E-06 (290)	7.2824E-06 (290)	
29	8.7901E-05 (358)	2.2006E-05 (109)	1.4483E-05 (39)	1.0749E-05 (257)	7.9759E-06 (257)	
30	9.3687E-05 (32)	2.1234E-05 (32)	1.2821E-05 (222)	8.6730E-06 (304)	6.4237E-06 (304)	
31	8.8932E-05 (359)	2.0828E-05 (88)	2.6148E-05 (15)	2.2168E-05 (15)	1.7720E-05 (15)	
32	9.9254E-05 (40)	2.2400E-05 (90)	1.1442E-05 (255)	8.2312E-06 (255)	6.0489E-06 (255)	
33	5.6378E-05 (328)	1.4259E-05 (195)	8.2914E-06 (207)	6.1226E-06 (207)	4.5437E-06 (207)	
34	6.8524E-05 (213)	2.3527E-05 (150)	1.2831E-05 (209)	8.2316E-06 (150)	5.7890E-06 (150)	
35	7.8880E-05 (40)	1.8880E-05 (349)	1.2319E-05 (257)	7.9936E-06 (40)	5.5328E-06 (40)	
36	6.8088E-05 (349)	1.8692E-05 (349)	1.1585E-05 (149)	7.5152E-06 (149)	5.2562E-06 (149)	

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PLANT NAME: FPC CR FLY ASH

POLLUTANT: TSP EMISSION UNITS: GM/SEC AIR QUALITY UNITS: GM/M**3

YEARLY SECOND MAXIMUM 24-HOUR CONC: 9.9263E-05 DIRECTION: 22 DISTANCE: 0.2 KM DAY:274

YEAR: 74

DTR	SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTOR				
	RANGE	0.2 KM	0.5 KM	1.0 KM	1.5 KM
1	5.7302E-05 (175)	1.9480E-05 (360)	9.7848E-06 (28)	6.4119E-06 (28)	4.5235E-06 (28)
2	5.4948E-05 (83)	1.4568E-05 (360)	5.5970E-06 (360)	3.5658E-06 (78)	2.5585E-06 (78)
3	6.3166E-05 (80)	1.5079E-05 (83)	6.1199E-06 (271)	4.1962E-06 (271)	3.0307E-06 (271)
4	4.8712E-05 (31)	1.5351E-05 (31)	7.5157E-06 (30)	4.9603E-06 (30)	3.4893E-06 (30)
5	3.3769E-05 (31)	1.2074E-05 (88)	6.0217E-06 (31)	3.5574E-06 (31)	2.6475E-06 (90)
6	6.3348E-05 (270)	1.5553E-05 (88)	6.4607E-06 (87)	4.0100E-06 (87)	2.7668E-06 (87)
7	5.5896E-05 (147)	1.2960E-05 (34)	8.0851E-06 (210)	6.9172E-06 (210)	5.5325E-06 (210)
8	5.0912E-05 (202)	1.4681E-05 (147)	7.3588E-06 (231)	4.6981E-06 (231)	3.2841E-06 (231)
9	8.3652E-05 (192)	2.2618E-05 (192)	1.0023E-05 (192)	7.6758E-06 (228)	5.8681E-06 (228)
10	6.2345E-05 (192)	1.9228E-05 (230)	8.5487E-06 (192)	5.3511E-06 (271)	3.9532E-06 (271)
11	4.9340E-05 (335)	1.2158E-05 (335)	6.4670E-06 (113)	5.1409E-06 (113)	3.9637E-06 (113)
12	5.2042E-05 (351)	1.6884E-05 (203)	6.6152E-06 (351)	4.2578E-06 (242)	3.1683E-06 (242)
13	5.6872E-05 (335)	1.3986E-05 (72)	6.7710E-06 (72)	4.9852E-06 (19)	3.8559E-06 (19)
14	7.3039E-05 (56)	1.7425E-05 (107)	1.1422E-05 (107)	7.9553E-06 (107)	5.8743E-06 (190)
15	6.1474E-05 (56)	1.6276E-05 (56)	1.0206E-05 (51)	8.2562E-06 (51)	6.4322E-06 (51)
16	5.7036E-05 (56)	1.5181E-05 (151)	9.4521E-06 (362)	7.3757E-06 (363)	5.8474E-06 (363)
17	7.1999E-05 (280)	2.1422E-05 (6)	1.1084E-05 (350)	6.9221E-06 (291)	5.3899E-06 (291)
18	7.7865E-05 (347)	2.0216E-05 (347)	9.3042E-06 (325)	6.2753E-06 (325)	4.4859E-06 (325)
19	6.1697E-05 (57)	1.5059E-05 (331)	8.3108E-06 (364)	5.7423E-06 (364)	4.1527E-06 (364)
20	7.2297E-05 (57)	1.8449E-05 (18)	8.7240E-06 (18)	5.4529E-06 (204)	4.1313E-06 (204)
21	8.7085E-05 (274)	2.2047E-05 (347)	1.2827E-05 (239)	1.0113E-05 (239)	7.7878E-06 (239)
22	9.9263E-05 (274)	2.5701E-05 (313)	1.1744E-05 (312)	7.3527E-06 (313)	5.3487E-06 (237)
23	8.1578E-05 (267)	1.9208E-05 (293)	1.3196E-05 (315)	9.3221E-06 (315)	6.8701E-06 (315)
24	9.0632E-05 (73)	2.7795E-05 (268)	1.2815E-05 (254)	8.9013E-06 (285)	6.5987E-06 (352)
25	7.7771E-05 (285)	2.3622E-05 (287)	1.5684E-05 (61)	1.1845E-05 (61)	8.9363E-06 (61)
26	6.1836E-05 (182)	1.9101E-05 (233)	1.1454E-05 (305)	7.5285E-06 (306)	5.3695E-06 (306)
27	6.0846E-05 (140)	2.3058E-05 (198)	1.4368E-05 (198)	1.0145E-05 (257)	7.8125E-06 (257)
28	8.3741E-05 (36)	2.3765E-05 (235)	1.3291E-05 (2)	8.2834E-06 (2)	5.9649E-06 (167)
29	8.1192E-05 (140)	2.3547E-05 (357)	1.3260E-05 (197)	1.0008E-05 (197)	7.6409E-06 (197)
30	5.0018E-05 (102)	1.9935E-05 (358)	1.1630E-05 (245)	8.6136E-06 (245)	6.4857E-06 (245)
31	7.2477E-05 (134)	2.1501E-05 (4)	8.3831E-06 (136)	5.7813E-06 (238)	4.3356E-06 (238)
32	6.2209E-05 (1)	1.7826E-05 (4)	9.7024E-06 (359)	7.6925E-06 (169)	5.5585E-06 (123)
33	5.7208E-05 (30)	1.9698E-05 (177)	1.1243E-05 (213)	6.8861E-06 (213)	4.8657E-06 (213)
34	6.0176E-05 (38)	1.9050E-05 (84)	1.1168E-05 (213)	8.4959E-06 (359)	6.6605E-06 (359)
35	6.6719E-05 (208)	1.9320E-05 (355)	1.0183E-05 (21)	6.5723E-06 (21)	4.6063E-06 (21)
36	7.7426E-05 (175)	1.7830E-05 (209)	7.4909E-06 (341)	4.8779E-06 (47)	3.6683E-06 (47)

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PLANT NAME: FPC CR LITY ASR

POLLUTANT: TSP EMISSION UNITS: GM/SEC AIR QUALITY UNITS: GM/MAX3

YEARLY SPREADING FACTOR: 24-HOUR DUR= 1.1370E-04 DIRECTION= 17 DISTANCE= 0.2 KM DAY=269

YEARS= 75

DTR RANGE	SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEIVER				
	0.2 KM	0.5 KM	1.0 KM	1.5 KM	2.0 KM
1	5.7436E-05 (19)	2.0507E-05 (110)	1.0711E-05 (110)	6.7846E-06 (110)	4.7395E-06 (110)
2	7.7937E-05 (8)	2.1730E-05 (81)	8.5863E-06 (84)	4.9286E-06 (84)	3.2640E-06 (84)
3	6.2185E-05 (35)	1.5771E-05 (150)	9.4728E-06 (150)	6.1521E-06 (76)	4.4826E-06 (76)
4	4.3381E-05 (43)	1.8003E-05 (43)	9.7297E-06 (187)	6.0259E-06 (66)	4.4169E-06 (66)
5	5.2670E-05 (37)	1.5336E-05 (191)	8.4538E-06 (191)	5.0950E-06 (191)	3.4421E-06 (191)
6	4.7986E-05 (89)	2.1911E-05 (92)	1.1352E-05 (190)	6.7907E-06 (190)	5.2440E-06 (351)
7	5.1000E-05 (190)	1.5062E-05 (192)	6.5856E-06 (188)	4.0810E-06 (91)	2.8797E-06 (91)
8	4.9682E-05 (90)	1.9668E-05 (76)	8.4640E-06 (90)	5.3148E-06 (91)	3.8202E-06 (91)
9	5.6600E-05 (158)	1.7513E-05 (158)	9.3154E-06 (189)	6.8064E-06 (180)	5.2758E-06 (180)
10	4.8086E-05 (44)	1.1628E-05 (135)	7.1783E-06 (159)	4.5874E-06 (159)	3.2052E-06 (159)
11	4.6748E-05 (223)	1.3425E-05 (130)	4.9693E-06 (360)	2.9283E-06 (95)	2.1686E-06 (95)
12	5.5156E-05 (138)	2.0790E-05 (230)	1.0574E-05 (297)	7.8070E-06 (297)	5.8325E-06 (297)
13	6.8640E-05 (256)	2.7094E-05 (139)	1.4491E-05 (139)	9.0011E-06 (139)	6.1936E-06 (139)
14	5.0009E-05 (48)	1.7081E-05 (55)	1.1953E-05 (139)	8.5563E-06 (299)	6.3786E-06 (299)
15	6.0133E-05 (102)	1.7471E-05 (56)	1.4365E-05 (165)	9.1741E-06 (165)	6.4053E-06 (165)
16	5.4857E-05 (352)	1.3694E-05 (13)	1.2338E-05 (129)	9.7214E-06 (180)	7.1252E-06 (180)
17	1.1370E-04 (269)	2.9996E-05 (269)	1.1903E-05 (18)	1.0485E-05 (356)	8.3680E-06 (356)
18	8.3470E-05 (270)	2.6492E-05 (269)	1.2842E-05 (90)	9.3741E-06 (90)	6.9165E-06 (90)
19	4.6526E-05 (269)	1.3453E-05 (96)	8.7404E-06 (297)	7.3957E-06 (297)	5.9159E-06 (297)
20	7.4287E-05 (64)	1.9018E-05 (356)	8.5821E-06 (356)	5.5168E-06 (326)	4.1738E-06 (326)
21	6.1176E-05 (64)	1.5305E-05 (361)	9.8294E-06 (169)	7.6905E-06 (123)	6.7624E-06 (123)
22	5.0515E-05 (64)	1.9228E-05 (252)	1.0089E-05 (252)	6.4151E-06 (345)	4.5432E-06 (252)
23	6.1988E-05 (17)	2.2448E-05 (306)	1.3523E-05 (306)	9.8512E-06 (17)	6.9935E-06 (17)
24	8.5982E-05 (306)	2.3209E-05 (183)	1.5596E-05 (147)	1.2232E-05 (147)	8.8632E-06 (183)
25	7.2552E-05 (55)	2.4872E-05 (307)	1.7587E-05 (239)	1.1387E-05 (239)	8.0101E-06 (213)
26	7.2253E-05 (286)	2.5038E-05 (309)	1.4162E-05 (321)	9.3982E-06 (321)	6.6692E-06 (321)
27	9.9233E-05 (182)	2.8657E-05 (182)	1.8395E-05 (279)	1.3410E-05 (255)	1.0146E-05 (255)
28	9.3081E-05 (287)	2.5383E-05 (288)	1.4700E-05 (157)	1.2278E-05 (249)	9.0243E-06 (249)
29	7.2531E-05 (113)	1.9041E-05 (113)	1.4585E-05 (157)	1.0898E-05 (157)	8.2414E-06 (157)
30	7.9642E-05 (264)	2.2792E-05 (263)	1.0428E-05 (315)	7.0232E-06 (219)	5.1274E-06 (219)
31	6.5288E-05 (267)	2.0262E-05 (267)	9.9414E-06 (75)	7.4179E-06 (75)	5.6474E-06 (75)
32	6.0289E-05 (364)	1.6747E-05 (72)	1.4354E-05 (231)	1.2122E-05 (231)	9.6065E-06 (231)
33	7.6783E-05 (364)	2.2435E-05 (151)	1.1087E-05 (4)	7.2508E-06 (4)	5.1364E-06 (4)
34	8.4788E-05 (10)	1.9912E-05 (10)	1.4270E-05 (204)	8.7741E-06 (209)	5.9706E-06 (209)
35	7.1090E-05 (266)	1.6007E-05 (266)	6.6943E-06 (207)	4.1579E-06 (207)	3.2572E-06 (203)
36	6.7352E-05 (72)	2.1200E-05 (266)	7.3561E-06 (100)	4.4274E-06 (100)	2.5792E-06 (100)

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RING DISTANCES(KM)= 0.20 0.50 1.00 1.50 2.00

STACK 6 1--CR1,TSP-1974

STACK 7 2--CR2,TSP-1974

STACK	MONTH	EMISSION RATE (GM3/SEC)	HEIGHT (METERS)	DIAMETER (METERS)	EXIT VELOCITY (M/SEC)	TEMP (DEG.K)	VOLUMETRIC FLOW (M3/SEC)
1	ALL	58.8000	152.00	4.57	35.70	416.00	585.58
2	ALL	77.2000	153.00	4.88	38.70	416.00	723.84

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PLANT NAME: FPC CR FLY ASH

POLLUTANT: TSP EMISSION UNITS: GM/SEC AIR QUALITY UNITS: GM/M**3

YEARLY SECOND MAXIMUM 24-HOUR CONC: 2.8104E-06 DIRECTIONS: 5 DISTANCE= 1.5 KM DAY=215

1971

SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTOR

RANGE	0.2 KM	0.5 KM	1.0 KM	1.5 KM	2.0 KM
1	9.1666E-31 (228)	1.8316E-14 (238)	5.8196E-07 (236)	7.5430E-07 (236)	1.1756E-06 (229)
2	8.3333E-31 (113)	1.1620E-13 (238)	7.6515E-07 (260)	1.6011E-06 (236)	1.4511E-06 (260)
3	7.9166E-31 (228)	4.0621E-13 (238)	1.5468E-06 (236)	1.7732E-06 (236)	1.5481E-06 (236)
4	7.5000E-31 (111)	7.8353E-13 (238)	2.0746E-06 (238)	2.6014E-06 (215)	2.0048E-06 (215)
5	7.9166E-31 (112)	7.3962E-13 (234)	2.2371E-06 (238)	2.8104E-06 (215)	2.1882E-06 (215)
6	1.0000E-30 (114)	3.2155E-13 (234)	1.3150E-06 (238)	1.4065E-06 (215)	1.8080E-06 (234)
7	1.0417E-30 (167)	7.7120E-14 (234)	9.6219E-07 (238)	1.1833E-06 (103)	1.7606E-06 (179)
8	1.0417E-30 (167)	1.7070E-13 (159)	1.3256E-06 (230)	1.6106E-06 (238)	1.6814E-06 (179)
9	1.0000E-30 (166)	4.1573E-13 (159)	5.3651E-07 (230)	1.1505E-06 (128)	2.6511E-06 (220)
10	9.5833E-31 (167)	3.3350E-13 (159)	2.2748E-07 (257)	7.0206E-07 (152)	1.6952E-06 (220)
11	9.5833E-31 (44)	9.6329E-14 (159)	3.7015E-07 (238)	7.0100E-07 (197)	1.3333E-06 (198)
12	1.0417E-30 (165)	4.7960E-14 (238)	1.3089E-07 (159)	9.3034E-07 (198)	1.7651E-06 (257)
13	1.0417E-30 (123)	3.6623E-14 (262)	6.3251E-07 (159)	7.0634E-07 (198)	1.1667E-06 (257)
14	1.0000E-30 (79)	1.9430E-13 (262)	3.1553E-07 (262)	4.4962E-07 (257)	8.4849E-07 (104)
15	9.5833E-31 (40)	5.6803E-13 (262)	1.1110E-06 (262)	9.7462E-07 (262)	1.2087E-06 (159)
16	9.1666E-31 (19)	4.1844E-13 (159)	1.1813E-06 (159)	9.1193E-07 (159)	1.1636E-06 (121)
17	9.1666E-31 (67)	1.5192E-13 (159)	3.5981E-07 (159)	2.9705E-07 (164)	6.5220E-07 (164)
18	8.3333E-31 (70)	3.0393E-14 (159)	8.8589E-08 (263)	3.7799E-07 (173)	7.5785E-07 (164)
19	8.3333E-31 (41)	3.3504E-15 (159)	1.5679E-07 (262)	3.9935E-07 (98)	6.8916E-07 (257)
20	9.1666E-31 (308)	6.0583E-16 (263)	1.6729E-08 (262)	3.1161E-07 (98)	6.3934E-07 (98)
21	1.0000E-30 (329)	8.1615E-16 (263)	7.3896E-09 (164)	3.4480E-07 (137)	1.1576E-06 (137)
22	1.0000E-30 (292)	1.0598E-16 (240)	2.9495E-08 (164)	5.1632E-07 (164)	9.7233E-07 (164)
23	1.0417E-30 (356)	2.4780E-16 (263)	3.8637E-08 (164)	6.3693E-07 (263)	1.5417E-06 (164)
24	1.0417E-30 (269)	1.7200E-15 (231)	3.6700E-08 (240)	4.7471E-07 (90)	1.2874E-06 (90)
25	1.0417E-30 (321)	1.9766E-14 (231)	8.7053E-08 (152)	2.8056E-07 (231)	7.5011E-07 (90)
26	1.0417E-30 (322)	1.2537E-13 (231)	3.7806E-07 (152)	8.3552E-07 (152)	8.4726E-07 (240)
27	1.0417E-30 (322)	4.3831E-13 (231)	1.1249E-06 (231)	1.9511E-06 (152)	1.8291E-06 (101)
28	1.0000E-30 (94)	8.0855E-13 (240)	2.4215E-06 (231)	2.4974E-06 (240)	1.9276E-06 (240)
29	9.5833E-31 (305)	7.4553E-13 (240)	1.2112E-06 (240)	1.1552E-06 (240)	1.3321E-06 (138)
30	1.0000E-30 (143)	1.3527E-13 (240)	2.9908E-07 (240)	6.7943E-07 (138)	1.2038E-06 (182)
31	1.0000E-30 (348)	2.2632E-14 (240)	3.6700E-08 (240)	4.7476E-07 (236)	9.0499E-07 (236)
32	8.7500E-31 (348)	2.0864E-15 (240)	4.3031E-08 (218)	4.2166E-07 (230)	1.3301E-06 (218)
33	7.9166E-31 (59)	9.8717E-17 (218)	8.3377E-09 (260)	3.1671E-07 (230)	1.1127E-06 (218)
34	8.3333E-31 (58)	1.4876E-16 (260)	2.4812E-08 (218)	5.1115E-07 (260)	1.1865E-06 (218)
35	9.1666E-31 (58)	1.2155E-16 (260)	4.4259E-08 (211)	8.9012E-07 (211)	1.8747E-06 (211)
36	1.0000E-30 (228)	1.5908E-15 (238)	1.2529E-07 (236)	7.1766E-07 (229)	1.7736E-06 (229)

Best Available Copy

PLANT NAME: FPC CR FLY ASH

POLLUTANT: TSP EMISSION UNITS: GM/SEC AIR QUALITY UNITS: GM/M**3

YEARLY SECOND MAXIMUM 24-HOUR CONCEN: 2.4019E-06 DIRECTION: 10 DISTANCE= 2.0 KM DAY=2/2

1972

SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTOR

RANGE	0.2 KM	0.5 KM	1.0 KM	1.5 KM	2.0 KM
1	8.3333E-31 (-76)	2.0293E-16 (171)	3.0134E-08 (211)	4.9735E-07 (211)	8.8522E-07 (113)
2	8.3333E-31 (-76)	1.8521E-15 (229)	1.2988E-07 (241)	4.5680E-07 (110)	1.0680E-06 (110)
3	7.9166E-31 (-104)	2.1374E-14 (229)	6.0491E-07 (241)	7.4462E-07 (110)	1.5719E-06 (110)
4	8.3333E-31 (-89)	1.3528E-13 (229)	1.4001E-06 (241)	1.4207E-06 (241)	1.3353E-06 (102)
5	8.7500E-31 (-104)	4.7293E-13 (229)	1.6109E-06 (241)	1.5773E-06 (215)	1.9678E-06 (211)
6	1.0417E-30 (-177)	9.1079E-13 (229)	1.7730E-06 (229)	1.5503E-06 (229)	1.9619E-06 (215)
7	1.0417E-30 (-174)	9.6692E-13 (229)	1.9897E-06 (238)	1.7622E-06 (229)	2.0274E-06 (215)
8	1.0417E-30 (-174)	7.1240E-13 (238)	1.2825E-06 (222)	1.6313E-06 (207)	2.1187E-06 (195)
9	1.0417E-30 (-174)	8.3053E-13 (207)	1.8851E-06 (207)	2.2947E-06 (222)	2.4123E-06 (242)
10	1.0417E-30 (-175)	5.9654E-13 (150)	1.7726E-06 (222)	1.6002E-06 (248)	2.4819E-06 (242)
11	1.0417E-30 (-175)	5.0952E-13 (222)	8.9023E-07 (150)	1.4573E-06 (184)	1.1697E-06 (184)
12	9.5833E-31 (-44)	1.6135E-13 (222)	2.1976E-07 (150)	4.5020E-07 (222)	5.2922E-07 (222)
13	1.0000E-30 (-44)	2.4400E-14 (222)	2.6966E-08 (150)	2.2642E-07 (23)	8.4632E-07 (146)
14	1.0417E-30 (-50)	7.8814E-15 (247)	5.6768E-09 (247)	2.3737E-07 (289)	6.8037E-07 (289)
15	1.0000E-30 (-50)	6.7360E-14 (247)	7.0380E-08 (247)	1.4863E-07 (362)	4.9209E-07 (240)
16	9.5833E-31 (-50)	2.3012E-14 (104)	3.5563E-08 (184)	2.4741E-07 (247)	4.2390E-07 (240)
17	9.5833E-31 (320)	1.34048E-13 (189)	1.5853E-07 (189)	7.0897E-07 (263)	6.4713E-07 (59)
18	1.0000E-30 (-35)	4.9A98E-13 (189)	7.4138E-07 (189)	6.4873E-07 (263)	9.0188E-07 (247)
19	1.0000E-30 (-35)	9.2738E-13 (247)	1.5267E-06 (247)	9.9624E-07 (247)	1.0882E-06 (189)
20	9.1666E-31 (-35)	6.1221E-13 (163)	1.4223E-06 (163)	1.1168E-06 (163)	1.4031E-06 (252)
21	9.5833E-31 (-16)	7.1451E-13 (189)	2.0177E-06 (163)	1.6421E-06 (163)	1.2712E-06 (163)
22	1.0417E-30 (-42)	2.4563E-13 (189)	1.4223E-06 (163)	1.1168E-06 (163)	8.7855E-07 (158)
23	1.0417E-30 (117)	1.3528E-13 (248)	1.1259E-06 (186)	1.4088E-06 (189)	1.3298E-06 (189)
24	1.0417E-30 (-42)	7.4876E-14 (163)	1.7129E-06 (186)	1.8304E-06 (247)	1.6906E-06 (158)
25	1.0417E-30 (117)	9.2989E-15 (163)	1.7709E-06 (248)	1.8326E-06 (186)	1.4395E-06 (156)
26	1.0417E-30 (119)	2.2876E-15 (247)	1.8991E-06 (248)	1.7786E-06 (156)	1.5078E-06 (156)
27	1.0417E-30 (127)	1.1259E-15 (247)	1.0122E-06 (248)	9.5873E-07 (156)	9.4090E-07 (267)
28	1.0417E-30 (160)	3.1367E-16 (247)	2.7095E-07 (248)	4.7906E-07 (154)	1.1507E-06 (186)
29	1.0000E-30 (166)	4.9174E-17 (247)	7.6925E-08 (248)	4.4502E-07 (186)	1.2786E-06 (27)
30	9.1666E-31 (170)	6.5387E-17 (212)	2.9745E-07 (248)	3.9795E-07 (241)	1.0370E-06 (241)
31	7.9166E-31 (133)	1.4242E-16 (212)	3.2300E-07 (163)	7.8810E-07 (163)	1.1097E-06 (248)
32	7.9166E-31 (320)	1.0202E-16 (212)	6.0298E-08 (163)	4.5841E-07 (196)	1.0041E-06 (196)
33	7.9166E-31 (320)	2.4033E-17 (212)	1.6190E-08 (196)	4.4251E-07 (196)	1.0615E-06 (229)
34	8.3333E-31 (-13)	3.4587E-16 (248)	8.8004E-09 (186)	2.2405E-07 (186)	5.6658E-07 (223)
35	7.1666E-31 (-13)	1.0399E-16 (248)	3.7557E-08 (215)	1.6729E-07 (248)	5.8036E-07 (139)
36	8.3333E-31 (-76)	2.1049E-16 (171)	2.6802E-08 (136)	2.3284E-07 (215)	7.4490E-07 (64)

PLATE NUMBER: FFF-0000000000

COLLECTOR: TSR

EMISSIONS: GR/SEC

AIR QUALITY UNITS: GM/HA/SEC

EARLY: 360000 MAXIMUM 20-EFFECTIVE DILUTION = 5.069E-06 DIRECTION = 6 DISTANCE = 1.5 KM DAY=252

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1973

SECOND REQUEST 20-EFFECT CONCENTRATION AT EACH RECEPTOR

RANGE	0.2 KM	0.5 KM	1.0 KM	1.5 KM	2.0 KM
1	8.3333E-31 (115)	2.0106E-13 (236)	1.1655E-06 (163)	1.0957E-06 (199)	1.1467E-06 (163)
2	7.5000E-31 (349)	5.2174E-13 (236)	1.2939E-06 (236)	1.1253E-06 (236)	1.1171E-06 (199)
3	7.1666E-31 (219)	7.4602E-13 (236)	1.3274E-06 (199)	1.3641E-06 (173)	1.7262E-06 (215)
4	9.5833E-31 (219)	8.8085E-13 (192)	1.5878E-06 (173)	2.1732E-06 (173)	1.8400E-06 (173)
5	9.1666E-31 (219)	6.9765E-13 (252)	2.5688E-06 (252)	2.6589L-06 (252)	2.4908E-06 (192)
6	8.7500E-31 (219)	8.6849E-13 (222)	2.6920E-06 (182)	3.0694E-06 (252)	2.8694E-06 (252)
7	8.7500E-31 (180)	6.0743E-13 (222)	1.6871E-06 (252)	1.7983E-06 (182)	2.7686E-06 (187)
8	9.1666E-31 (191)	2.3419E-13 (222)	4.9099E-07 (222)	1.1931E-06 (181)	2.6228E-06 (181)
9	9.5833E-31 (168)	6.4320E-14 (259)	1.0064E-07 (222)	1.1095E-06 (132)	2.4548E-06 (132)
10	9.5833E-31 (85)	8.4937E-10 (218)	5.4837E-07 (259)	9.8056E-07 (140)	1.6780E-06 (132)
11	9.5833E-31 (85)	1.2014E-10 (218)	2.3509E-07 (218)	6.9052E-07 (169)	1.5055E-06 (169)
12	9.5833E-31 (29)	9.4927E-16 (218)	3.0023E-08 (218)	4.3678E-07 (143)	8.3380E-07 (100)
13	1.0000E-30 (29)	2.9793E-15 (119)	3.3408E-08 (119)	2.2656E-07 (197)	7.1820E-07 (103)
14	9.5833E-31 (30)	2.5971E-10 (119)	2.8163E-07 (119)	4.7038E-07 (138)	8.6694E-07 (197)
15	9.1666E-31 (29)	1.0630E-13 (119)	2.0094E-07 (131)	2.6874E-07 (138)	8.1100E-07 (118)
16	8.7500E-31 (41)	2.5979E-13 (119)	8.1371E-07 (131)	6.2262E-07 (131)	9.6620E-07 (95)
17	8.7500E-31 (342)	6.6030E-13 (238)	1.6375E-06 (131)	1.3460E-06 (131)	1.0387E-06 (131)
18	1.0000E-30 (341)	7.8353E-13 (131)	1.9427E-06 (119)	1.3905E-06 (238)	1.0499E-06 (221)
19	9.1666E-31 (11)	4.3174E-13 (131)	8.1371E-07 (131)	6.6005E-07 (233)	8.6706E-07 (233)
20	9.5833E-31 (296)	2.5256E-13 (221)	6.4688E-07 (238)	4.8086E-07 (183)	1.3745E-06 (183)
21	9.5833E-31 (279)	7.1649E-13 (191)	1.3113E-06 (221)	1.2139E-06 (221)	1.7771E-06 (183)
22	1.0000E-30 (10)	9.3711E-13 (221)	1.9974E-06 (221)	1.8932E-06 (221)	1.9093E-06 (221)
23	1.0017E-30 (276)	7.3834E-13 (221)	1.5200E-06 (221)	1.7155E-06 (221)	2.1998E-06 (221)
24	1.0017E-30 (283)	3.2055E-13 (221)	5.7879E-07 (221)	8.4680E-07 (221)	1.3995E-06 (120)
25	1.0000E-30 (288)	7.6684E-14 (221)	1.0136E-06 (260)	1.3396E-06 (260)	1.4645E-06 (191)
26	1.0000E-30 (82)	1.0108E-10 (221)	2.9676E-07 (191)	6.3180E-07 (154)	1.5935E-06 (154)
27	1.0017E-30 (110)	1.1811E-15 (260)	3.6659E-08 (158)	7.2470E-07 (158)	1.5187E-06 (154)
28	1.0017E-30 (107)	2.2814E-15 (191)	3.9849E-08 (158)	7.1987E-07 (239)	1.7202E-06 (239)
29	1.0017E-30 (105)	1.3819E-16 (260)	3.5111E-08 (233)	4.6572E-07 (238)	1.3842E-06 (238)
30	1.0017E-30 (108)	1.2672E-16 (204)	2.8154E-08 (204)	3.3329E-07 (239)	9.6053E-07 (202)
31	1.0017E-30 (359)	1.6004E-16 (217)	1.9006E-07 (261)	5.8090E-07 (171)	8.7749E-07 (217)
32	9.5833E-31 (21)	5.2233E-16 (261)	7.6967E-07 (261)	1.0655E-06 (217)	1.9800E-06 (224)
33	8.7500E-31 (40)	9.4793E-16 (261)	1.5489E-06 (261)	1.3361E-06 (233)	2.1337E-06 (202)
34	9.1666E-31 (339)	1.2690E-14 (199)	8.1681E-07 (233)	7.7837L-07 (217)	1.7312E-06 (261)
35	9.5833E-31 (90)	9.6316E-14 (199)	7.6967E-07 (261)	1.0267E-06 (261)	1.2479E-06 (228)
36	9.5833E-31 (146)	4.2693L-14 (236)	5.7355E-07 (199)	8.8231E-07 (160)	1.7245E-06 (160)

Best Available Copy

PLANT NAME: FPC CR FLY ASH

POLLUTANT

TSP

EMISSION UNITS: GM/SEC

AIR QUALITY UNITS: GM/M³

YEARLY SECOND MAXIMUM 24-HOUR CONC= 2.3197E-06 DIRECTION= 27 DISTANCE= 2.0 KM DAY=110

1974

SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTOR

RANGE DER	0.2 KM	0.5 KM	1.0 KM	1.5 KM	2.0 KM
1	8.5335E-31 (80)	4.4955E-13 (237)	1.9639E-06 (221)	1.6835E-06 (221)	1.5264E-06 (242)
2	7.9166E-31 (175)	1.1415E-13 (237)	1.3908E-06 (161)	1.4131E-06 (221)	1.3252E-06 (161)
3	7.0833E-31 (209)	2.3406E-13 (199)	4.2581E-07 (199)	7.5585E-07 (207)	1.5648E-06 (207)
4	7.9166E-31 (80)	1.2464E-13 (221)	1.0942E-06 (173)	8.8614E-07 (158)	1.2264E-06 (173)
5	7.0833E-31 (31)	1.0509E-14 (221)	1.4655E-06 (173)	2.0851E-06 (200)	1.8710E-06 (158)
6	8.7500E-31 (147)	9.9330E-14 (156)	1.4993E-06 (199)	2.0340E-06 (173)	2.1079E-06 (151)
7	9.1666E-31 (89)	2.9708E-13 (199)	7.3201E-07 (156)	1.1060E-06 (173)	1.8958E-06 (200)
8	1.0417E-30 (147)	7.1068E-14 (199)	1.0315E-06 (109)	1.0743E-06 (109)	1.6719E-06 (197)
9	1.0000E-30 (202)	9.3679E-15 (199)	1.5693E-06 (109)	1.6057E-06 (156)	2.1639E-06 (198)
10	9.1666E-31 (202)	1.4359E-15 (223)	1.1864E-06 (109)	2.1693E-06 (211)	1.8217E-06 (211)
11	9.5833E-31 (142)	1.5241E-15 (223)	1.2496E-06 (211)	2.2318E-06 (211)	1.7941E-06 (211)
12	8.3333E-31 (192)	1.1866E-15 (211)	1.0198E-06 (223)	1.3919E-06 (223)	1.3070E-06 (167)
13	8.7500E-31 (40)	1.5985E-15 (211)	2.7004E-07 (223)	3.7904E-07 (237)	8.2161E-07 (237)
14	8.7500E-31 (40)	2.0173E-16 (156)	5.8633E-08 (234)	1.2372E-07 (237)	4.1293E-07 (99)
15	8.7500E-31 (56)	3.8040E-16 (234)	3.6123E-07 (234)	4.1465E-07 (234)	4.3706E-07 (109)
16	8.7500E-31 (56)	1.3592E-16 (196)	7.2716E-08 (211)	2.5962E-07 (282)	8.9430E-07 (282)
17	8.7500E-31 (57)	1.4250E-15 (234)	7.3368E-08 (243)	2.0898E-07 (180)	7.0103E-07 (282)
18	9.1666E-31 (57)	1.1227E-15 (234)	4.2148E-07 (243)	3.7331E-07 (243)	9.5464E-07 (108)
19	9.1666E-31 (313)	6.7704E-15 (233)	4.1782E-07 (234)	5.6443E-07 (234)	7.6008E-07 (108)
20	9.1666E-31 (57)	5.7865E-14 (233)	9.9836E-07 (196)	6.4619E-07 (196)	8.1293E-07 (114)
21	1.0000E-30 (312)	2.7251E-13 (233)	1.2032E-06 (243)	1.1866E-06 (243)	9.3670E-07 (264)
22	1.0000E-30 (312)	7.0714E-13 (233)	1.4177E-06 (233)	1.1974E-06 (196)	1.1952E-06 (171)
23	1.0417E-30 (294)	4.7485E-13 (190)	1.7942E-06 (190)	1.8465E-06 (190)	1.5164E-06 (171)
24	1.0417E-30 (286)	7.5277E-13 (204)	1.7942E-06 (190)	1.8465E-06 (190)	1.6292E-06 (286)
25	1.0000E-30 (263)	3.4587E-13 (233)	2.0710E-06 (204)	2.0590E-06 (204)	1.5831E-06 (204)
26	9.5833E-31 (333)	4.8725E-13 (180)	1.4841E-06 (260)	1.8013E-06 (200)	1.7700E-06 (180)
27	1.0417E-30 (340)	8.7243E-13 (227)	1.9604E-06 (227)	2.2314E-06 (260)	2.3197E-06 (110)
28	1.0417E-30 (140)	8.7243E-13 (227)	1.9001E-06 (172)	2.1186E-06 (227)	1.8274E-06 (172)
29	1.0000E-30 (139)	4.8073E-13 (227)	1.5444E-06 (164)	2.1650E-06 (164)	1.6912E-06 (164)
30	9.1666E-31 (140)	1.8225E-13 (172)	1.6778E-06 (243)	2.2609E-06 (243)	1.8435E-06 (243)
31	8.3333E-31 (184)	3.0840E-13 (221)	1.6276E-06 (159)	1.8898E-06 (243)	1.7835E-06 (243)
32	7.9166E-31 (334)	7.5319E-13 (221)	2.0088E-06 (159)	1.6419E-06 (221)	1.7949E-06 (241)
33	7.9166E-31 (334)	8.3081E-13 (159)	1.8037E-06 (97)	1.7010E-06 (97)	1.9531E-06 (97)
34	7.5000E-31 (131)	7.6865E-13 (237)	1.2251E-06 (237)	1.4288E-06 (226)	1.6811E-06 (221)
35	9.1666E-31 (94)	5.3411E-13 (221)	8.2188E-07 (221)	1.0900E-06 (159)	1.4087E-06 (242)
36	9.1666E-31 (175)	7.3066E-13 (221)	1.6202E-06 (237)	1.1526E-06 (237)	1.6056E-06 (242)

Best Available Copy

PLANT NAME: FPC CR FLY ASH

POLLUTANT: TSP EMISSION UNITS: GM/SFC AIR QUALITY UNITS: GM/H**3

YEARLY SECOND MAXIMUM 24-HOUR CONC= 2.0027E-06 DIRECTION= R DISTANCE= 2.0 KM DAY=230

1975

SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTOR

RANGE	DIR	0.2 KM	0.5 KM	1.0 KM	1.5 KM	2.0 KM
1		8.7500E-31 (83)	9.6692E-13 (162)	1.9393E-06 (162)	1.9720E-06 (162)	1.7815E-06 (218)
2		7.5000E-31 (49)	7.9776E-13 (126)	1.7326E-06 (218)	1.7006E-06 (126)	1.3897E-06 (218)
3		7.9166E-31 (191)	6.6715E-13 (126)	1.6543E-06 (179)	1.3495E-06 (126)	1.3642E-06 (122)
4		8.3333E-31 (190)	8.7108E-13 (171)	1.9474E-06 (149)	1.4403E-06 (145)	1.7810E-06 (161)
5		9.5833E-31 (191)	6.4661E-13 (171)	1.4111E-06 (171)	1.3418E-06 (171)	2.0514E-06 (181)
6		9.5833E-31 (191)	8.4430E-13 (181)	1.7941E-06 (176)	1.8073E-06 (230)	1.8212E-06 (146)
7		9.5833E-31 (188)	4.3831E-13 (181)	1.6427E-06 (185)	2.2813E-06 (185)	2.4036E-06 (230)
8		9.5833E-31 (188)	2.1436E-13 (243)	1.0261E-06 (176)	1.9931E-06 (185)	2.4427E-06 (230)
9		7.5000E-31 (186)	1.8225E-13 (176)	6.2320E-07 (206)	1.0702E-06 (206)	2.1703E-06 (165)
10		7.0833E-31 (78)	2.0041E-13 (97)	1.2068E-06 (206)	1.4487E-06 (243)	1.8379E-06 (166)
11		7.9166E-31 (189)	4.0969E-13 (97)	1.5395E-06 (243)	1.2416E-06 (243)	1.2437E-06 (140)
12		7.5000E-31 (138)	4.3828E-13 (243)	6.6518E-07 (243)	6.1923E-07 (206)	1.0319E-06 (97)
13		8.7500E-31 (139)	2.1693E-13 (177)	4.7258E-07 (177)	4.7628E-07 (177)	9.7283E-07 (230)
14		8.3333E-31 (78)	9.8000E-14 (97)	3.0187E-07 (97)	3.6669E-07 (180)	9.0251E-07 (180)
15		8.7500E-31 (298)	1.8473E-14 (97)	8.4301E-07 (144)	8.4297E-07 (144)	8.7833E-07 (244)
16		8.3333E-31 (13)	1.9105E-15 (97)	1.5819E-06 (144)	1.6872E-06 (144)	1.3100E-06 (144)
17		9.5833E-31 (327)	1.2838E-15 (144)	6.2465E-07 (177)	6.0017E-07 (177)	1.2059E-06 (144)
18		9.5833E-31 (269)	1.4744E-15 (176)	3.0704E-07 (143)	4.3604E-07 (143)	6.7277E-07 (95)
19		9.1666E-31 (268)	8.6823E-15 (177)	1.5737E-07 (144)	2.6206E-07 (94)	6.6156E-07 (94)
20		9.1666E-31 (14)	1.2627E-15 (143)	2.0808E-07 (176)	5.3213E-07 (106)	1.3080E-06 (106)
21		9.5833E-31 (303)	1.0560E-15 (143)	9.0343E-07 (176)	1.0150E-06 (176)	1.1545E-06 (106)
22		9.1666E-31 (22)	4.86661E-16 (143)	5.3593E-07 (143)	6.3797E-07 (143)	8.6539E-07 (141)
23		1.0000E-30 (362)	3.1224E-16 (116)	3.4094E-07 (116)	4.0787E-07 (142)	9.0925E-07 (142)
24		1.0017E-30 (304)	1.1412E-15 (217)	1.1135E-06 (176)	1.1375E-06 (176)	1.1676E-06 (116)
25		1.0000E-30 (17)	1.4802E-14 (217)	2.9488E-07 (176)	6.7670E-07 (250)	1.4897E-06 (250)
26		1.0000E-30 (182)	2.5763E-14 (176)	1.3010E-07 (217)	7.4106E-07 (250)	1.9501E-06 (247)
27		1.0017E-30 (113)	7.4876E-14 (219)	6.4989E-07 (217)	8.9630E-07 (248)	2.2312E-06 (248)
28		1.0017E-30 (208)	3.3222E-13 (219)	8.9839E-07 (219)	1.0831E-06 (184)	1.6567E-06 (248)
29		1.0017E-30 (315)	8.1221E-13 (219)	1.4226E-06 (219)	1.1651E-06 (219)	1.4007E-06 (250)
30		1.0000E-30 (264)	7.1252E-13 (217)	1.6441E-06 (143)	1.6598E-06 (143)	1.6819E-06 (219)
31		8.7500E-31 (364)	6.4661E-13 (242)	1.4290E-06 (143)	1.4164E-06 (143)	1.2708E-06 (114)
32		9.1666E-31 (364)	3.3222E-13 (219)	6.1964E-07 (143)	6.9901E-07 (143)	1.22275E-06 (114)
33		1.0000E-30 (12)	7.4876E-14 (219)	1.3897E-06 (205)	1.5753E-06 (205)	1.6925E-06 (114)
34		1.0000E-30 (266)	1.3528E-13 (162)	5.0538E-07 (242)	8.1624E-07 (114)	1.7726E-06 (205)
35		9.5833E-31 (83)	2.5865E-13 (218)	8.3789E-07 (162)	7.8180E-07 (162)	1.0373E-06 (114)
36		1.0000E-30 (50)	7.1240E-13 (218)	1.3098E-06 (218)	1.3368E-06 (218)	1.2328E-06 (120)

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REF. DISTANCES (KMS) 2.50 3.00 4.00 5.00 20.00

STACK # 1--CR1, TSP, 1970
STACK # 2--CR2, TSP, 1970

STACK	NUMBER	EMISSION RATE (GM3/SEC)	HEIGHT (METERS)	DIAMETER (METERS)	EXIT VELOCITY (M/SEC)	TEMP (DEG. K)	VOLUME THIC FLOW (M**3/SEC)
1	ALL	58.8000	152.00	4.57	35.70	416.00	585.58
2	ALL	77.2000	153.00	4.88	38.70	416.00	723.84

Best Available Copy

PLANT NAME: FPC CR FLY ASH

POLLUTANTS: TSP EMISSION UNITS: GM/SEC AIR QUALITY UNITS: GM/M³

YEARLY SECOND MAXIMUM 24-HOUR CONC= 3.8019E-06 DIRECTIONS= 9 DISTANCE= 3.0 KM DAY=128

197

SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTOR

RANGE	DIR	2.5 KM	3.0 KM	4.0 KM	5.0 KM	20.0 KM
1	1	1.5484E-06 (229)	1.6067E-06 (260)	1.3854E-06 (236)	1.2714E-06 (113)	9.1153E-07 (38)
2	1	1.5507E-06 (113)	1.9794E-06 (113)	2.1179E-06 (331)	2.0807E-06 (331)	1.1552E-06 (30)
3	1	1.9679E-06 (234)	1.8565E-06 (205)	1.9902E-06 (205)	1.8233E-06 (205)	6.2804E-07 (354)
4	1	1.6355E-06 (215)	1.6607E-06 (205)	1.8196E-06 (234)	1.5705E-06 (127)	4.8339E-07 (205)
5	1	1.8663E-06 (206)	1.8117E-06 (288)	1.5698E-06 (205)	1.4901E-06 (219)	6.2662E-07 (205)
6	1	1.9188E-06 (203)	2.0815E-06 (159)	1.9372E-06 (206)	1.4313E-06 (206)	1.1785E-06 (175)
7	1	2.0454E-06 (179)	2.1228E-06 (207)	2.0126E-06 (224)	2.0484E-06 (224)	6.7584E-07 (201)
8	1	2.0503E-06 (179)	2.0889E-06 (128)	2.0159E-06 (257)	1.8104E-06 (139)	7.3981E-07 (167)
9	1	3.4782E-06 (128)	3.8019E-06 (128)	3.6507E-06 (128)	3.0580E-06 (167)	1.6315E-06 (167)
10	1	2.2120E-06 (204)	2.6830E-06 (220)	2.5333E-06 (220)	2.1483E-06 (220)	1.0551E-06 (195)
11	1	1.5492E-06 (198)	1.4542E-06 (198)	1.6639E-06 (196)	1.6110E-06 (196)	8.4012E-07 (44)
12	1	1.4531E-06 (257)	1.7260E-06 (136)	2.2751E-06 (136)	1.7886E-06 (198)	1.0980E-06 (123)
13	1	1.1802E-06 (141)	1.5715E-06 (141)	1.8083E-06 (141)	1.7115E-06 (198)	6.6585E-07 (141)
14	1	8.8897E-07 (159)	1.1380E-06 (222)	1.3765E-06 (222)	1.3205E-06 (222)	7.6772E-07 (63)
15	1	1.1526E-06 (121)	1.3212E-06 (121)	1.4063E-06 (221)	1.5038E-06 (221)	8.8704E-07 (121)
16	1	1.1555E-06 (262)	1.2711E-06 (169)	1.3721E-06 (124)	1.3988E-06 (124)	7.8910E-07 (121)
17	1	6.6980E-07 (262)	1.0752E-06 (99)	1.1930E-06 (162)	1.1961E-06 (162)	5.6009E-07 (19)
18	1	1.0080E-06 (124)	1.3442E-06 (99)	1.3216E-06 (316)	1.3861E-06 (316)	6.4981E-07 (89)
19	1	8.9946E-07 (98)	9.6631E-07 (221)	9.7087E-07 (316)	1.0628E-06 (275)	7.9108E-07 (67)
20	1	8.3977E-07 (46)	9.0816E-07 (46)	8.7571E-07 (334)	9.1257E-07 (99)	4.6856E-07 (19)
21	1	1.6560E-06 (137)	1.6452E-06 (263)	1.5265E-06 (312)	1.6392E-06 (312)	9.8807E-07 (356)
22	1	1.4077E-06 (47)	1.7006E-06 (47)	1.7042E-06 (47)	1.4822E-06 (47)	1.0044E-06 (356)
23	1	1.7840E-06 (68)	1.9817E-06 (68)	1.9465E-06 (156)	1.6287E-06 (272)	1.4666E-06 (292)
24	1	2.0177E-06 (90)	2.4554E-06 (90)	2.4085E-06 (156)	2.0225E-06 (156)	1.1664E-06 (352)
25	1	1.2251E-06 (90)	1.5593E-06 (90)	1.7615E-06 (90)	1.6448E-06 (285)	8.9182E-07 (156)
26	1	1.0963E-06 (101)	1.2343E-06 (101)	1.5983E-06 (267)	1.5841E-06 (48)	1.1744E-06 (33)
27	1	1.7710E-06 (231)	2.1961E-06 (190)	2.4839E-06 (190)	2.6081E-06 (190)	1.0694E-06 (49)
28	1	1.9346E-06 (101)	2.3217E-06 (101)	2.5114E-06 (101)	2.3270E-06 (101)	8.5680E-07 (321)
29	1	1.6684E-06 (138)	1.6900E-06 (138)	1.9098E-06 (188)	2.0846E-06 (231)	1.0392E-06 (188)
30	1	1.7209E-06 (182)	1.8637E-06 (182)	1.7944E-06 (210)	1.9517E-06 (210)	1.0086E-06 (33)
31	1	1.1083E-06 (182)	1.1058E-06 (230)	1.5872E-06 (182)	1.5862E-06 (182)	8.1484E-07 (242)
32	1	1.5059E-06 (218)	1.8274E-06 (2)	1.9031E-06 (2)	1.7238E-06 (2)	6.2312E-07 (345)
33	1	1.3565E-06 (218)	1.8468E-06 (91)	2.0623E-06 (363)	2.2539E-06 (363)	1.0206E-06 (185)
34	1	1.4082E-06 (218)	1.9105E-06 (187)	2.4008E-06 (259)	2.1118E-06 (259)	5.8755E-07 (187)
35	1	2.2589E-06 (211)	2.2626E-06 (211)	1.8989E-06 (211)	1.4970E-06 (211)	3.8278E-07 (260)
36	1	2.3576E-06 (229)	2.5028E-06 (260)	2.0539E-06 (260)	1.6635E-06 (260)	8.7115E-07 (228)

Best Available Copy

PLANT NAME & FPC OR FLY ASR

POLLUTANT TSP EMISSION UNITS GM/SEC AIR QUALITY UNITS GM/M**3

YEARLY SPECIFIED MAXIMUM 24-HOUR CONC = 3.8780E-06 DIRECTION = 9 DISTANCE = 3.0 KM DAY=124

1972

SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEIVER

RANGE	DIR	2.5 KM	3.0 KM	4.0 KM	5.0 KM	20.0 KM
1	1	1.0877E-06 (196)	1.6415E-06 (196)	2.3151E-06 (113)	2.0958E-06 (113)	8.0267E-07 (38)
2	2	1.6392E-06 (55)	1.6337E-06 (57)	2.2439E-06 (57)	2.2540E-06 (57)	8.0875E-07 (5)
3	3	1.9064E-06 (110)	1.9266E-06 (110)	1.9225E-06 (105)	1.8588E-06 (57)	9.3061E-07 (129)
4	4	1.8210E-06 (195)	1.9045E-06 (195)	1.6072E-06 (136)	1.4965E-06 (136)	6.0918E-07 (98)
5	5	2.4940E-06 (150)	2.6321E-06 (150)	2.5498E-06 (211)	2.1912E-06 (261)	5.8345E-07 (172)
6	6	2.3900E-06 (261)	2.3918E-06 (211)	2.2739E-06 (210)	2.0313E-06 (261)	8.8375E-07 (85)
7	7	2.4862E-06 (194)	2.5512E-06 (194)	2.5617E-06 (309)	2.2108E-06 (316)	8.1758E-07 (172)
8	8	2.0087E-06 (195)	2.3375E-06 (220)	2.4069E-06 (53)	2.2585E-06 (53)	1.0419E-06 (172)
9	9	3.5369E-06 (124)	3.0788E-06 (120)	3.8046E-06 (207)	3.8250E-06 (207)	2.5835E-06 (173)
10	10	3.2206E-06 (242)	3.3358E-06 (242)	2.9470E-06 (242)	2.8226E-06 (181)	1.0077E-06 (124)
11	11	1.4810E-06 (131)	1.7815E-06 (131)	1.9076E-06 (131)	1.7280E-06 (131)	8.7952E-07 (143)
12	12	8.4669E-07 (143)	1.0861E-06 (143)	1.3684E-06 (245)	1.5756E-06 (245)	6.5289E-07 (331)
13	13	1.6403E-06 (146)	1.7755E-06 (184)	1.4454E-06 (184)	1.2628E-06 (116)	9.3415E-07 (44)
14	14	8.9752E-07 (289)	9.3260E-07 (146)	1.0857E-06 (146)	1.0112E-06 (102)	7.9144E-07 (281)
15	15	7.6035E-07 (240)	8.5382E-07 (198)	9.9741E-07 (362)	9.2767E-07 (362)	8.0052E-07 (44)
16	16	6.9991E-07 (240)	8.1328E-07 (216)	1.1678E-06 (216)	1.1141E-06 (263)	6.5100E-07 (325)
17	17	9.2818E-07 (59)	1.1206E-06 (363)	1.0883E-06 (363)	9.5305E-07 (216)	1.0190E-06 (351)
18	18	1.1678E-06 (59)	1.3154E-06 (59)	1.2968E-06 (363)	1.1574E-06 (193)	1.1829E-06 (328)
19	19	1.1691E-06 (189)	1.1794E-06 (189)	1.1203E-06 (19)	1.0065E-06 (19)	8.2117E-07 (161)
20	20	1.5984E-06 (189)	1.5582E-06 (189)	1.5209E-06 (336)	1.4115E-06 (193)	5.9633E-07 (401)
21	21	1.6775E-06 (252)	1.8827E-06 (189)	1.5426E-06 (189)	1.3300E-06 (256)	7.5742E-07 (92)
22	22	1.1305E-06 (265)	1.2435E-06 (283)	1.3170E-06 (288)	1.4007E-06 (189)	1.1579E-06 (66)
23	23	1.5128E-06 (156)	1.5672E-06 (156)	1.5079E-06 (266)	1.3067E-06 (279)	1.4426E-06 (117)
24	24	1.6733E-06 (156)	1.6849E-06 (156)	1.5497E-06 (52)	1.8020E-06 (288)	1.2086E-06 (100)
25	25	1.7433E-06 (86)	1.7359E-06 (157)	2.0785E-06 (157)	1.9619E-06 (157)	1.0949E-06 (156)
26	26	1.7061E-06 (265)	2.2734E-06 (257)	2.8238E-06 (265)	2.7423E-06 (265)	1.1802E-06 (257)
27	27	1.4284E-06 (310)	1.6987E-06 (310)	2.0038E-06 (247)	1.7901E-06 (247)	1.7767E-06 (268)
28	28	1.4035E-06 (197)	1.6280E-06 (197)	1.8389E-06 (339)	1.8378E-06 (339)	1.9226E-06 (121)
29	29	1.7488E-06 (27)	1.8390E-06 (27)	2.0378E-06 (197)	1.9097E-06 (230)	1.0494E-06 (127)
30	30	1.4171E-06 (201)	1.5486E-06 (241)	1.7329E-06 (345)	1.6714E-06 (345)	8.1981E-07 (347)
31	31	1.1980E-06 (196)	1.3948E-06 (241)	1.7377E-06 (241)	1.8348E-06 (241)	7.5033E-07 (241)
32	32	1.3161E-06 (307)	1.4997E-06 (61)	1.9397E-06 (307)	1.8829E-06 (61)	7.7486E-07 (120)
33	33	1.4000E-06 (248)	1.8171E-06 (314)	2.0175E-06 (314)	2.1621E-06 (12)	1.0039E-06 (12)
34	34	1.0200E-06 (54)	1.5216E-06 (314)	1.3743E-06 (314)	1.1875E-06 (314)	6.0225E-07 (90)
35	35	8.3372E-07 (238)	1.0217E-06 (213)	1.1214E-06 (213)	1.0914E-06 (319)	5.6456E-07 (307)
36	36	1.1893E-06 (64)	1.3517E-06 (136)	1.3333E-06 (341)	1.4505E-06 (341)	8.1850E-07 (301)

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PLANT NAME: FPC CR FLY ASH

POLLUTANT: TSP EMISSION UNITS: GM/SFC AIR QUALITY UNITS: GM/M³

YEARLY SECOND MAXIMUM 24-HOUR CONC= 3.3695E-06 DIRECTION= 8 DISTANCE= 3.0 KM DAY=181

(1973)

SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTOR

DTR	RANGE	2.5 KM	3.0 KM	4.0 KM	5.0 KM	20.0 KM
1	1.0919E-06 (226)	1.2214E-06 (149)	1.3094E-06 (149)	1.4014E-06 (193)	7.7851E-07 (146)	
2	1.3979E-06 (147)	1.6459E-06 (147)	1.7613E-06 (159)	1.7850E-06 (159)	7.8320E-07 (146)	
3	2.0670E-06 (215)	2.0045E-06 (215)	1.7211E-06 (269)	1.6950E-06 (123)	7.0580E-07 (214)	
4	1.7547E-06 (313)	1.9608E-06 (313)	1.6609E-06 (173)	1.4922E-06 (173)	5.8614E-07 (178)	
5	2.7216E-06 (192)	2.8378E-06 (192)	2.8819E-06 (313)	2.4370E-06 (182)	7.4099E-07 (182)	
6	2.7888E-06 (252)	2.7054E-06 (209)	2.6377E-06 (209)	2.4946E-06 (209)	1.1059E-06 (144)	
7	3.1693E-06 (187)	3.0350E-06 (181)	2.7312E-06 (181)	2.3359E-06 (181)	9.2700E-07 (209)	
8	5.7863E-06 (181)	3.3645E-06 (181)	2.8916E-06 (181)	2.4320E-06 (253)	8.0263E-07 (253)	
9	5.0911E-06 (132)	3.2181E-06 (132)	3.0471E-06 (152)	2.5058E-06 (152)	9.9663E-07 (253)	
10	2.2008E-06 (132)	2.3696E-06 (140)	2.3796E-06 (132)	2.1313E-06 (132)	1.0017E-06 (169)	
11	1.8422E-06 (169)	1.9016E-06 (169)	1.7531E-06 (263)	1.6273E-06 (169)	9.5670E-07 (85)	
12	1.4443E-06 (100)	1.3137E-06 (259)	1.5093E-06 (124)	1.6144E-06 (138)	8.9560E-07 (98)	
13	9.9098E-07 (259)	8.2783E-07 (259)	9.8696E-07 (135)	1.1226E-06 (135)	1.3921E-06 (41)	
14	1.0140E-06 (197)	1.2026E-06 (103)	1.3450E-06 (169)	1.2777E-06 (169)	9.1849E-07 (175)	
15	9.6658E-07 (103)	1.0646E-06 (103)	1.3756E-06 (47)	1.5051E-06 (47)	7.7406E-07 (350)	
16	1.4602E-06 (356)	1.4073E-06 (119)	1.8204E-06 (356)	1.6403E-06 (356)	5.7075E-07 (342)	
17	1.0062E-06 (95)	1.1612E-06 (95)	1.2813E-06 (182)	1.2697E-06 (182)	1.0354E-06 (342)	
18	1.1125E-06 (103)	1.4431E-06 (103)	1.6865E-06 (14)	1.6691E-06 (103)	7.0623E-07 (42)	
19	1.0028E-06 (221)	1.1825E-06 (305)	1.3213E-06 (305)	1.2372E-06 (268)	7.3789E-07 (10)	
20	1.8565E-06 (183)	1.9153E-06 (183)	1.5702E-06 (183)	1.3942E-06 (305)	8.0338E-07 (24)	
21	2.5524E-06 (183)	2.6308E-06 (233)	2.4722E-06 (183)	2.5148E-06 (221)	1.1586E-06 (305)	
22	2.0028E-06 (221)	2.0302E-06 (221)	1.9378E-06 (125)	1.6698E-06 (221)	9.4514E-07 (291)	
23	2.4358E-06 (221)	2.3090E-06 (221)	2.0336E-06 (221)	1.6750E-06 (221)	1.2728E-06 (291)	
24	1.7786E-06 (120)	1.7363E-06 (191)	2.1439E-06 (59)	2.2199E-06 (59)	9.7919E-07 (276)	
25	1.9419E-06 (260)	2.2185E-06 (260)	2.5019E-06 (321)	2.4985E-06 (240)	1.0345E-06 (265)	
26	2.0074E-06 (154)	2.2310E-06 (260)	2.6219E-06 (336)	2.7854E-06 (82)	9.9193E-07 (154)	
27	1.7972E-06 (158)	1.8246E-06 (158)	1.9788E-06 (154)	1.7149E-06 (154)	1.1972E-06 (106)	
28	2.1448E-06 (239)	2.1653E-06 (239)	1.9014E-06 (286)	1.7960E-06 (158)	1.1610E-06 (105)	
29	2.0250E-06 (238)	2.3475E-06 (239)	2.2919E-06 (239)	2.3131E-06 (238)	9.5169E-07 (105)	
30	1.5311E-06 (171)	1.9207E-06 (202)	2.1824E-06 (202)	2.1778E-06 (244)	9.3101E-07 (359)	
31	1.0579E-06 (224)	1.3656E-06 (322)	1.6353E-06 (322)	1.6676E-06 (160)	9.0506E-07 (88)	
32	2.2095E-06 (217)	2.3535E-06 (157)	2.1795E-06 (322)	1.9701E-06 (322)	1.2414E-06 (21)	
33	2.6747E-06 (224)	2.5726E-06 (217)	2.1891E-06 (217)	1.7718E-06 (217)	7.5392E-07 (70)	
34	1.8005E-06 (202)	2.0475E-06 (202)	1.9932E-06 (202)	1.7093E-06 (202)	6.9882E-07 (213)	
35	1.6414E-06 (177)	1.8094E-06 (177)	1.6675E-06 (177)	1.4080E-06 (164)	1.1052E-06 (93)	
36	1.9159E-06 (160)	1.7965E-06 (163)	1.5330E-06 (194)	1.4976E-06 (194)	7.5709E-07 (73)	

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PLATE NUMBER FPC LR 101 YR 1974

PELLENTS TSP EMISSION UNITS GM/SEC AIR QUALITY UNITS GM/M³/A3

YEARLY SECOND MAXIMUM 24-HOUR CONC = 5.88417E-06 DIRECTION = 20 DISTANCE = 4.0 KM DAY=286

1974

SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTION

RANGE	2.0 KM	3.0 KM	4.0 KM	5.0 KM	20.0 KM
1	1.7478E-06 (247)	1.6653E-06 (161)	1.3771E-06 (228)	1.1811E-06 (228)	8.5412E-07 (175)
2	1.2980E-06 (127)	1.6711E-06 (127)	1.8615E-06 (127)	1.5739E-06 (207)	7.5044E-07 (30)
3	1.6922E-06 (152)	1.5883E-06 (166)	1.4394E-06 (207)	1.1924E-06 (103)	6.7527E-07 (80)
4	1.6397E-06 (229)	1.7330E-06 (158)	1.9853E-06 (90)	1.9346E-06 (90)	7.1188E-07 (229)
5	1.9186E-06 (234)	1.6911E-06 (234)	1.9333E-06 (157)	1.6703E-06 (229)	5.5924E-07 (163)
6	2.6372E-06 (200)	2.6126E-06 (129)	2.1694E-06 (129)	1.6775E-06 (129)	8.1008E-07 (89)
7	2.3849E-06 (200)	2.4891E-06 (200)	2.2392E-06 (200)	1.9302E-06 (7)	8.5641E-07 (190)
8	2.3298E-06 (168)	2.4763E-06 (196)	2.0957E-06 (196)	2.1000E-06 (148)	6.0393E-07 (168)
9	2.9271E-06 (231)	3.5491E-06 (173)	3.8256E-06 (230)	3.6685E-06 (230)	1.3228E-06 (192)
10	1.9569E-06 (121)	2.4764E-06 (231)	2.7850E-06 (231)	2.4884E-06 (231)	8.5111E-07 (202)
11	1.7679E-06 (167)	1.8406E-06 (200)	1.9799E-06 (200)	1.7899E-06 (200)	7.3947E-07 (72)
12	1.7654E-06 (211)	1.3077E-06 (200)	1.6631E-06 (200)	1.5990E-06 (200)	7.1508E-07 (53)
13	1.1322E-06 (167)	1.1598E-06 (211)	8.9542E-07 (211)	8.2994E-07 (222)	7.6797E-07 (39)
14	8.0695E-07 (211)	7.0677E-07 (211)	7.6699E-07 (222)	8.2584E-07 (222)	1.0567E-06 (40)
15	6.2759E-07 (128)	8.0040E-07 (99)	8.2387E-07 (364)	8.3314E-07 (197)	9.9103E-07 (96)
16	1.1039E-06 (338)	1.4226E-06 (338)	1.6955E-06 (338)	1.6910E-06 (338)	8.9225E-07 (326)
17	1.1054E-06 (282)	1.3230E-06 (282)	1.2216E-06 (282)	1.0286E-06 (317)	6.3585E-07 (280)
18	1.5691E-06 (311)	1.5339E-06 (108)	1.4833E-06 (332)	1.4639E-06 (332)	1.0673E-06 (279)
19	9.2330E-07 (311)	1.2286E-06 (311)	1.2038E-06 (121)	1.2273E-06 (332)	8.2145E-07 (311)
20	1.1828E-06 (311)	1.3896E-06 (311)	1.6058E-06 (281)	1.5633E-06 (281)	8.7957E-07 (279)
21	1.3175E-06 (264)	1.5045E-06 (264)	1.8230E-06 (264)	1.8218E-06 (265)	1.0592E-06 (274)
22	1.5311E-06 (171)	1.5818E-06 (171)	1.5369E-06 (169)	1.4923E-06 (344)	1.4254E-06 (276)
23	1.4978E-06 (233)	1.7983E-06 (306)	2.1245E-06 (298)	2.0399E-06 (306)	9.0751E-07 (266)
24	1.7510E-06 (306)	2.5682E-06 (284)	3.8417E-06 (286)	3.6086E-06 (286)	1.3274E-06 (348)
25	2.1644E-06 (286)	2.5614E-06 (307)	2.5849E-06 (305)	2.3613E-06 (110)	1.0118E-06 (73)
26	2.6621E-06 (305)	2.9924E-06 (110)	2.7146E-06 (110)	2.3521E-06 (110)	7.7158E-07 (306)
27	2.9026E-06 (110)	3.0018E-06 (110)	2.6634E-06 (110)	2.3305E-06 (116)	1.0434E-06 (171)
28	2.0356E-06 (172)	2.0587E-06 (172)	2.1352E-06 (236)	1.8782E-06 (2)	1.2018E-06 (2)
29	1.7742E-06 (240)	1.7034E-06 (240)	1.7644E-06 (225)	1.8272E-06 (221)	1.3532E-06 (357)
30	1.6012E-06 (243)	1.6935E-06 (67)	1.8837E-06 (237)	1.7131E-06 (67)	6.7183E-07 (334)
31	1.7806E-06 (136)	2.0928E-06 (237)	2.1358E-06 (219)	2.2459E-06 (219)	1.1302E-06 (134)
32	2.1710E-06 (187)	2.0309E-06 (187)	2.5004E-06 (241)	2.0995E-06 (241)	6.8162E-07 (187)
33	2.2110E-06 (97)	2.0886E-06 (221)	1.8710E-06 (159)	1.7152E-06 (159)	7.7137E-07 (220)
34	1.8245E-06 (199)	1.9745E-06 (199)	1.8148E-06 (236)	1.5684E-06 (236)	8.0114E-07 (50)
35	1.2876E-06 (242)	1.9464E-06 (159)	1.4446E-06 (221)	1.3202E-06 (164)	5.9424E-07 (94)
36	1.5129E-06 (161)	1.6127E-06 (221)	1.4773E-06 (210)	1.5138E-06 (210)	1.0904E-06 (341)

Best Available Copy

PLANT NAME: FPC OR FLY ASH

POLLUTANTS

TSP

EMISSION UNITS: GM/SEC.

AIR QUALITY UNITS: GR/M**3

YEARLY SECOND MAXIMUM 24-HOUR CONC: 3.3202E-06 DIRECTION: 27 DISTANCE: 3.0 KM DAY=248

1975

SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTOR

RHR	RANGE	2.5 KM	3.0 KM	4.0 KM	5.0 KM	20.0 KM
1	1.9046E-06 (99)	1.7776E-06 (120)	1.4055E-06 (66)	1.3678E-06 (66)	9.0357E-07 (290)	
2	1.8105E-06 (66)	2.4052E-06 (92)	2.1068E-06 (91)	2.1100E-06 (19)	1.0581E-06 (19)	
3	1.7316E-06 (122)	2.0692E-06 (118)	2.4210E-06 (118)	2.2293E-06 (118)	7.4838E-07 (24)	
4	2.1507E-06 (122)	2.1175E-06 (127)	2.0475E-06 (24)	2.0425E-06 (24)	6.6796E-07 (24)	
5	1.9762E-06 (132)	2.4290E-06 (137)	2.5166E-06 (161)	2.0511E-06 (161)	7.1336E-07 (186)	
6	2.2283E-06 (181)	2.0911E-06 (181)	1.7351E-06 (146)	1.4945E-06 (205)	5.4642E-07 (191)	
7	2.4589E-06 (178)	2.8104E-06 (178)	2.2832E-06 (178)	1.8199E-06 (80)	5.5972E-07 (124)	
8	2.4908E-06 (115)	2.8801E-06 (185)	2.4886E-06 (185)	2.0239E-06 (185)	5.8850E-07 (124)	
9	3.1027E-06 (179)	3.2827E-06 (179)	3.0253E-06 (189)	2.8264E-06 (189)	9.5132E-07 (158)	
10	2.45357E-06 (166)	2.4597E-06 (179)	2.0881E-06 (156)	1.7856E-06 (166)	6.3345E-07 (155)	
11	1.5751E-06 (140)	1.5788E-06 (140)	1.5105E-06 (170)	1.4889E-06 (170)	6.7859E-07 (162)	
12	1.0111E-06 (231)	1.1073E-06 (231)	1.1028E-06 (224)	1.2468E-06 (224)	5.8397E-07 (336)	
13	1.5784E-06 (244)	2.0455E-06 (226)	1.8607E-06 (230)	1.8253E-06 (230)	8.2712E-07 (256)	
14	1.2993E-06 (328)	1.0664E-06 (328)	1.7077E-06 (244)	1.4818E-06 (244)	6.1527E-07 (55)	
15	1.3115E-06 (240)	1.3126E-06 (177)	1.0222E-06 (177)	1.1008E-06 (244)	8.5812E-07 (317)	
16	1.27326E-06 (95)	1.4229E-06 (95)	1.4074E-06 (244)	1.1978E-06 (244)	8.3568E-07 (352)	
17	9.8383E-07 (144)	1.2341E-06 (105)	1.5152E-06 (105)	1.4411E-06 (105)	8.3285E-07 (270)	
18	8.8263E-07 (95)	1.0302E-06 (326)	1.2171E-06 (96)	1.2055E-06 (361)	9.3795E-07 (327)	
19	8.7070E-07 (94)	9.3920E-07 (94)	7.6464E-07 (300)	7.1167E-07 (300)	5.8037E-07 (14)	
20	1.2769E-06 (206)	1.5154E-06 (293)	1.5274E-06 (106)	1.4137E-06 (94)	1.0936E-06 (64)	
21	1.3934E-06 (64)	1.5714E-06 (106)	1.9672E-06 (303)	1.9599E-06 (64)	8.1253E-07 (303)	
22	1.6014E-06 (141)	2.0541E-06 (176)	2.1234E-06 (176)	2.1330E-06 (176)	9.2781E-07 (302)	
23	1.2290E-06 (181)	1.7350E-06 (175)	2.0578E-06 (175)	1.9572E-06 (175)	8.9750E-07 (85)	
24	1.3155E-06 (207)	1.3565E-06 (102)	1.4936E-06 (285)	1.5760E-06 (285)	7.8730E-07 (17)	
25	1.4813E-06 (250)	1.8450E-06 (97)	1.9079E-06 (142)	1.9154E-06 (142)	8.3640E-07 (182)	
26	2.3275E-06 (116)	2.4100E-06 (74)	2.9066E-06 (247)	2.4760E-06 (247)	8.7568E-07 (345)	
27	3.0161E-06 (208)	3.3202E-06 (248)	3.2018E-06 (248)	2.9586E-06 (345)	1.5012E-06 (86)	
28	2.1071E-06 (248)	2.3502E-06 (250)	2.1146E-06 (180)	1.9032E-06 (250)	1.1395E-06 (112)	
29	1.8603E-06 (250)	1.9287E-06 (250)	1.7482E-06 (251)	1.6268E-06 (251)	1.0904E-06 (313)	
30	1.9255E-06 (219)	2.1515E-06 (219)	2.2409E-06 (217)	1.9072E-06 (143)	1.1263E-06 (263)	
31	1.4436E-06 (114)	1.3493E-06 (114)	1.4097E-06 (222)	1.5621E-06 (222)	7.9321E-07 (289)	
32	1.77412E-06 (258)	1.8051E-06 (258)	2.0364E-06 (108)	2.0785E-06 (108)	7.6584E-07 (290)	
33	1.8761E-06 (242)	1.8457E-06 (242)	1.8987E-06 (216)	1.7573E-06 (198)	1.0313E-06 (11)	
34	1.77923E-06 (216)	1.9976E-06 (216)	1.8301E-06 (216)	1.4975E-06 (216)	6.6298E-07 (209)	
35	1.45579E-06 (147)	1.4512E-06 (147)	1.4739E-06 (169)	1.4175E-06 (334)	6.1762E-07 (209)	
36	1.3125E-06 (120)	1.2766E-06 (205)	1.0408E-06 (331)	1.6138E-06 (201)	1.1806E-06 (351)	

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RING DISTANCES (KM) = 0.20 0.50 1.00 1.50 2.00

STACK # T-10CR495, ESP, 198013

STACK	HIGHTE	EMISSION RATE (GM/S/SEC)	HEIGHT (METERS)	DIAMETER (METERS)	EXIT VELOCITY (M/SEC)	TEMP (DEG.K)	VOLUMETRIC FLOW (MAA3/SEC)
1	ALL	168.1300	182.90	6.86	27.40	400,00	1012.72

Best Available Copy

PLANT NAME: FPC CR FLY ASH

POLLUTANT: TSP EMISSION UNITS: GM/SEC AIR QUALITY UNITS: GM/M**3

YEARLY SECOND MAXIMUM 24-HOUR CONC= 3.0318E-06 DIRECTION= 28 DISTANCE= 1.5 KM DAY=240

1971

SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTOR

RANGE	0.2 KM	0.5 KM	1.0 KM	1.5 KM	2.0 KM
1	9.1666E-31 (228)	2.8706E-18 (238)	3.8538E-07 (236)	7.1784E-07 (236)	8.5023E-07 (236)
2	8.3333E-31 (113)	1.8212E-17 (238)	4.8067E-07 (234)	1.7483E-06 (236)	1.6391E-06 (236)
3	7.9166E-31 (228)	6.3664E-17 (238)	1.0258E-06 (236)	2.0227E-06 (236)	1.7268E-06 (236)
4	7.5000E-31 (111)	1.2282E-16 (238)	2.0965E-06 (238)	2.6863E-06 (238)	2.0681E-06 (238)
5	7.9166E-31 (112)	1.2343E-16 (234)	2.2583E-06 (238)	2.9096E-06 (238)	2.2508E-06 (238)
6	1.0000E-30 (114)	5.3589E-17 (234)	1.3031E-06 (238)	1.5544E-06 (238)	1.4475E-06 (206)
7	1.0417E-30 (167)	1.2820E-17 (234)	8.4284E-07 (238)	9.5634E-07 (238)	1.5855E-06 (103)
8	1.0417E-30 (167)	4.6491E-17 (159)	8.9474E-07 (230)	1.6905E-06 (230)	1.5810E-06 (238)
9	1.0000E-30 (166)	1.1317E-16 (159)	3.6053E-07 (230)	6.8688E-07 (230)	1.5950E-06 (128)
10	9.5833E-31 (167)	9.0686E-17 (159)	1.0454E-07 (257)	5.2098E-07 (257)	9.3778E-07 (204)
11	9.5833E-31 (44)	2.4908E-17 (159)	2.9817E-07 (257)	3.6989E-07 (238)	9.0519E-07 (197)
12	1.0417E-30 (165)	8.5511E-18 (230)	1.0049E-07 (159)	3.3637E-07 (198)	1.4685E-06 (198)
13	1.0417E-30 (123)	6.1222E-18 (262)	2.9817E-07 (257)	5.8807E-07 (159)	1.0791E-06 (198)
14	1.0000E-30 (79)	3.2481E-17 (262)	2.5651E-07 (262)	5.0720E-07 (257)	4.0897E-07 (257)
15	9.5833E-31 (40)	7.6862E-17 (159)	9.0317E-07 (262)	1.1729E-06 (262)	8.8089E-07 (262)
16	9.1666E-31 (19)	5.0644E-17 (159)	9.3789E-07 (159)	1.0765E-06 (159)	8.1890E-07 (159)
17	9.1666E-31 (67)	1.8387E-17 (159)	2.8566E-07 (159)	2.9025E-07 (159)	4.1644E-07 (164)
18	8.3333E-31 (20)	3.6785E-18 (159)	9.2035E-08 (263)	1.3538E-07 (173)	5.3602E-07 (262)
19	8.3333E-31 (41)	4.0550E-19 (159)	1.2747E-07 (262)	1.5178E-07 (98)	5.2488E-07 (98)
20	9.1666E-31 (308)	2.0631E-20 (159)	1.3600E-08 (262)	1.1753E-07 (98)	4.0822E-07 (98)
21	1.0000E-30 (329)	2.7866E-21 (263)	7.2105E-10 (262)	8.6255E-08 (137)	6.0184E-07 (137)
22	1.0000E-30 (292)	2.0685E-21 (263)	2.4468E-09 (164)	2.1169E-07 (164)	6.6262E-07 (164)
23	1.0417E-30 (356)	8.4609E-22 (263)	3.0078E-09 (164)	3.0488E-07 (164)	9.1130E-07 (156)
24	1.0417E-30 (269)	3.3473E-19 (231)	4.0555E-08 (240)	1.5625E-07 (160)	6.8252E-07 (90)
25	1.0417E-30 (321)	3.8539E-18 (231)	4.0794E-08 (152)	1.9067E-07 (152)	3.8429E-07 (90)
26	1.0417E-30 (322)	2.4450E-17 (231)	2.8939E-07 (231)	9.6257E-07 (152)	8.2644E-07 (156)
27	1.0417E-30 (322)	8.5471E-17 (231)	1.2562E-06 (231)	2.2478E-06 (152)	1.9644E-06 (152)
28	1.0000E-30 (94)	1.3138E-16 (240)	2.6933E-06 (240)	3.0318E-06 (240)	2.3402E-06 (240)
29	9.5833E-31 (305)	7.2393E-17 (240)	1.3384E-06 (240)	1.4024E-06 (240)	1.0225E-06 (240)
30	1.0000E-30 (143)	2.1980E-17 (240)	3.3049E-07 (240)	3.0005E-07 (240)	9.4515E-07 (138)
31	1.0000E-30 (348)	3.6774E-18 (240)	4.0555E-08 (240)	2.3415E-07 (218)	6.1736E-07 (236)
32	8.7500E-31 (348)	3.3901E-19 (240)	3.6940E-09 (218)	1.1507E-07 (105)	7.4409E-07 (230)
33	7.9166E-31 (59)	2.0996E-22 (218)	2.8135E-09 (218)	7.4783E-08 (145)	5.8153E-07 (230)
34	8.3333E-31 (58)	3.1693E-22 (260)	1.8055E-09 (211)	2.1019E-07 (218)	6.5338E-07 (259)
35	9.1666E-31 (58)	3.5421E-22 (260)	8.8291E-09 (236)	3.4963E-07 (211)	1.2096E-06 (211)
36	1.0000E-30 (228)	2.4932E-19 (238)	8.2747E-08 (236)	2.4554E-07 (229)	1.0622E-06 (229)

Best Available Copy

PLANT NAME: FPC CR FLY ASH

POLLUTANTS: TSP

EMISSION UNITS: GM/SEC

AIR QUALITY UNITS: GM/M**3

YEARLY SECOND MAXIMUM 24-HOUR CONC= 2.7416E-06 DIRECTION= 9 DISTANCE= 1.5 KM DAY=222

1972

SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTOR

DTP	RANGE	0.2 KM	0.5 KM	1.0 KM	1.5 KM	2.0 KM
1	8.5333E-31 (-76)	3.7516E-21 (171)	2.6472E-09 (211)	1.6228E-07 (136)	5.3138E-07 (111)	
2	8.3333E-31 (-76)	3.3022E-19 (229)	2.9842E-09 (215)	1.5999E-07 (111)	6.3493E-07 (110)	
3	7.9166E-31 (-104)	3.8020E-18 (229)	4.5634E-08 (215)	2.8984E-07 (110)	7.1284E-07 (135)	
4	8.3333E-31 (-89)	2.4120E-17 (229)	3.4677E-07 (215)	3.4646E-07 (215)	7.9772E-07 (102)	
5	8.7500E-31 (-104)	8.4320E-17 (229)	1.0963E-06 (241)	1.0992E-06 (215)	1.2815E-06 (211)	
6	1.0417E-30 (-177)	1.6242E-16 (229)	1.4366E-06 (229)	1.8447E-06 (229)	1.4628E-06 (229)	
7	1.0417E-30 (-174)	1.7240E-16 (229)	1.6120E-06 (238)	2.0265E-06 (229)	1.6977E-06 (229)	
8	1.0417E-30 (-170)	1.2265E-16 (207)	1.1404E-06 (222)	1.8732E-06 (207)	1.6120E-06 (207)	
9	1.0417E-30 (-174)	1.3016E-16 (207)	1.5192E-06 (207)	2.7416E-06 (222)	2.1662E-06 (222)	
10	1.0417E-30 (-175)	7.6128E-17 (207)	1.4216E-06 (150)	1.8459E-06 (189)	1.6724E-06 (183)	
11	1.0417E-30 (-175)	3.9783E-17 (150)	6.3424E-07 (222)	7.9048E-07 (189)	8.2802E-07 (248)	
12	9.5833E-31 (-400)	1.2079E-17 (150)	1.3342E-07 (222)	1.5658E-07 (189)	2.8782E-07 (248)	
13	1.0000E-30 (-44)	2.0209E-18 (150)	1.3603E-08 (222)	5.1297E-08 (289)	2.8541E-07 (289)	
14	1.0417E-30 (-50)	2.7164E-19 (222)	1.3051E-09 (150)	5.9946E-08 (282)	3.7190E-07 (282)	
15	1.0000E-30 (-50)	3.3144E-19 (189)	7.2813E-10 (189)	3.4250E-08 (282)	2.3547E-07 (240)	
16	9.5833E-31 (-50)	4.0504E-18 (189)	1.3733E-08 (189)	1.4559E-07 (263)	2.0284E-07 (240)	
17	9.5833E-31 (-320)	2.7274E-17 (189)	1.2881E-07 (189)	2.4877E-07 (263)	5.7174E-07 (247)	
18	1.0000E-30 (-35)	1.0120E-16 (189)	6.0193E-07 (189)	5.1387E-07 (189)	8.5188E-07 (263)	
19	1.0000E-30 (-35)	1.8809E-16 (247)	1.2406E-06 (247)	1.1208E-06 (247)	6.8699E-07 (247)	
20	9.1666E-31 (-35)	1.5446E-16 (163)	1.1531E-06 (163)	1.3259E-06 (163)	1.0199E-06 (163)	
21	9.5833E-31 (-16)	1.4471E-16 (189)	1.6112E-06 (189)	1.9221E-06 (189)	1.5429E-06 (163)	
22	1.0417E-30 (-42)	9.9504E-17 (189)	1.1531E-06 (163)	1.3259E-06 (163)	1.0199E-06 (163)	
23	1.0417E-30 (-117)	2.4120E-17 (248)	8.6303E-07 (186)	1.5087E-06 (189)	1.3419E-06 (158)	
24	1.0417E-30 (-42)	1.4239E-17 (163)	1.5130E-06 (186)	1.9930E-06 (247)	1.3039E-06 (247)	
25	1.0417E-30 (-117)	1.7684E-18 (163)	1.4304E-06 (248)	2.2130E-06 (186)	1.7062E-06 (186)	
26	1.0417E-30 (-119)	1.2101E-19 (163)	1.5345E-06 (248)	2.0548E-06 (156)	1.7043E-06 (156)	
27	1.0417E-30 (-127)	3.8399E-21 (247)	7.6649E-07 (247)	1.1080E-06 (156)	8.7972E-07 (156)	
28	1.0417E-30 (-160)	1.0890E-21 (247)	1.7410E-07 (156)	2.2214E-07 (247)	6.2233E-07 (154)	
29	1.0000E-30 (-166)	1.7320E-22 (247)	2.4570E-08 (156)	1.3650E-07 (214)	6.3166E-07 (186)	
30	9.1666E-31 (-170)	2.9536E-22 (212)	1.7232E-09 (156)	1.3495E-07 (241)	3.6592E-07 (251)	
31	7.9166E-31 (-133)	4.4729E-22 (212)	3.0072E-09 (212)	2.2079E-07 (212)	6.9750E-07 (212)	
32	7.9166E-31 (-324)	5.2041E-22 (212)	2.0453E-09 (212)	1.6041E-07 (196)	6.3920E-07 (196)	
33	7.9166E-31 (-324)	7.5081E-23 (212)	9.3792E-10 (196)	1.5947E-07 (196)	6.2153E-07 (196)	
34	8.3333E-31 (-13)	8.0862E-24 (136)	5.4005E-10 (186)	8.2570E-08 (186)	4.0766E-07 (314)	
35	9.1666E-31 (-13)	1.7833E-22 (171)	7.3105E-10 (136)	5.7682E-08 (87)	3.2149E-07 (139)	
36	8.3333E-31 (-76)	1.8201E-22 (136)	2.3186E-09 (136)	9.1074E-08 (211)	5.0462E-07 (87)	

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PLANT NAME: FPC OF FLY ASH

POLLUTANT: TSP EMISSION UNITS: GM/SFC AIR QUALITY UNITS: GM/FAA3

YEARLY SECOND MAXIMUM 24-HOUR CONC= 2.8391E-06 DIRECTIONS= 6 DISTANCE= 1.5 KM DAY=222

1973

SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTOR

RANGE	0.2 KM	0.5 KM	1.0 KM	1.5 KM	2.0 KM
1	8.5333E-31 (115)	2.7692E-17 (236)	7.9569E-07 (163)	1.2794E-06 (199)	9.7374E-07 (199)
2	7.5000E-31 (349)	7.1861E-17 (236)	1.0380E-06 (236)	1.3496E-06 (236)	1.3560E-06 (199)
3	7.6166E-31 (210)	1.0275E-16 (236)	1.0787E-06 (199)	1.6278E-06 (173)	1.6941E-06 (236)
4	9.5833E-31 (210)	8.0304E-17 (192)	1.1939E-06 (236)	2.5857E-06 (173)	2.1056E-06 (173)
5	9.1666E-31 (210)	1.0724E-16 (222)	1.5603E-06 (192)	2.4399E-06 (192)	2.3484E-06 (192)
6	8.7500E-31 (210)	1.3611E-16 (222)	1.9822E-06 (222)	2.8391E-06 (222)	2.2169E-06 (222)
7	8.7500E-31 (180)	9.5193E-17 (222)	1.3037E-06 (222)	1.8417E-06 (222)	1.8209E-06 (187)
8	9.1666E-31 (141)	3.6684E-17 (222)	4.2826E-07 (222)	7.1990E-07 (222)	1.8495E-06 (181)
9	9.5833E-31 (168)	1.0752E-17 (259)	8.9721E-08 (259)	4.3641E-07 (132)	1.6850E-06 (132)
10	9.5833E-31 (85)	1.3202E-17 (218)	5.1478E-07 (259)	6.7702E-07 (259)	1.1219E-06 (132)
11	9.5833E-31 (85)	1.8076E-18 (218)	1.6313E-07 (218)	2.7813E-07 (218)	1.0108E-06 (208)
12	9.5833E-31 (29)	1.4251E-19 (218)	2.0589E-08 (218)	1.8601E-07 (143)	5.5967E-07 (143)
13	1.0000E-30 (29)	2.1411E-19 (119)	2.2317E-08 (119)	8.4093E-08 (197)	3.4974E-07 (103)
14	9.5833E-31 (34)	1.7240E-18 (119)	1.9110E-07 (119)	3.0153E-07 (119)	5.6187E-07 (197)
15	9.1666E-31 (29)	8.5511E-18 (238)	8.9592E-08 (259)	1.0961E-07 (138)	3.3714E-07 (138)
16	8.7500E-31 (41)	1.0701E-17 (119)	2.9867E-07 (238)	2.5120E-07 (238)	5.6617E-07 (95)
17	8.7500E-31 (342)	2.5193E-17 (119)	9.8060E-07 (238)	9.3162E-07 (238)	6.6730E-07 (238)
18	1.0000E-30 (341)	1.8701E-17 (119)	1.4227E-06 (119)	1.5982E-06 (238)	1.1913E-06 (238)
19	9.1666E-31 (11)	8.9652E-18 (221)	4.5122E-07 (119)	5.5407E-07 (233)	6.9234E-07 (233)
20	9.5833E-31 (296)	4.2220E-17 (221)	5.2259E-07 (238)	4.6547E-07 (238)	7.6750E-07 (183)
21	9.5833E-31 (279)	6.9624E-17 (191)	1.0576E-06 (221)	1.3283E-06 (221)	1.3872E-06 (221)
22	1.0000E-30 (10)	1.5666E-16 (221)	1.6092E-06 (221)	2.1065E-06 (221)	1.9454E-06 (191)
23	1.0017E-30 (276)	1.2303E-16 (221)	1.2171E-06 (221)	1.6548E-06 (221)	1.8779E-06 (221)
24	1.0017E-30 (283)	5.3586E-17 (221)	4.5771E-07 (221)	6.5071E-07 (221)	1.0016E-06 (221)
25	1.0000E-30 (288)	1.2819E-17 (221)	6.9769E-07 (260)	1.3858E-06 (191)	1.3673E-06 (191)
26	1.0000E-30 (82)	1.6898E-18 (221)	2.3163E-07 (191)	3.3651E-07 (191)	9.4291E-07 (154)
27	1.0017E-30 (110)	1.2274E-19 (221)	2.4063E-08 (191)	2.8321E-07 (158)	9.7463E-07 (158)
28	1.0017E-30 (107)	5.8137E-19 (191)	3.1352E-09 (158)	3.2901E-07 (158)	1.0505E-06 (239)
29	1.0017E-30 (105)	4.5993E-22 (260)	2.8283E-08 (233)	1.3326E-07 (238)	8.0105E-07 (238)
30	1.0017E-30 (108)	3.9800E-22 (204)	1.7372E-08 (261)	1.8832E-07 (204)	5.5428E-07 (204)
31	1.0017E-30 (359)	5.3152E-22 (217)	1.4157E-07 (261)	2.6535E-07 (261)	6.2932E-07 (233)
32	9.5833E-31 (21)	1.2298E-21 (261)	5.7331E-07 (261)	1.2402E-06 (261)	1.3258E-06 (233)
33	8.7500E-31 (40)	1.8704E-19 (199)	1.1537E-06 (261)	1.5677E-06 (233)	1.4744E-06 (224)
34	9.1666E-31 (339)	2.5750E-18 (199)	6.5797E-07 (233)	6.7135E-07 (233)	1.4739E-06 (217)
35	9.5833E-31 (90)	1.9535E-17 (199)	5.7331E-07 (261)	1.2402E-06 (261)	9.1833E-07 (261)
36	9.58333E-31 (146)	5.8803E-18 (236)	4.6608E-07 (199)	4.3475E-07 (199)	1.1671E-06 (160)

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PLANT NAME: FPC CR FLY ASH

POLLUTANT: TSP EMISSION UNITS: GM/SEC AIR QUALITY UNITS: GM/M**3

YEARLY SECOND MAXIMUM 24-HOUR CONC: 2.5643E-06 DIRECTION: 11 DISTANCE: 1.5 KM DAY=211

1974

SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTOR

DIR	RANGE	0.2 KM	0.5 KM	1.0 KM	1.5 KM	2.0 KM
1	8.3333E-31 (-80)	9.1178E-17 (237)	5.3045E-07 (237)	4.9223E-07 (237)	1.0053E-06 (242)	
2	7.9166E-31 (-175)	2.3151E-17 (237)	1.0620E-07 (237)	2.5569E-07 (207)	9.7053E-07 (207)	
3	7.0833E-31 (-209)	3.6687E-17 (199)	3.4198E-07 (199)	5.7151E-07 (173)	1.0105E-06 (207)	
4	7.9166E-31 (-80)	2.3702E-17 (221)	8.8094E-07 (173)	1.0346E-06 (200)	1.1570E-06 (158)	
5	7.0833E-31 (-31)	3.5198E-18 (221)	1.3403E-06 (173)	2.4336E-06 (200)	2.0144E-06 (200)	
6	8.7500E-31 (-177)	1.5551E-17 (186)	1.1205E-06 (200)	2.3470E-06 (173)	1.9290E-06 (173)	
7	9.1666E-31 (-89)	4.6559E-17 (199)	5.8263E-07 (156)	9.5934E-07 (173)	1.1341E-06 (173)	
8	1.0017E-30 (-147)	1.1138E-17 (199)	6.7794E-07 (109)	1.2246E-06 (109)	1.0729E-06 (197)	
9	1.0000E-39 (202)	1.4682E-18 (199)	1.0314E-06 (109)	1.8114E-06 (156)	1.5275E-06 (156)	
10	9.1666E-31 (202)	1.0664E-19 (199)	8.8599E-07 (156)	2.4739E-06 (211)	2.1786E-06 (211)	
11	9.5833E-31 (-192)	5.5975E-21 (223)	6.9357E-07 (211)	2.5643E-06 (211)	2.1701E-06 (211)	
12	8.3333E-31 (-192)	4.3509E-21 (211)	9.9456E-07 (211)	1.6466E-06 (223)	1.2825E-06 (223)	
13	8.7500E-31 (-40)	5.8613E-21 (211)	2.6010E-07 (223)	3.8021E-07 (223)	5.3447E-07 (237)	
14	8.7500E-31 (-40)	4.3509E-21 (211)	4.1496E-08 (234)	6.7134E-08 (234)	1.6204E-07 (237)	
15	8.7500E-31 (-56)	1.2782E-21 (234)	2.5565E-07 (234)	4.9832E-07 (234)	3.5028E-07 (234)	
16	8.7500E-31 (-56)	3.3168E-21 (234)	4.9939E-08 (211)	7.7390E-08 (211)	4.5303E-07 (282)	
17	8.7500E-31 (-57)	7.7426E-21 (234)	5.0038E-08 (243)	6.2342E-08 (243)	3.3726E-07 (180)	
18	9.1666E-31 (-57)	7.7827E-20 (233)	2.9205E-07 (243)	4.2843E-07 (243)	5.1157E-07 (108)	
19	9.1666E-31 (311)	1.2071E-18 (233)	3.3816E-07 (234)	6.7833E-07 (234)	4.8780E-07 (234)	
20	9.1666E-31 (-57)	1.0317E-17 (233)	7.9945E-07 (196)	7.3577E-07 (196)	5.0002E-07 (114)	
21	1.0000E-39 (312)	4.8586E-17 (233)	8.3371E-07 (243)	1.3619E-06 (243)	1.0436E-06 (196)	
22	1.0000E-39 (312)	1.0655E-16 (196)	1.3010E-06 (233)	1.3634E-06 (196)	9.6072E-07 (196)	
23	1.0017E-30 (294)	5.7701E-17 (204)	1.4662E-06 (190)	2.2325E-06 (190)	1.7381E-06 (190)	
24	1.0017E-30 (286)	1.1797E-16 (204)	1.4662E-06 (190)	2.0720E-06 (233)	1.5875E-06 (233)	
25	1.0000E-30 (263)	6.1666E-17 (233)	7.2862E-07 (190)	1.0667E-06 (260)	8.9810E-07 (110)	
26	9.5833E-31 (333)	8.2506E-17 (204)	1.0050E-06 (180)	1.6118E-06 (180)	1.6778E-06 (180)	
27	1.0017E-30 (340)	1.4584E-16 (227)	1.6341E-06 (180)	2.5571E-06 (180)	2.1221E-06 (260)	
28	1.0017E-30 (140)	1.4580E-16 (227)	1.5343E-06 (172)	2.5478E-06 (227)	2.0068E-06 (227)	
29	1.0000E-30 (139)	8.0363E-17 (227)	8.8405E-07 (227)	1.5781E-06 (243)	1.2069E-06 (243)	
30	9.1666E-31 (140)	3.2494E-17 (172)	5.5861E-07 (164)	1.2080E-06 (164)	8.9891E-07 (164)	
31	8.3333E-31 (184)	9.4900E-17 (221)	9.6937E-07 (243)	1.2060E-06 (159)	1.1427E-06 (237)	
32	7.9166E-31 (334)	1.3427E-16 (221)	1.2406E-06 (97)	1.5300E-06 (159)	1.3659E-06 (97)	
33	7.9166E-31 (334)	1.7948E-16 (159)	1.4268E-06 (97)	1.6476E-06 (97)	1.6931E-06 (97)	
34	7.3000E-31 (131)	1.4233E-16 (221)	9.9538E-07 (237)	9.8664E-07 (237)	1.3570E-06 (159)	
35	9.1666E-31 (-94)	9.7915E-17 (221)	6.7101E-07 (221)	9.0120E-07 (221)	1.3057E-06 (237)	
36	9.1666E-31 (175)	1.3812E-16 (221)	9.7900E-07 (221)	1.2243E-06 (221)	1.0185E-06 (237)	

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PLANT NAME : EPC CR ELY ASE

POLLUTANT TSP EMISSION UNITS: GM/SEC AIR QUALITY UNITS: GM/M**3

YEARLY STEERING AXLE POSITION= 24-INCH CIRCLE = 0.0000E+00 DIRECTION= 7 DISTANCE= 2.0 KM /DAY ERS

1975

SECOND-HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTOR

RANK	0.2 KM		0.5 KM		1.0 KM		1.5 KM		2.0 KM	
	NO.	PPM								
1	8.7500E-31	(85)	1.7200E-16	(162)	1.6391E-06	(162)	2.3870E-06	(162)	1.8589E-06	(162)
2	7.5000E-31	(49)	1.1721E-16	(126)	1.5688E-06	(126)	2.0317E-06	(126)	1.6072E-06	(126)
3	7.9166E-31	(191)	1.0134E-16	(171)	1.3168E-06	(179)	1.4107E-06	(179)	1.2537E-06	(126)
4	8.3333E-31	(190)	1.3612E-16	(171)	1.5723E-06	(145)	1.6449E-06	(179)	1.3045E-06	(145)
5	9.5000E-31	(91)	1.0928E-16	(185)	1.1271E-06	(171)	1.2708E-06	(171)	1.4686E-06	(161)
6	9.5833E-31	(191)	1.9317E-16	(181)	1.4936E-06	(176)	2.1749E-06	(230)	1.7057E-06	(230)
7	9.5833E-31	(188)	7.4325E-17	(181)	1.1839E-06	(181)	2.3141E-06	(176)	2.4248E-06	(185)
8	9.5833E-31	(188)	2.1261E-17	(181)	8.5362E-07	(176)	1.8464E-06	(185)	2.1910E-06	(185)
9	7.5000E-31	(186)	5.0043E-18	(97)	2.2607E-07	(176)	6.7557E-07	(185)	1.2736E-06	(179)
10	7.0833E-31	(78)	5.7702E-18	(176)	7.2200E-08	(185)	2.3507E-07	(230)	1.0589E-06	(166)
11	7.9166E-31	(189)	7.9188E-19	(177)	7.1814E-09	(185)	2.3288E-07	(231)	7.4191E-07	(140)
12	7.5000E-31	(182)	6.7679E-18	(177)	7.3019E-08	(177)	2.0058E-07	(128)	6.6593E-07	(226)
13	8.7500E-31	(139)	2.6762E-17	(97)	4.4901E-07	(177)	5.4250E-07	(177)	6.2590E-07	(226)
14	8.3333E-31	(78)	9.1542E-18	(97)	2.3680E-07	(97)	2.2530E-07	(144)	5.2788E-07	(180)
15	8.7500E-31	(298)	1.7254E-18	(97)	5.7655E-07	(144)	9.7490E-07	(144)	7.5479E-07	(144)
16	8.3333E-31	(15)	1.7720E-19	(97)	1.0819E-06	(144)	1.9512E-06	(144)	1.5902E-06	(144)
17	9.5833E-31	(327)	1.0255E-20	(97)	5.9392E-07	(177)	7.2830E-07	(177)	7.3533E-07	(95)
18	9.5833E-31	(269)	2.1662E-19	(176)	2.0836E-07	(143)	3.6411E-07	(143)	5.2872E-07	(143)
19	9.1666E-31	(268)	1.2756E-18	(177)	1.0763E-07	(144)	1.5323E-07	(144)	3.8070E-07	(94)
20	9.1666E-31	(14)	9.2654E-20	(177)	1.9791E-07	(176)	2.2293E-07	(176)	7.6477E-07	(106)
21	9.5833E-31	(303)	3.1900E-21	(143)	8.5950E-07	(176)	1.1156E-06	(176)	1.0228E-06	(176)
22	9.1666E-31	(72)	1.4700E-21	(143)	3.6455E-07	(143)	6.3526E-07	(143)	6.7493E-07	(143)
23	1.0000E-30	(362)	8.3512E-22	(116)	2.3120E-07	(116)	3.9394E-07	(116)	6.2728E-07	(181)
24	1.0017E-30	(304)	2.1701E-19	(217)	9.6738E-07	(116)	1.3776E-06	(176)	1.1727E-06	(236)
25	1.0000E-30	(17)	2.8149E-18	(217)	2.8075E-07	(176)	3.1836E-07	(176)	9.3920E-07	(250)
26	1.0000E-30	(182)	3.7852E-18	(176)	1.0541E-07	(217)	2.9232E-07	(250)	1.0747E-06	(247)
27	1.0017E-30	(115)	4.4239E-17	(219)	5.2652E-07	(217)	5.0542E-07	(217)	1.3418E-06	(247)
28	1.0017E-30	(208)	6.3177E-17	(219)	4.0422E-07	(219)	5.0979E-07	(143)	1.0919E-06	(217)
29	1.0017E-30	(315)	1.5446E-16	(219)	1.1539E-06	(219)	1.3704E-06	(219)	1.0942E-06	(219)
30	1.0000E-30	(264)	1.3548E-16	(217)	1.1335E-06	(143)	1.8351E-06	(143)	1.7142E-06	(219)
31	8.7500E-31	(364)	1.0134E-16	(242)	1.1539E-06	(219)	1.5735E-06	(143)	1.2867E-06	(143)
32	9.1666E-31	(364)	6.3177E-17	(219)	4.2585E-07	(143)	6.6214E-07	(143)	8.0668E-07	(114)
33	1.0000E-30	(12)	1.4239E-17	(219)	9.1520E-08	(143)	2.5616E-07	(114)	1.0488E-06	(114)
34	1.0000E-30	(266)	2.4120E-17	(162)	1.6307E-07	(162)	2.6722E-07	(114)	8.0288E-07	(260)
35	9.5833E-31	(83)	7.9187E-17	(218)	3.6521E-07	(218)	4.4285E-07	(218)	6.2971E-07	(161)
36	1.0000E-30	(50)	1.3548E-16	(218)	1.1990E-06	(218)	1.6203E-06	(218)	1.2133E-06	(218)

Best Available Copy

RING DISTANCES (KMS) = 2.50 3.00 4.00 5.00 20.00

STACK #: 1-007485, ISP, 198018

STACK	MONTH	EMISSION RATE (GM/H/SEC)	HEIGHT (METERS)	DIAMETER (METERS)	EXIT VELOCITY (M/SEC)	TEMP (DEG.K)	VOLUMETRIC FLOW (M**3/SEC)
1	AUG	168,1300	182.70	6.86	27.40	400.00	1012.72

Best Available Copy

PLANT NAME: FPC CR FLY ASH

POLLUTANT: TSP EMISSION UNITS: GM/SEC AIR QUALITY UNITS: GM/H**3

YEARLY SECOND MAXIMUM 24-HOUR CONC: 3.2882E-06 DIRECTIONS: 9 DISTANCE: 4.0 KM DAY=128

RANGE DTP	SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTOR				
	2.5 KM	3.0 KM	4.0 KM	5.0 KM	20.0 KM
1	1.1794E-06 (236)	1.4214E-06 (229)	1.5076E-06 (260)	1.2414E-06 (260)	7.4786E-07 (239)
2	1.4253E-06 (260)	1.3042E-06 (113)	1.7802E-06 (113)	1.8120E-06 (113)	1.0205E-06 (113)
3	1.5619E-06 (236)	1.8936E-06 (234)	1.6685E-06 (205)	1.6819E-06 (205)	5.9008E-07 (354)
4	1.6872E-06 (238)	1.4286E-06 (238)	1.5439E-06 (205)	1.6801E-06 (205)	5.7322E-07 (205)
5	1.8441E-06 (238)	1.6462E-06 (200)	1.6477E-06 (288)	1.4830E-06 (288)	6.2474E-07 (178)
6	1.7406E-06 (234)	1.7092E-06 (206)	1.8119E-06 (159)	1.5878E-06 (206)	7.7650E-07 (175)
7	1.6798E-06 (230)	1.7995E-06 (179)	1.8394E-06 (207)	1.6121E-06 (103)	7.1266E-07 (114)
8	1.5965E-06 (179)	1.7856E-06 (179)	1.7463E-06 (139)	1.7175E-06 (257)	5.9357E-07 (344)
9	2.6900E-06 (220)	3.0414E-06 (128)	3.2882E-06 (128)	3.0620E-06 (128)	1.3875E-06 (166)
10	1.6799E-06 (220)	2.0524E-06 (204)	2.3243E-06 (220)	2.1473E-06 (220)	9.1013E-07 (165)
11	1.2089E-06 (198)	1.3308E-06 (198)	1.3060E-06 (196)	1.5173E-06 (196)	7.4923E-07 (96)
12	1.7641E-06 (257)	1.5051E-06 (257)	1.8255E-06 (136)	2.0005E-06 (198)	9.3626E-07 (123)
13	1.1383E-06 (257)	9.5758E-07 (159)	1.1605E-06 (123)	1.2627E-06 (136)	5.6250E-07 (97)
14	8.0405E-07 (104)	8.9709E-07 (159)	1.0492E-06 (222)	1.1503E-06 (222)	6.3679E-07 (63)
15	1.2057E-06 (159)	1.0280E-06 (159)	1.1310E-06 (121)	1.2394E-06 (221)	7.6273E-07 (121)
16	1.1267E-06 (121)	1.1946E-06 (262)	1.1611E-06 (169)	1.1814E-06 (124)	7.1220E-07 (121)
17	7.2701E-07 (317)	9.9417E-07 (262)	9.4092E-07 (99)	9.2900E-07 (316)	5.1393E-07 (67)
18	7.2720E-07 (164)	8.9358E-07 (173)	1.3235E-06 (316)	1.4106E-06 (124)	5.0969E-07 (316)
19	6.9325E-07 (257)	8.1489E-07 (99)	8.8585E-07 (316)	1.0712E-06 (316)	5.9295E-07 (67)
20	6.1094E-07 (46)	8.1428E-07 (46)	9.4555E-07 (46)	8.8898E-07 (46)	4.7523E-07 (19)
21	1.1900E-06 (137)	1.4969E-06 (137)	1.4882E-06 (137)	1.3567E-06 (326)	7.1670E-07 (356)
22	1.0484E-06 (473)	1.4455E-06 (263)	1.6933E-06 (142)	1.7031E-06 (47)	7.3159E-07 (358)
23	1.4544E-06 (164)	1.5732E-06 (68)	1.7094E-06 (68)	1.5938E-06 (156)	1.1136E-06 (292)
24	1.2832E-06 (90)	1.7797E-06 (90)	2.2331E-06 (90)	2.0452E-06 (156)	8.9077E-07 (352)
25	7.3392E-07 (90)	1.0533E-06 (90)	1.4204E-06 (90)	1.4665E-06 (90)	6.6166E-07 (93)
26	7.9709E-07 (240)	9.3804E-07 (101)	1.1245E-06 (267)	1.3926E-06 (267)	8.5306E-07 (33)
27	1.7648E-06 (101)	1.7241E-06 (231)	2.1367E-06 (190)	2.3739E-06 (190)	9.9719E-07 (190)
28	1.9143E-06 (240)	1.6436E-06 (101)	2.0662E-06 (101)	2.1007E-06 (101)	7.6051E-07 (244)
29	1.2853E-06 (138)	1.4727E-06 (138)	1.4412E-06 (247)	1.7915E-06 (247)	8.1850E-07 (231)
30	1.2513E-06 (182)	1.6144E-06 (182)	1.7768E-06 (182)	1.6552E-06 (182)	9.0931E-07 (138)
31	8.4712E-07 (236)	8.7710E-07 (236)	1.1744E-06 (250)	1.1930E-06 (243)	6.0143E-07 (242)
32	1.2332E-06 (218)	1.5931E-06 (2)	2.0694E-06 (2)	2.0147E-06 (2)	6.4450E-07 (2)
33	1.0283E-06 (218)	1.2017E-06 (362)	1.7907E-06 (91)	1.8186E-06 (363)	8.8432E-07 (185)
34	1.1030E-06 (218)	1.2107E-06 (218)	2.0158E-06 (187)	2.2341E-06 (259)	6.3942E-07 (259)
35	1.7899E-06 (211)	1.9919E-06 (211)	1.8662E-06 (211)	1.6095E-06 (229)	4.5683E-07 (229)
36	1.8108E-06 (279)	2.2664E-06 (229)	2.2272E-06 (260)	1.9182E-06 (260)	7.1122E-07 (179)

Best Available Copy

PLANT NAME: FPC CR FLY ASH

POLLUTANT:

TSP

EMISSION UNITS: GM/SEC

AIR QUALITY UNITS: GM/MARS

YEARLY SECOND MAXIMUM 24-HOUR CONC = 3.7151E-06 DIRECTION = 9 DISTANCE = 5.0 KM DAY=207

1972

SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTOR

RANGE	2.5 KM	3.0 KM	4.0 KM	5.0 KM	20.0 KM
1	8.5881E-07 (113)	1.0229E-06 (25)	1.2132E-06 (25)	1.3433E-06 (107)	6.4217E-07 (330)
2	9.2411E-07 (111)	1.1743E-06 (110)	1.6316E-06 (57)	1.9278E-06 (57)	8.3911E-07 (341)
3	1.2242E-06 (135)	1.6635E-06 (110)	1.5814E-06 (110)	1.6209E-06 (105)	8.2808E-07 (25)
4	1.5235E-06 (150)	1.6284E-06 (150)	1.5711E-06 (150)	1.4124E-06 (269)	4.5227E-07 (210)
5	1.8629E-06 (211)	2.2452E-06 (150)	2.2569E-06 (211)	2.2317E-06 (211)	6.9063E-07 (261)
6	1.9073E-06 (211)	2.1016E-06 (211)	2.1833E-06 (210)	2.0398E-06 (261)	8.8944E-07 (85)
7	2.0172E-06 (215)	2.1740E-06 (194)	2.2122E-06 (309)	2.1762E-06 (309)	6.9084E-07 (172)
8	2.0408E-06 (248)	2.1189E-06 (195)	2.0781E-06 (220)	2.0244E-06 (220)	8.4815E-07 (172)
9	2.4913E-06 (124)	3.2556E-06 (183)	3.6057E-06 (124)	3.7151E-06 (207)	2.0840E-06 (174)
10	2.4941E-06 (242)	2.0801E-06 (242)	2.9033E-06 (242)	2.6530E-06 (181)	1.0040E-06 (178)
11	1.0660E-06 (248)	1.2913E-06 (131)	1.6123E-06 (131)	1.6121E-06 (131)	7.2899E-07 (143)
12	4.5082E-07 (143)	6.3443E-07 (112)	9.7969E-07 (231)	1.1682E-06 (231)	4.6557E-07 (49)
13	6.8805E-07 (25)	8.3206E-07 (23)	8.1233E-07 (23)	9.1695E-07 (185)	7.3712E-07 (44)
14	6.8199E-07 (289)	8.0586E-07 (289)	9.5436E-07 (102)	1.1152E-06 (249)	5.0807E-07 (102)
15	5.2247E-07 (240)	6.9380E-07 (240)	7.5784E-07 (146)	8.6635E-07 (146)	6.4568E-07 (362)
16	7.4659E-07 (240)	5.8902E-07 (240)	6.0620E-07 (240)	7.7854E-07 (322)	5.8132E-07 (362)
17	7.9162E-07 (247)	6.7459E-07 (193)	8.6738E-07 (193)	7.9533E-07 (193)	8.0757E-07 (351)
18	9.2693E-07 (247)	1.1025E-06 (193)	1.2113E-06 (326)	1.3858E-06 (193)	8.1251E-07 (320)
19	1.0540E-06 (189)	1.0916E-06 (189)	1.0507E-06 (189)	9.6778E-07 (19)	6.8216E-07 (16)
20	1.4000E-06 (252)	1.5126E-06 (189)	1.3649E-06 (189)	1.3003E-06 (336)	5.5006E-07 (260)
21	1.2698E-06 (163)	1.4664E-06 (252)	1.6051E-06 (189)	1.3684E-06 (189)	5.9305E-07 (336)
22	8.7000E-07 (282)	1.1264E-06 (282)	1.1553E-06 (282)	1.1839E-06 (288)	9.0648E-07 (66)
23	1.3270E-06 (189)	1.3608E-06 (156)	1.3210E-06 (156)	1.2701E-06 (266)	1.1413E-06 (117)
24	1.6253E-06 (158)	1.6637E-06 (186)	1.4283E-06 (156)	1.4950E-06 (288)	9.7021E-07 (294)
25	1.7113E-06 (156)	1.6023E-06 (86)	1.6245E-06 (157)	1.7520E-06 (157)	9.6695E-07 (86)
26	1.5108E-06 (156)	1.5845E-06 (257)	2.1983E-06 (257)	2.3752E-06 (257)	9.3808E-07 (265)
27	9.3980E-07 (207)	1.3221E-06 (316)	1.7822E-06 (250)	1.7069E-06 (247)	1.2680E-06 (254)
28	8.5381E-07 (154)	1.2125E-06 (339)	1.5728E-06 (230)	1.7422E-06 (330)	1.4677E-06 (121)
29	9.7710E-07 (186)	1.1635E-06 (220)	1.5545E-06 (27)	1.4307E-06 (220)	8.9666E-07 (101)
30	8.3503E-07 (226)	1.3683E-06 (228)	1.5625E-06 (241)	1.6245E-06 (345)	7.3369E-07 (347)
31	1.0334E-06 (248)	1.1931E-06 (196)	1.4149E-06 (196)	1.5942E-06 (332)	6.4523E-07 (269)
32	9.8523E-07 (196)	1.1530E-06 (307)	1.4576E-06 (61)	1.6596E-06 (307)	7.0988E-07 (301)
33	1.2441E-06 (314)	1.5753E-06 (229)	1.8271E-06 (229)	1.9242E-06 (11)	8.8000E-07 (301)
34	6.1088E-07 (248)	9.0863E-07 (54)	1.2333E-06 (54)	1.2553E-06 (54)	4.6619E-07 (90)
35	5.7959E-07 (238)	8.1428E-07 (238)	9.9514E-07 (238)	9.6257E-07 (238)	5.8616E-07 (309)
36	8.9768E-07 (136)	1.0722E-06 (136)	1.2727E-06 (64)	1.1866E-06 (136)	6.7839E-07 (14)

Best Available Copy

PLANT NAME: FPC CR FLY ASH

POLLUTANT: TSP EMISSION UNITS: GM/SEC AIR QUALITY UNITS: GM/M³

YEARLY SECOND MAXIMUM 24-HOUR CONC= 3.1215E-06 DIRECTION= 9 DISTANCE= 4.0 KM DAY=132

1973

SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTOR

RANGE	2.5 KM	3.0 KM	4.0 KM	5.0 KM	20.0 KM
1	1.1170E-06 (163)	1.0757E-06 (160)	1.3105E-06 (226)	1.2016E-06 (193)	7.6112E-07 (146)
2	1.1157E-06 (199)	1.1737E-06 (147)	1.4220E-06 (147)	1.5152E-06 (151)	6.9089E-07 (339)
3	1.6657E-06 (215)	1.8512E-06 (215)	1.7067E-06 (215)	1.5055E-06 (269)	6.4745E-07 (226)
4	1.8446E-06 (173)	1.8905E-06 (313)	1.8313E-06 (182)	1.5731E-06 (173)	6.1805E-07 (20)
5	2.4370E-06 (192)	2.5491E-06 (192)	2.5910E-06 (192)	2.4056E-06 (192)	6.4404E-07 (313)
6	2.0563E-06 (209)	2.4588E-06 (209)	2.7264E-06 (209)	2.7376E-06 (209)	9.6988E-07 (144)
7	2.6226E-06 (187)	2.8079E-06 (187)	2.5132E-06 (216)	2.2807E-06 (216)	8.7693E-07 (209)
8	2.7569E-06 (218)	2.6916E-06 (236)	2.5615E-06 (236)	2.3470E-06 (187)	9.0712E-07 (253)
9	2.7980E-06 (152)	3.0502E-06 (152)	3.1215E-06 (132)	2.7820E-06 (132)	9.6841E-07 (236)
10	1.7857E-06 (132)	2.0436E-06 (140)	2.0194E-06 (196)	2.0922E-06 (196)	8.0390E-07 (141)
11	1.4428E-06 (169)	1.6218E-06 (169)	1.7617E-06 (208)	1.6632E-06 (232)	9.0354E-07 (85)
12	7.8249E-07 (100)	1.2047E-06 (100)	1.2789E-06 (135)	1.5364E-06 (100)	6.9384E-07 (138)
13	7.1429E-07 (103)	9.9033E-07 (103)	7.5511E-07 (259)	7.3772E-07 (124)	1.1593E-06 (29)
14	8.3659E-07 (197)	9.4813E-07 (38)	1.0567E-06 (169)	1.1532E-06 (169)	7.2134E-07 (175)
15	7.6736E-07 (118)	8.6088E-07 (103)	9.0919E-07 (103)	8.7014E-07 (345)	5.5714E-07 (350)
16	9.1293E-07 (95)	1.1244E-06 (95)	1.2528E-06 (95)	1.1275E-06 (119)	4.6333E-07 (188)
17	6.7566E-07 (95)	8.5430E-07 (95)	1.0051E-06 (53)	1.1216E-06 (53)	7.1374E-07 (305)
18	1.1197E-06 (221)	1.0670E-06 (103)	1.5961E-06 (103)	1.6298E-06 (14)	5.9496E-07 (103)
19	8.1056E-07 (233)	9.5466E-07 (221)	1.1700E-06 (305)	1.2739E-06 (305)	5.8399E-07 (305)
20	1.3793E-06 (183)	1.6609E-06 (183)	1.5832E-06 (183)	1.4106E-06 (305)	6.4412E-07 (345)
21	1.8128E-06 (221)	2.2789E-06 (183)	2.3705E-06 (183)	2.5009E-06 (221)	1.0598E-06 (50)
22	2.0449E-06 (221)	2.1082E-06 (221)	2.0266E-06 (221)	1.7976E-06 (125)	7.4356E-07 (291)
23	2.2118E-06 (221)	2.3669E-06 (221)	2.2613E-06 (221)	1.9552E-06 (221)	1.0153E-06 (291)
24	1.3666E-06 (221)	1.5816E-06 (120)	1.6600E-06 (125)	1.8979E-06 (183)	8.8538E-07 (310)
25	1.3768E-06 (191)	1.7503F-06 (240)	2.1903F-06 (260)	2.3465E-06 (260)	9.7386E-07 (265)
26	1.5710E-06 (154)	1.9101F-06 (154)	2.1267E-06 (260)	2.2699E-06 (82)	9.7744E-07 (154)
27	1.5068E-06 (154)	1.6951E-06 (260)	1.6975E-06 (287)	1.8043E-06 (287)	9.4983E-07 (106)
28	1.6604E-06 (239)	1.8731E-06 (239)	1.7246E-06 (239)	1.6425E-06 (286)	9.5681E-07 (105)
29	1.5023F-06 (238)	1.8534F-06 (238)	1.8281E-06 (238)	1.9353E-06 (239)	7.4343E-07 (358)
30	1.0750E-06 (238)	1.3486E-06 (238)	1.5313F-06 (222)	1.3456E-06 (222)	8.1536E-07 (231)
31	7.9260E-07 (217)	9.3650E-07 (238)	1.2806E-06 (322)	1.4196E-06 (65)	6.3047E-07 (113)
32	1.8870F-06 (224)	2.0675F-06 (217)	1.9331E-06 (220)	1.8505E-06 (322)	9.7949E-07 (329)
33	2.1077E-06 (217)	2.5030E-06 (217)	2.4392E-06 (217)	2.0688E-06 (217)	6.1596E-07 (328)
34	1.7192F-06 (261)	1.5886E-06 (202)	1.7734E-06 (202)	1.6551E-06 (269)	6.9856E-07 (217)
35	1.5347F-06 (217)	1.7445E-06 (163)	1.6882E-06 (163)	1.4852E-06 (163)	8.4408E-07 (93)
36	1.6209E-06 (160)	1.6864E-06 (160)	1.6338E-06 (163)	1.3401E-06 (163)	6.0991E-07 (73)

Best Available Copy

PLANT NAME: FPC CR FLY ASH POLLUTANT: TSP EMISSION UNITS: GM/SEC AIR QUALITY UNITS: GM/M³

YEARLY SECOND MAXIMUM 24-HOUR CONC= 2.9703E-06 DIRECTION= 9 DISTANCE= 5.0 KM DAY=231

1974

SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTOR

DTR	RANGE	2.5 KM	3.0 KM	4.0 KM	5.0 KM	20.0 KM
1	1.4196E-06 (221)	1.3422E-06 (158)	1.4666E-06 (158)	1.2876E-06 (158)	8.2634E-07 (175)	
2	1.0736E-06 (221)	1.1723E-06 (310)	1.6598E-06 (127)	1.5996E-06 (207)	6.9497E-07 (91)	
3	1.7466E-06 (207)	1.7829E-06 (152)	1.3719E-06 (166)	1.1678E-06 (207)	6.1032E-07 (248)	
4	1.2795E-06 (229)	1.6403E-06 (158)	1.6103E-06 (90)	1.7071E-06 (229)	6.5071E-07 (80)	
5	1.7605E-06 (158)	1.7714E-06 (234)	1.5621E-06 (206)	1.6232E-06 (158)	4.8288E-07 (339)	
6	2.0802E-06 (151)	2.2724E-06 (129)	2.1431E-06 (129)	1.7636E-06 (129)	6.4513E-07 (247)	
7	1.6507E-06 (190)	1.9674E-06 (190)	1.7837E-06 (197)	1.5772E-06 (222)	8.5912E-07 (16)	
8	1.5962E-06 (197)	2.0613E-06 (140)	2.0897E-06 (161)	2.0158E-06 (163)	6.5892E-07 (163)	
9	1.6121E-06 (173)	1.9474E-06 (151)	2.7255E-06 (231)	2.9703E-06 (231)	1.1999E-06 (71)	
10	1.8122E-06 (214)	1.7430E-06 (223)	2.1249E-06 (121)	2.1165E-06 (192)	7.7347E-07 (192)	
11	1.7405E-06 (211)	1.5073E-06 (167)	1.6617E-06 (200)	1.6643E-06 (200)	6.8256E-07 (193)	
12	1.3336E-06 (167)	1.2665E-06 (211)	1.2906E-06 (200)	1.4232E-06 (200)	6.8604E-07 (167)	
13	7.9146E-07 (167)	1.0084E-06 (167)	1.0484E-06 (167)	8.9093E-07 (211)	6.1546E-07 (335)	
14	4.0247E-07 (99)	7.3070E-07 (99)	6.4386E-07 (211)	6.6970E-07 (222)	8.2110E-07 (40)	
15	4.2904E-07 (109)	5.6999E-07 (364)	7.6541E-07 (364)	8.2981E-07 (99)	7.8077E-07 (40)	
16	9.2706E-07 (282)	1.2063E-06 (282)	1.2519E-06 (282)	1.5207E-06 (291)	8.0085E-07 (338)	
17	7.4493E-07 (287)	1.1255E-06 (338)	1.1834E-06 (234)	1.0255E-06 (282)	5.6230E-07 (350)	
18	9.7030E-07 (108)	1.2044E-06 (311)	1.3504E-06 (198)	1.2594E-06 (332)	8.2888E-07 (279)	
19	8.7056E-07 (203)	8.5609E-07 (108)	1.1634E-06 (121)	1.2532E-06 (122)	6.7451E-07 (311)	
20	1.0011E-06 (273)	1.2070E-06 (282)	1.4972E-06 (273)	1.3999E-06 (273)	7.3545E-07 (279)	
21	1.1031E-06 (273)	1.3899E-06 (273)	1.4681E-06 (264)	1.5633E-06 (264)	7.9491E-07 (274)	
22	1.1615E-06 (171)	1.5791E-06 (169)	1.7424E-06 (169)	1.5421E-06 (169)	1.0823E-06 (312)	
23	1.4926E-06 (171)	1.5492E-06 (233)	1.8473E-06 (171)	1.8301E-06 (298)	7.2140E-07 (266)	
24	1.4754E-06 (306)	2.0100E-06 (306)	2.2846E-06 (284)	2.8820E-06 (284)	9.1889E-07 (348)	
25	1.5049E-06 (286)	1.8613E-06 (286)	2.3590E-06 (305)	2.2698E-06 (305)	9.6052E-07 (307)	
26	1.8033E-06 (305)	2.0390E-06 (305)	2.3506E-06 (110)	1.9812E-06 (110)	7.3606E-07 (306)	
27	2.2096E-06 (110)	2.5012E-06 (110)	2.5246E-06 (110)	2.2469E-06 (110)	8.4823E-07 (194)	
28	1.9034E-06 (172)	2.0836E-06 (172)	2.1020E-06 (172)	1.7475E-06 (116)	8.2111E-07 (36)	
29	1.1575E-06 (227)	1.2408E-06 (227)	1.1207E-06 (43)	1.2121E-06 (139)	9.4529E-07 (357)	
30	9.4586E-07 (227)	1.3706E-06 (238)	1.5819E-06 (203)	1.5988E-06 (67)	6.7830E-07 (329)	
31	1.6048E-06 (237)	1.7769E-06 (203)	1.7431E-06 (237)	1.9096E-06 (136)	1.0032E-06 (134)	
32	1.3231E-06 (207)	1.6485E-06 (230)	1.8293E-06 (207)	1.6425E-06 (63)	6.7176E-07 (6)	
33	1.9273E-06 (97)	2.0534E-06 (97)	1.9953E-06 (97)	1.7631E-06 (97)	6.4123E-07 (103)	
34	1.7775E-06 (221)	1.7161E-06 (221)	1.6974E-06 (199)	1.5192E-06 (236)	6.7254E-07 (.84)	
35	1.7031E-06 (221)	1.8331E-06 (159)	1.7281E-06 (221)	1.4245E-06 (221)	5.3089E-07 (208)	
36	1.5370E-06 (242)	1.6650E-06 (221)	1.5342E-06 (242)	1.2365E-06 (33)	7.4529E-07 (33)	

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PLANT NAME EPC CR ELY 436

POLLUTANT: TSP EMISSION UNITS GM/SEC ATR QUALITY UNITS GM/MAA3

YEARLY SECOND MAX FOR 24-HOUR CONC = 5.0079E-06 DIRECTION# 9 DISTANCE= 0.0 KM DAY=179

1975

SECOND HIGHEST 24-HOUR CONCENTRATION AT EACH RECEPTOR

RANGE	2.5 KM	3.0 KM	4.0 KM	5.0 KM	20.0 KM
1	1.6705E-06 (120)	1.7094E-06 (120)	1.4609E-06 (166)	1.4804E-06 (166)	7.6468E-07 (290)
2	1.3672E-06 (218)	1.8983E-06 (166)	2.9272E-06 (192)	1.8636E-06 (19)	1.1722E-06 (19)
3	1.5340E-06 (122)	1.5004E-06 (122)	1.9281E-06 (118)	2.0321E-06 (118)	6.6566E-07 (71)
4	1.7118E-06 (161)	1.9361E-06 (161)	1.8985E-06 (109)	2.0217E-06 (24)	7.2708E-07 (24)
5	2.0322E-06 (181)	1.7110E-06 (132)	2.3002E-06 (137)	2.0893E-06 (161)	7.8542E-07 (224)
6	1.7890E-06 (146)	2.0047E-06 (146)	1.7892E-06 (146)	1.4041E-06 (146)	5.5213E-07 (205)
7	2.5861E-06 (230)	2.6175E-06 (178)	2.4530E-06 (178)	2.0275E-06 (178)	4.9485E-07 (178)
8	2.3659E-06 (230)	2.1649E-06 (230)	2.4942E-06 (185)	2.1395E-06 (185)	5.8956E-07 (58)
9	2.2514E-06 (166)	2.9058E-06 (179)	3.0479E-06 (179)	2.6802E-06 (179)	9.1223E-07 (180)
10	1.8058E-06 (166)	2.1486E-06 (166)	2.1305E-06 (166)	1.8218E-06 (166)	5.9636E-07 (59)
11	1.2168E-06 (140)	1.3960E-06 (140)	1.3152E-06 (155)	1.3018E-06 (170)	5.2412E-07 (162)
12	1.0280E-06 (97)	8.7547E-07 (97)	9.4728E-07 (231)	9.7641E-07 (224)	5.8231E-07 (336)
13	9.5391E-07 (230)	1.5299E-06 (244)	1.8003E-06 (226)	1.6118E-06 (230)	7.8633E-07 (244)
14	9.1620E-07 (244)	1.0899E-06 (180)	1.2115E-06 (180)	1.1330E-06 (180)	4.5538E-07 (55)
15	9.1218E-07 (244)	1.2233E-06 (244)	1.2409E-06 (177)	1.0229E-06 (177)	6.4512E-07 (38)
16	1.3038E-06 (144)	1.1086E-06 (144)	1.3578E-06 (95)	1.3664E-06 (244)	6.6624E-07 (352)
17	1.1974E-06 (144)	1.0113E-06 (144)	1.1781E-06 (105)	1.2905E-06 (105)	6.1561E-07 (95)
18	6.2799E-07 (95)	8.2601E-07 (79)	1.22215E-06 (326)	1.2455E-06 (79)	7.5299E-07 (270)
19	6.5326E-07 (94)	7.5540E-07 (94)	8.0631E-07 (94)	6.9801E-07 (300)	4.2461E-07 (14)
20	1.2513E-06 (106)	1.2427E-06 (143)	1.4895E-06 (106)	1.3534E-06 (106)	8.8102E-07 (64)
21	1.1821E-06 (176)	1.3093E-06 (106)	1.5081E-06 (14)	1.7024E-06 (14)	7.5519E-07 (14)
22	8.7850E-07 (141)	1.3915E-06 (141)	2.0709E-06 (141)	2.2737E-06 (141)	7.9157E-07 (302)
23	1.1425E-06 (181)	1.5465E-06 (175)	1.9379E-06 (181)	2.0410E-06 (181)	7.7445E-07 (181)
24	1.0906E-06 (116)	1.1700E-06 (247)	1.3125E-06 (142)	1.3323E-06 (175)	6.9556E-07 (17)
25	1.4424E-06 (250)	1.6138E-06 (250)	1.6704E-06 (142)	1.8575E-06 (142)	7.9808E-07 (304)
26	1.9090E-06 (247)	2.3965E-06 (116)	2.2364E-06 (253)	2.4433E-06 (247)	8.5016E-07 (253)
27	2.1816E-06 (248)	2.6592E-06 (248)	2.8899E-06 (248)	2.6954E-06 (248)	1.1529E-06 (86)
28	1.6037E-06 (248)	1.8499E-06 (248)	2.0261E-06 (250)	1.7244E-06 (184)	9.0558E-07 (287)
29	1.3912E-06 (250)	1.6586E-06 (250)	1.6038E-06 (250)	1.4916E-06 (251)	9.6954E-07 (217)
30	1.7526E-06 (219)	1.9543E-06 (219)	2.2513E-06 (217)	2.0285E-06 (217)	9.3402E-07 (143)
31	1.1921E-06 (114)	1.2603E-06 (114)	1.2201E-06 (219)	1.5458E-06 (222)	7.2015E-07 (222)
32	1.2608E-06 (258)	1.5785E-06 (258)	1.6765E-06 (242)	1.6166E-06 (242)	7.3280E-07 (108)
33	1.6111E-06 (114)	1.7617E-06 (114)	1.7329E-06 (218)	1.6880E-06 (242)	7.8253E-07 (12)
34	1.5092E-06 (260)	1.5263E-06 (260)	1.4839E-06 (260)	1.3164E-06 (198)	6.8357E-07 (152)
35	9.7871E-07 (114)	1.3156E-06 (147)	1.3404E-06 (147)	1.2743E-06 (169)	5.5398E-07 (12)
36	1.1296E-06 (120)	1.43308E-06 (205)	1.3549E-06 (205)	1.4226E-06 (201)	9.8289E-07 (12)

ALL SOURCES, 1980S

STUDENT DATA

SOURCE NUMBER	SOURCE LOCATION		SOURCE AREA		ANNUAL SOURCE		STACK DATA			
	HORIZONTAL KILOMETERS	VERTICAL KILOMETERS	SQUARE KILOMETERS	SQ2	PAB1	EMISSION RATE (TONS/DAY)	HT (ft)	DIAM (in)	VEL (ft/sec)	TEMP (DEG K)
1	334.2	3204.2	0.0	0.0	0.063	2.4	0.2	37.1	339.	FLY ASH TRAN SIL
2	334.2	3204.2	0.0	0.0	0.001	10.7	0.6	0.5	339.	FLY ASH TRAN SIL
3	334.2	3204.2	0.0	0.0	0.011	28.0	0.5	13.7	339.	FLY ASH SIUR SIL
4	334.2	3204.2	0.0	0.0	4.670	152.0	4.6	42.1	422.	CRI-TSP-1980S
5	334.2	3204.2	0.0	0.0	5.660	153.0	4.9	44.8	422.	CR2-TSP-1980S
6	334.7	3205.3	0.0	0.0	16.010	182.9	4.9	27.4	400.	CR4&5-TSP-1980S
7	334.6	3209.0	0.0	0.0	0.006	6.4	0.5	9.1	315.	TRANSFERPT #1
8	334.8	3203.9	0.0	0.0	0.006	12.8	0.5	9.1	315.	TRANSFERPT #2
9	334.0	3208.1	0.0	0.0	0.006	12.8	0.5	9.1	315.	TRANSFERPT #3
10	335.0	3205.0	0.0	0.0	0.006	12.8	0.5	9.1	315.	TRANSFERPT #4
11	334.8	2205.3	0.0	0.0	0.020	12.8	1.0	9.1	315.	CRUSHER HOUSE
12	334.7	3205.3	0.0	0.0	0.033	12.8	0.6	9.1	315.	SILO DUST COLLED
13	334.7	3205.3	0.0	0.0	0.108	45.7	1.1	9.1	315.	FLY ASH SILLS
14	334.7	3205.3	0.0	0.0	0.042	3.0	0.6	9.1	315.	FLY ASH VAC PUMP
15	334.7	3205.3	0.0	0.0	0.065	12.8	0.7	9.1	315.	EMERG RECLAIM HPR
16	364.0	3204.2	0.0	0.118	0.066	6.1	1.0	16.1	302.	CITRUS 03-01
17	364.1	3192.6	0.0	0.0	0.025	10.1	2.7	2.8	327.	CITRUS 01-01
18	364.5	3205.3	0.0	0.001	0.090	18.3	1.2	9.1	322.	CITRUS 07-31
19	364.5	3158.3	0.0	0.329	0.214	9.1	0.7	14.3	394.	HERNANDO 04-01
20	364.5	3158.3	0.0	0.219	0.016	9.1	0.6	1.2	477.	HERNANDO 04-02
21	359.4	3162.3	0.0	1.905	0.233	27.0	3.1	0.6	302.	HERNANDO 05-05
22	359.4	3162.3	0.0	0.0	0.008	6.1	3.1	0.5	340.	HERNANDO 05-06
23	359.4	3162.3	0.0	0.266	0.041	10.7	3.1	1.3	323.	HERNANDO 05-07
24	356.2	3103.7	0.0	0.0	0.033	15.2	3.1	9.1	0.04	HERNANDO 10-04
25	359.7	3164.0	0.0	0.0	0.008	7.6	1.8	5.0	347.	HERNANDO 13-01
26	384.6	3244.1	0.0	0.0	0.033	10.3	0.6	20.2	327.	MARIEN 16-01
27	384.6	3244.1	0.0	0.0	0.266	11.0	3.7	2.2	311.	MARIEN 16-02
28	384.5	3245.3	0.0	0.586	0.310	17.7	1.5	4.8	353.	MARIEN 17-01

ALL SOURCES, 19865

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RECEIVER DATA

LOCATIONS TO BE USED AS RECEIVERS IN ADDITION TO THE 143 RECTANGULAR GRID LOCATIONS

RECEIVER NUMBER	X-COORDINATE KILOMETERS	Y-COORDINATE KILOMETERS
144	332.4	3184.1

ALL SOURCES, 1980S

METEOROLOGICAL INPUT DATA FOR THE ANNUAL SEASON

MIXING DEPTH = 1394. METERS
 AMBIENT TEMPERATURE = 292. DEGREES,KELVIN
 AMBIENT PRESSURE = 1017. MILLIBARS

STABILITY CLASS 1

WINDSPEED CLASS

WIND DIRECTION	1	2	3	4	5	6
N	0.0000	0.0002	0.0	0.0	0.0	0.0
NNE	0.0000	0.0002	0.0	0.0	0.0	0.0
NE	0.0000	0.0002	0.0	0.0	0.0	0.0
ENE	0.0000	0.0001	0.0	0.0	0.0	0.0
E	0.0001	0.0003	0.0	0.0	0.0	0.0
ESE	0.0001	0.0002	0.0	0.0	0.0	0.0
SE	0.0000	0.0002	0.0	0.0	0.0	0.0
SSE	0.0001	0.0002	0.0	0.0	0.0	0.0
S	0.0001	0.0002	0.0	0.0	0.0	0.0
SSW	0.0000	0.0002	0.0	0.0	0.0	0.0
SW	0.0001	0.0004	0.0	0.0	0.0	0.0
WSW	0.0001	0.0003	0.0	0.0	0.0	0.0
W	0.0001	0.0003	0.0	0.0	0.0	0.0
WNW	0.0001	0.0002	0.0	0.0	0.0	0.0
NW	0.0000	0.0000	0.0	0.0	0.0	0.0
NNW	0.0000	0.0001	0.0	0.0	0.0	0.0

ALL SOURCES, 1960S

METEOROLOGICAL INPUT DATA FOR THE ANNUAL SEASON

STABILITY CLASS - 2

WINDSPEED CLASS

WIND DIRECTION	1	2	3	4	5	6
N	0.0005	0.0013	0.0009	0.0	0.0	0.0
NNE	0.0004	0.0013	0.0008	0.0	0.0	0.0
NE	0.0004	0.0012	0.0009	0.0	0.0	0.0
LNE	0.0005	0.0013	0.0014	0.0	0.0	0.0
E	0.0008	0.0029	0.0027	0.0	0.0	0.0
LE	0.0007	0.0019	0.0011	0.0	0.0	0.0
SE	0.0005	0.0012	0.0018	0.0	0.0	0.0
SSE	0.0003	0.0018	0.0018	0.0	0.0	0.0
S	0.0005	0.0016	0.0019	0.0	0.0	0.0
SSW	0.0003	0.0013	0.0018	0.0	0.0	0.0
SW	0.0003	0.0017	0.0026	0.0	0.0	0.0
WSW	0.0002	0.0018	0.0039	0.0	0.0	0.0
W	0.0005	0.0030	0.0061	0.0	0.0	0.0
WNW	0.0002	0.0008	0.0008	0.0	0.0	0.0
NW	0.0002	0.0005	0.0003	0.0	0.0	0.0
NNW	0.0003	0.0006	0.0005	0.0	0.0	0.0

ALL SOURCES, 1980S

METEOROLOGICAL INPUT DATA FOR THE ANNUAL SEASON

STABILITY CLASS 3

WINDSPEED CLASS

WIND DIRECTION	1	2	3	4	5	6
N	0.0002	0.0010	0.0034	0.0005	0.0	0.0
NNE	0.0001	0.0011	0.0041	0.0005	0.0	0.0
NE	0.0001	0.0016	0.0054	0.0008	0.0	0.0
ENL	0.0004	0.0029	0.0085	0.0011	0.0	0.0
E	0.0006	0.0057	0.0117	0.0017	0.0000	0.0
LSE	0.0002	0.0029	0.0065	0.0010	0.0000	0.0
SE	0.0003	0.0022	0.0072	0.0013	0.0	0.0
SSP	0.0003	0.0022	0.0069	0.0009	0.0	0.0
S	0.0002	0.0020	0.0053	0.0013	0.0	0.0000
SSW	0.0002	0.0010	0.0058	0.0018	0.0000	0.0
SW	0.0001	0.0015	0.0052	0.0010	0.0	0.0
WSW	0.0001	0.0017	0.0076	0.0013	0.0000	0.0
W	0.0002	0.0021	0.0159	0.0064	0.0003	0.0
NNW	0.0001	0.0007	0.0029	0.0012	0.0000	0.0000
NW	0.0000	0.0005	0.0018	0.0006	0.0000	0.0
RNW	0.0001	0.0008	0.0019	0.0006	0.0001	0.0000

ALL SOURCES, 1980S

METEOROLOGICAL INPUT DATA FOR THE ANNUAL SEASON

STABILITY CLASS

WINDSPEED CLASS

WIND DIRECTION	1	2	3	4	5	6
N	0.0005	0.0026	0.0103	0.0081	0.0005	0.0
MNE	0.0004	0.0032	0.0079	0.0068	0.0002	0.0000
NE	0.0005	0.0032	0.0105	0.0105	0.0004	0.0000
ENE	0.0006	0.0045	0.0138	0.0098	0.0003	0.0
E	0.0010	0.0077	0.0235	0.0168	0.0005	0.0000
EEC	0.0005	0.0035	0.0134	0.0073	0.0002	0.0
SE	0.0004	0.0031	0.0101	0.0075	0.0001	0.0000
SSF	0.0003	0.0029	0.0102	0.0076	0.0003	0.0000
S	0.0007	0.0036	0.0118	0.0102	0.0007	0.0001
SSW	0.0003	0.0019	0.0076	0.0084	0.0007	0.0000
SW	0.0002	0.0015	0.0045	0.0034	0.0001	0.0000
WSW	0.0003	0.0018	0.0065	0.0047	0.0002	0.0
W	0.0002	0.0026	0.0164	0.0211	0.0006	0.0001
WNW	0.0004	0.0011	0.0060	0.0091	0.0011	0.0004
NW	0.0003	0.0017	0.0061	0.0095	0.0011	0.0003
NNW	0.0002	0.0015	0.0066	0.0094	0.0013	0.0001

ALL SOURCES, 1980S

METEOROLOGICAL INPUT DATA FOR THE ANNUAL SEASON

STABILITY CLASS 5

WINDSPEED CLASS

WIND DIRECTION	1	2	3	4	5	6
N	0.0043	0.0127	0.0067	0.0	0.0	0.0
NNE	0.0047	0.0119	0.0050	0.0	0.0	0.0
NE	0.0063	0.0181	0.0078	0.0	0.0	0.0
FNE	0.0112	0.0337	0.0094	0.0	0.0	0.0
F	0.0158	0.0487	0.0135	0.0	0.0	0.0
ESE	0.0094	0.0225	0.0068	0.0	0.0	0.0
SE	0.0055	0.0129	0.0052	0.0	0.0	0.0
SSE	0.0039	0.0125	0.0034	0.0	0.0	0.0
S	0.0037	0.0107	0.0029	0.0	0.0	0.0
SSW	0.0015	0.0045	0.0018	0.0	0.0	0.0
SW	0.0015	0.0060	0.0013	0.0	0.0	0.0
WSW	0.0018	0.0052	0.0020	0.0	0.0	0.0
W	0.0028	0.0068	0.0049	0.0	0.0	0.0
WNW	0.0026	0.0069	0.0035	0.0	0.0	0.0
NW	0.0001	0.0132	0.0049	0.0	0.0	0.0
NNW	0.0038	0.0102	0.0042	0.0	0.0	0.0

ALL SOURCES, 1980S

INPUT REGRESSION PARAMETERS ARE:

BULLIONATE Y-INTERCEPT SLOPE

PARTICULARS 0.0 1.0000

ALL SOURCES, 1980S

RECEPTOR CONCENTRATION DATA					
RECEPTOR NUMBER	RECEPTOR LOCATION		EXPECTED ARITHMETIC MEAN		
	(KILOMETERS)		(MICROGRAMS/CU. METER)	SUSP.	PARTICULATES
	PERIZ	VERI	SUSP.		
1	330.0	3199.0	0.	1.	
2	330.0	3200.0	0.	1.	
3	330.0	3201.0	0.	1.	
4	330.0	3202.0	0.	1.	
5	330.0	3203.0	0.	1.	
6	330.0	3204.0	0.	1.	
7	330.0	3205.0	0.	1.	
8	330.0	3206.0	0.	1.	
9	330.0	3207.0	0.	1.	
10	330.0	3208.0	0.	1.	
11	330.0	3209.0	0.	1.	
12	330.0	3210.0	0.	1.	
13	330.0	3211.0	0.	1.	
14	331.0	3199.0	0.	1.	
15	331.0	3200.0	0.	1.	
16	331.0	3201.0	0.	1.	
17	331.0	3202.0	0.	1.	
18	331.0	3203.0	0.	1.	
19	331.0	3204.0	0.	1.	
20	331.0	3205.0	0.	2.	
21	331.0	3206.0	0.	1.	
22	331.0	3207.0	0.	1.	
23	331.0	3208.0	0.	1.	
24	331.0	3209.0	0.	1.	
25	331.0	3210.0	0.	1.	
26	331.0	3211.0	0.	1.	
27	332.0	3199.0	0.	0.	
28	332.0	3200.0	0.	1.	
29	332.0	3201.0	0.	1.	
30	332.0	3202.0	0.	1.	
31	332.0	3203.0	0.	1.	
32	332.0	3204.0	0.	2.	
33	332.0	3205.0	0.	2.	
34	332.0	3206.0	0.	2.	
35	332.0	3207.0	0.	1.	
36	332.0	3208.0	0.	1.	
37	332.0	3209.0	0.	1.	
38	332.0	3210.0	0.	1.	
39	332.0	3211.0	0.	1.	
40	333.0	3199.0	0.	1.	

BELLVILLE TURBIDITY DATA					
RECEIVER NUMBER	RECEIVER LOCATION		EXPECTED ARITHMETIC MEAN		
	(KILOMETERS)		(MICROGRAMS/CU. METER)		
	BELB12	VER1	S02	PAB111LATES	
41	333.0	3200.0	0.	1.	
42	333.0	3201.0	0.	1.	
43	333.0	3202.0	0.	1.	
44	333.0	3203.0	0.	1.	
45	333.0	3204.0	0.	3.	
46	333.0	3205.0	0.	3.	
47	333.0	3206.0	0.	2.	
48	333.0	3207.0	0.	1.	
49	333.0	3208.0	0.	1.	
50	333.0	3209.0	0.	1.	
51	333.0	3210.0	0.	1.	
52	333.0	3211.0	0.	1.	
53	334.0	3199.0	0.	1.	
54	334.0	3200.0	0.	1.	
55	334.0	3201.0	0.	1.	
56	334.0	3202.0	0.	1.	
57	334.0	3203.0	0.	2.	
58	334.0	3204.0	0.	8.	
59	334.0	3205.0	0.	6.	
60	334.0	3206.0	0.	3.	
61	334.0	3207.0	0.	1.	
62	334.0	3208.0	0.	1.	
63	334.0	3209.0	0.	1.	
64	334.0	3210.0	0.	1.	
65	334.0	3211.0	0.	1.	
66	335.0	3199.0	0.	0.	
67	335.0	3200.0	0.	1.	
68	335.0	3201.0	0.	1.	
69	335.0	3202.0	0.	1.	
70	335.0	3203.0	0.	1.	
71	335.0	3204.0	0.	5.	
72	335.0	3205.0	0.	5.	
73	335.0	3206.0	0.	2.	
74	335.0	3207.0	0.	1.	
75	335.0	3208.0	0.	1.	
76	335.0	3209.0	0.	1.	
77	335.0	3210.0	0.	1.	
78	335.0	3211.0	0.	1.	
79	336.0	3199.0	0.	0.	
80	336.0	3200.0	0.	1.	

RECEIVER LOCATIONS DATA					
RECEIVER NUMBER	RECEIVER LOCATION	EXPECTED ARITHMETIC MEAN			
		(KILOMETERS)	(METERS)	(MICROGRAMS/CU. METER)	PARTICLES
	SLB12	VIB1	SLB2	PARTICLES	
81	336.0	3201.0	0.	1.	
82	336.0	3202.0	0.	1.	
83	336.0	3203.0	0.	1.	
84	336.0	3204.0	0.	2.	
85	336.0	3205.0	0.	2.	
86	336.0	3206.0	0.	1.	
87	336.0	3207.0	0.		
88	336.0	3208.0	0.	1.	
89	336.0	3209.0	0.	1.	
90	336.0	3210.0	0.		
91	336.0	3211.0	0.	0.	
92	337.0	3199.0	0.	0.	
93	337.0	3200.0	0.	0.	
94	337.0	3201.0	0.	1.	
95	337.0	3202.0	0.	1.	
96	337.0	3203.0	0.		
97	337.0	3204.0	0.	1.	
98	337.0	3205.0	0.	1.	
99	337.0	3206.0	0.		
100	337.0	3207.0	0.	1.	
101	337.0	3208.0	0.	1.	
102	337.0	3209.0	0.	1.	
103	337.0	3210.0	0.	0.	
104	337.0	3211.0	0.	0.	
105	338.0	3199.0	0.	0.	
106	338.0	3200.0	0.	0.	
107	338.0	3201.0	0.	1.	
108	338.0	3202.0	0.	1.	
109	338.0	3203.0	0.	1.	
110	338.0	3204.0	0.	1.	
111	338.0	3205.0	0.		
112	338.0	3206.0	0.	1.	
113	338.0	3207.0	0.	1.	
114	338.0	3208.0	0.	1.	
115	338.0	3209.0	0.	1.	
116	338.0	3210.0	0.	0.	
117	338.0	3211.0	0.	0.	
118	339.0	3199.0	0.	0.	
119	339.0	3200.0	0.	0.	
120	339.0	3201.0	0.	1.	

BETTER CIRCUMSTANCES DATA					
RECEIVER NUMBER	RECEIVER LOCATION	EXPECTED ARITHMETIC MEAN			
		(KILOMETERS)		(MICROGRAMS/CU. METER)	
		SL1	SL2	PARTICLES	
121	339.0	3202.0	0.	1.	
122	339.0	3203.0	0.	1.	
123	339.0	3204.0	0.	2.	
124	339.0	3205.0	0.	2.	
125	339.0	3206.0	0.	1.	
126	339.0	3207.0	0.	1.	
127	339.0	3208.0	0.	1.	
128	339.0	3209.0	0.	0.	
129	339.0	3210.0	0.	0.	
130	340.0	3211.0	0.	0.	
131	340.0	3199.0	0.	0.	
132	340.0	3200.0	0.	0.	
133	340.0	3201.0	0.	0.	
134	340.0	3202.0	0.	1.	
135	340.0	3203.0	0.	1.	
136	340.0	3204.0	0.	2.	
137	340.0	3205.0	0.	2.	
138	340.0	3206.0	0.	1.	
139	340.0	3207.0	0.	1.	
140	340.0	3208.0	0.	1.	
141	340.0	3209.0	0.	1.	
142	340.0	3210.0	0.	0.	
143	340.0	3211.0	0.	0.	
144	352.0	3184.1	0.	0.	

ALL SOURCES, 1980S

SOURCE CONTRIBUTIONS TO FIVE MAXIMUM RECEIPTORS

ALLOAL - PARACOLATES

MICROGRAMS PER CUBIC METER

SOURCE	RECEPTOR 1	RECEPTOR 2	RECEPTOR 3	RECEPTOR 4	RECEPTOR 5
1	58	59	72	86	85
1	75.99 %	15.51 %	5.87 %	17.08 %	46.80 %
1	6.3305	0.9908	0.2102	0.5656	1.4121
2	1.17 %	0.25 %	0.09 %	0.28 %	0.76 %
2	0.0971	0.0160	0.0030	0.0091	0.0238
3	0.52 %	1.09 %	0.60 %	1.79 %	4.36 %
3	0.0030	0.0090	0.0201	0.0590	0.1343
4	0.0 %	0.01 %	0.14 %	0.10 %	0.13 %
4	0.0	0.0000	0.0006	0.0033	0.0002
5	0.0 %	0.00 %	0.13 %	0.10 %	0.13 %
5	0.0	0.0002	0.0061	0.0035	0.0061
6	0.13 %	0.00 %	0.00 %	0.33 %	0.28 %
6	0.0105	0.0001	0.0000	0.0109	0.0089
7	0.07 %	0.12 %	0.15 %	0.20 %	0.17 %
7	0.0057	0.0070	0.0071	0.0065	0.0053
8	2.68 %	0.64 %	0.88 %	0.90 %	2.37 %
8	0.2252	0.0010	0.0009	0.0297	0.0700
9	2.11 %	0.70 %	1.50 %	0.92 %	2.08 %
9	0.1762	0.0408	0.0702	0.0303	0.0695
10	0.57 %	3.04 %	0.0 %	2.11 %	1.16 %
10	0.0276	0.1939	0.0	0.0697	0.0366
11	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %
11	0.0001	0.0001	0.0001	0.0001	0.0001
12	2.25 %	14.34 %	14.82 %	11.91 %	5.45 %
12	0.1875	0.9159	0.6920	0.3944	0.1718
13	2.41 %	5.77 %	1.10 %	14.00 %	7.55 %
13	0.2000	0.3681	0.0510	0.4630	0.2375
14	3.28 %	25.84 %	58.19 %	16.96 %	7.48 %
14	0.2750	1.6502	1.7833	0.5613	0.2353
15	4.32 %	26.64 %	27.01 %	22.96 %	10.57 %
15	0.3598	1.7018	1.2611	0.7600	0.3326
16	1.62 %	1.91 %	3.02 %	3.24 %	3.71 %
16	0.1350	0.1220	0.1010	0.1072	0.1167
17	0.03 %	0.04 %	0.06 %	0.08 %	0.09 %
17	0.0027	0.0027	0.0027	0.0025	0.0027
18	2.08 %	3.08 %	5.03 %	5.09 %	4.84 %
18	0.1729	0.1965	0.2351	0.1686	0.1520
19	0.10 %	0.12 %	0.17 %	0.24 %	0.26 %
19	0.0081	0.0079	0.0080	0.0079	0.0080
20	0.01 %	0.02 %	0.02 %	0.03 %	0.04 %
20	0.0012	0.0011	0.0011	0.0011	0.0012
21	0.22 %	0.28 %	0.39 %	0.55 %	0.59 %
21	0.0184	0.0181	0.0181	0.0181	0.0186

ALL SOURCES, 1980S

SOURCE CONTRIBUTIONS TO FIVE MAXIMUM RECEPTORS

ANNUAL PARTICULATES

MICROGRAMS PER CUBIC METER

SOURCE	RECEPTOR 1	RECEPTOR 2	RECEPTOR 3	RECEPTOR 4	RECEPTOR 5
22	0.01 %	0.01 %	0.01 %	0.02 %	0.02 %
	-0.0006	-0.0006	-0.0006	-0.0006	-0.0006
23	0.01 %	0.05 %	0.07 %	0.10 %	0.10 %
	-0.0033	-0.0032	-0.0032	-0.0032	-0.0033
24	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %
	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
25	0.00 %	0.01 %	0.01 %	0.01 %	0.01 %
	-0.0004	-0.0003	-0.0003	-0.0003	-0.0003
26	0.04 %	0.05 %	0.07 %	0.10 %	0.11 %
	-0.0033	-0.0033	-0.0034	-0.0034	-0.0033
27	0.17 %	0.23 %	0.31 %	0.44 %	0.45 %
	-0.0140	-0.0144	-0.0140	-0.0145	-0.0141
28	0.19 %	0.25 %	0.34 %	0.49 %	0.50 %
	-0.0157	-0.0162	-0.0161	-0.0163	-0.0158
BACK	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
BUOLED	0.	0.	0.	0.	0.
TOTAL	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
	-8.3310	-6.3870	-6.6692	-3.3110	-3.1460

FPC C.R. FLY ASH, BASELINE CONDITIONS, 1974

SOURCE DATA

SOURCE NUMBER	SOURCE LOCATION (KILOMETERS)	SOURCE AREA SQUARE KILOMETERS	ANNUAL SOURCE EMISSION RATE (TONS/DAY)		STACK DATA					
			SQ2	PAB1	HT (M)	DIAM (M)	VEL 1M/SEC1	TEMP (DEG K)		
1	334.2	3204.2	0.0	0.0	3.900	152.0	4.6	24.9	416.	CR1, TSP, 1974
2	334.2	3204.2	0.0	0.0	5.800	153.0	4.9	30.5	416.	CR2, TSP, 1974
3	358.7	3192.8	0.0	0.108	0.011	11.9	2.5	4.5	333.	CITRUS 01-01
4	341.0	3204.2	0.0	0.118	0.011	6.1	1.0	16.2	302.	CITRUS 03-01
5	360.5	3158.3	0.0	0.329	0.214	9.1	0.7	14.4	394.	HERNANDU 04-01
6	364.5	3158.3	0.0	0.219	0.016	9.1	0.6	10.5	477.	HERNANDU 04-02
7	359.1	3162.8	0.0	1.071	0.499	30.5	3.9	1.0	366.	HERNANDU 05-01
8	359.1	3162.8	0.0	0.356	0.460	9.1	2.7	2.6	366.	HERNANDU 05-02
9	359.1	3162.8	0.0	0.0	0.014	9.1	0.6	0.8	294.	HERNANDU 05-03
10	359.1	3162.8	0.0	0.0	0.003	9.1	0.6	12.0	294.	HERNANDU 05-04
11	368.0	3159.1	0.0	0.003	0.093	10.4	2.2	7.3	355.	HERNANDU 06-01
12	360.3	3230.0	0.0	0.0	0.005	7.6	0.3	10.8	298.	MARICK 08-01
13	381.6	3223.6	0.0	0.019	0.027	6.4	0.9	16.9	394.	MARION 13-01

FED C.R. FLY ASH, BASELINE CONDITIONS, 1974

RECEPTOR DATA

LOCATIONS TO BE USED AS RECEPTORS IN ADDITION TO THE 143 RECTANGULAR GRID LOCATIONS

RECEPTOR NUMBER	X-COORDINATE (KILOMETERS)	Y-COORDINATE (KILOMETERS)
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144	332.4	3184.1
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ON WORST DAY 15, 1973--FLY ASH INCR.

1. 7.0

A A A S O U R C E S * * *

NO.	R (G/SEC)	HP (M)	TS (DEG-K)	VS (M/SEC)	D(M)	VF(M**3/SEC)	R (KM)	S (KM)	
1.	0.67	2.4	330.0	37.2	0.20	0.0	334.200	3204.200	FLY ASH TRANSFER SILO
2.	0.01	10.7	330.0	0.5	0.59	0.0	334.200	3204.200	FLY ASH TRANSFER SILO
3.	0.11	28.3	330.0	13.7	0.48	0.0	334.200	3204.200	FLY ASH STORAGE SILO
4.	49.01	152.0	422.0	42.1	4.57	0.0	334.200	3204.200	CR1,TSP,1980's
5.	59.41	153.0	422.0	44.8	4.88	0.0	334.200	3204.200	CR2,TSP,1980's
6.	168.13	182.9	400.0	27.4	6.86	0.0	334.700	3205.300	CR485,TSP,1980's
7.	0.10	12.8	315.0	9.1	0.68	0.0	334.700	3205.300	CRUSHER HOUSE
8.	0.21	12.8	315.0	9.1	0.99	0.0	334.800	3205.300	EMERGING RECLAIM HOPPER
9.	0.35	12.8	315.0	9.1	0.62	0.0	334.700	3205.300	SILE DUST COLLECTORS
10.	0.55	45.7	315.0	9.1	1.13	0.0	334.700	3205.300	FLY ASH SILOS
11.	0.08	3.0	315.0	9.1	0.44	0.0	334.700	3205.300	FLY ASH VACUUM PUMP
12.	0.06	6.4	315.0	9.1	0.52	0.0	334.600	3203.900	TRANSFER POINT 1
13.	0.06	12.8	315.0	9.1	0.52	0.0	334.680	3203.900	TRANSFER POINT 2
14.	0.06	12.8	315.0	9.1	0.52	0.0	335.000	3204.100	TRANSFER POINT 3
15.	0.06	12.8	315.0	9.1	0.52	0.0	335.000	3205.000	TRANSFER POINT 4

A A A R E C E P T O R S * * *

NO.	RREC(KM)	SREC(KM)	Z (M)	
1.	332.590	3205.550	0.0	
2.	332.510	3205.610	0.0	
3.	332.440	3205.680	0.0	
4.	332.360	3205.740	0.0	
5.	332.280	3205.810	0.0	
1.	330.	1.0	7	1025.0
2.	332.	1.0	7	1037.0
3.	128.	2.1	6	1049.0
4.	130.	1.0	6	1061.0
5.	135.	1.0	6	1074.0
6.	130.	1.0	6	1086.0
7.	129.	1.5	6	1098.0
8.	132.	1.0	5	1100.0
9.	127.	1.0	4	1280.0
10.	197.	2.6	4	1461.0
11.	252.	2.1	3	1641.0
12.	200.	3.1	3	1822.0
13.	244.	4.1	3	1902.0
14.	270.	4.6	3	1183.0
15.	273.	6.2	4	1183.0
16.	266.	6.2	4	1183.0
17.	293.	4.6	4	1183.0
18.	287.	2.1	5	1183.0
19.	271.	2.1	5	1184.0
20.	252.	1.5	6	1184.0
21.	254.	1.5	6	1185.0
22.	253.	1.5	6	1185.0
23.	249.	1.0	6	1186.0
24.	250.	1.0	6	1186.0

AVERAGE CONCENTRATIONS FOR 24 HOURS.

** A R E C E P T O R N U M B E R **

1. 2. 3. 4. 5.

SOURCE PARTIAL CONCENTRATIONS (G/M**3)

SOURCE	1.	2.	3.	4.	5.
1.	1.659E-05	1.600E-05	1.509E-05	1.460E-05	1.391E-05
2.	1.132E-07	1.082E-07	1.015E-07	9.753E-08	9.234E-08
3.	2.991E-07	3.065E-07	3.057E-07	3.117E-07	3.129E-07
4.	0.0	0.0	0.0	0.0	0.0
5.	0.0	0.0	0.0	0.0	0.0
6.	0.0	0.0	0.0	0.0	0.0
7.	2.821E-25	1.108E-23	5.899E-22	8.680E-21	1.575E-19
8.	1.141E-25	4.434E-24	2.353E-22	3.559E-21	6.691E-20
9.	1.024E-24	4.011E-23	2.131E-21	3.130E-20	5.669E-19
10.	3.864E-25	1.629E-23	9.225E-22	1.436E-20	2.749E-19
11.	3.833E-25	1.489E-23	7.851E-22	1.145E-20	2.061E-19
12.	8.365E-07	8.014E-07	7.809E-07	7.509E-07	7.254E-07
13.	4.580E-07	4.372E-07	4.508E-07	4.316E-07	4.279E-07
14.	1.402E-08	1.454E-08	1.688E-08	1.725E-08	1.867E-08
15.	9.744E-19	6.056E-18	5.302E-17	2.156E-16	1.079E-15

TOTAL CONCENTRATION (G/M**3)

1.831E-05 1.767E-05 1.674E-05 1.621E-06 1.548E-05

- 1.7

$$\begin{array}{r}
 15.48 \\
 - 1.7 \\
 \hline
 13.78
 \end{array}$$

(14)

CR DAY 105, 1972--INT. W/ 485

1. 7.0

A A * S O U R C E S * A A

NU.	R (G/SEC)	HP (M)	TS (DEG-K)	VS (M/SEC)	D(M)	VF(M**3/SEC)	R (KM)	S (KM)	
1.	0.67	2.4	339.0	37.2	0.20	0.0	334.200	3204.200	FLY ASH TRANSFER SILO
2.	0.01	10.7	339.0	0.5	0.59	0.0	334.200	3204.200	FLY ASH TRANSFER SILO
3.	0.11	28.3	339.0	13.7	0.48	0.0	334.200	3204.200	FLY ASH STORAGE SILO
4.	49.01	152.0	422.0	42.1	4.57	0.0	334.200	3204.200	CR1,TSP,1980'S
5.	59.41	153.0	422.0	44.8	4.88	0.0	334.200	3204.200	CR2,TSP,1980'S
6.	168.13	182.9	400.0	27.4	6.86	0.0	334.700	3205.300	CR485,TSP,1980'S
7.	0.10	12.8	315.0	9.1	0.68	0.0	334.700	3205.300	CRUSHER HOUSE
8.	0.21	12.8	315.0	9.1	0.99	0.0	334.800	3205.300	EMERGING RECLAIM HOPPER
9.	0.35	12.8	315.0	9.1	0.62	0.0	334.700	3205.300	SILC DUST COLLECTORS
10.	0.55	45.7	315.0	9.1	1.13	0.0	334.700	3205.300	FLY ASH SILOS
11.	0.08	3.0	315.0	9.1	0.44	0.0	334.700	3205.300	FLY ASH VACUUM PUMP
12.	0.06	6.4	315.0	9.1	0.52	0.0	334.600	3203.900	TRANSFER POINT 1
13.	0.06	12.8	315.0	9.1	0.52	0.0	334.680	3203.900	TRANSFER POINT 2
14.	0.06	12.8	315.0	9.1	0.52	0.0	335.000	3204.100	TRANSFER POINT 3
15.	0.06	12.8	315.0	9.1	0.52	0.0	335.000	3205.000	TRANSFER POINT 4

A A * R E C E P T O R S * A A *

NU.	RRFC(KM)	SREC(KM)	Z (M)	
1.	335.090	3206.640	0.0	
2.	335.120	3206.740	0.0	
3.	335.160	3206.830	0.0	
4.	335.190	3206.930	0.0	
5.	335.230	3207.020	0.0	
6.	335.260	3207.110	0.0	
7.	335.290	3207.210	0.0	
8.	335.330	3207.300	0.0	
9.	335.360	3207.390	0.0	
10.	335.400	3207.490	0.0	
1.	211.	2.6	6	1208.
2.	218.	2.6	6	1232.
3.	200.	2.6	6	1255.
4.	202.	2.1	6	1279.
5.	125.	1.5	7	1302.
6.	120.	1.0	7	1326.
7.	153.	2.6	6	161.
8.	182.	3.6	5	354.
9.	209.	5.1	4	548.
10.	211.	5.1	3	741.
11.	220.	7.2	3	930.
12.	190.	5.7	3	1127.
13.	208.	6.2	3	1321.
14.	201.	5.7	3	1514.
15.	206.	6.2	4	1514.
16.	202.	5.1	3	1514.
17.	267.	5.1	4	1514.
18.	274.	4.6	4	1514.
19.	243.	0.1	5	1514.
20.	229.	2.6	6	1511.
21.	205.	3.1	6	1508.
22.	221.	3.1	6	1505.
23.	205.	3.1	5	1502.
24.	100.	2.1	6	1499.

AVERAGE CONCENTRATIONS FOR 24 HOURS.

*** RECEPTOR NUMBER ***

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

SOURCE PARTIAL CONCENTRATIONS (G/M**3)

1.	3.407E-06	3.123E-06	3.096E-06	2.855E-06	2.834E-06	2.686E-06	2.496E-06	2.484E-06	2.366E-06	2.305E-06
2.	2.013E-08	1.843E-08	1.827E-08	1.683E-08	1.670E-08	1.582E-08	1.470E-08	1.462E-08	1.392E-08	1.356E-08
3.	9.542E-08	9.088E-08	9.309E-08	8.880E-08	9.073E-08	8.801E-08	8.381E-08	8.518E-08	8.274E-08	8.233E-08
4.	3.454E-07	3.797E-07	4.169E-07	4.459E-07	4.785E-07	5.014E-07	5.215E-07	5.462E-07	5.613E-07	5.799E-07
5.	2.905E-07	3.273E-07	3.671E-07	4.005E-07	4.373E-07	4.654E-07	4.915E-07	5.216E-07	5.424E-07	5.673E-07
6.	9.507E-10	3.014E-09	7.517E-09	1.626E-08	3.066E-08	5.051E-08	7.977E-08	1.181E-07	1.608E-07	2.198E-07
7.	6.344E-08	5.649E-08	7.052E-08	6.528E-08	7.882E-08	7.758E-08	7.168E-08	8.403E-08	8.213E-08	8.845E-08
8.	5.822E-08	5.185E-08	4.869E-08	4.397E-08	4.228E-08	3.963E-08	3.659E-08	3.706E-08	3.576E-08	3.673E-08
9.	2.285E-07	2.106E-07	2.553E-07	2.359E-07	2.856E-07	2.808E-07	2.590E-07	3.039E-07	2.967E-07	3.194E-07
10.	1.378E-07	1.233E-07	1.177E-07	1.065E-07	1.034E-07	9.698E-08	8.956E-08	8.924E-08	8.516E-08	8.432E-08
11.	1.106E-07	1.004E-07	1.291E-07	1.166E-07	1.448E-07	1.403E-07	1.265E-07	1.497E-07	1.445E-07	1.547E-07
12.	4.623E-09	4.296E-09	4.054E-09	3.817E-09	3.652E-09	3.485E-09	3.307E-09	3.191E-09	3.060E-09	2.941E-09
13.	4.735E-09	4.169E-09	3.665E-09	3.362E-09	3.109E-09	2.931E-09	2.763E-09	2.637E-09	2.521E-09	2.412E-09
14.	3.409E-08	3.185E-08	2.788E-08	2.410E-08	1.928E-08	1.596E-08	1.311E-08	9.917E-09	8.083E-09	6.168E-09
15.	5.450E-08	4.736E-08	3.152E-08	2.366E-08	1.586E-08	1.206E-08	9.461E-09	7.118E-09	6.032E-09	5.095E-09

TOTAL CONCENTRATION (G/M**3)

4.856E-06 4.571E-06 4.687E-06 4.446E-06 4.584E-06 4.477E-06 4.299E-06 4.457E-06 4.391E-06 4.468E-06

DAY 326, 1975

1. 7.0

A A A S O U R C E S * * *

NU.	Q (G/SEC)	HP (M)	TS (DEG-K)	VS (M/SEC)	D(M)	VF(M**3/SEC)	R (KM)	S (KM)	
1.	0.67	2.4	339.0	37.2	0.20	0.0	334.200	3204.200	FLY ASH TRANSFER SILO
2.	0.01	10.7	339.0	0.5	0.59	0.0	334.200	3204.200	FLY ASH TRANSFER SILO
3.	0.11	28.3	339.0	13.7	0.48	0.0	334.200	3204.200	FLY ASH STORAGE SILO
4.	49.01	152.0	422.0	42.1	4.57	0.0	334.200	3204.200	CR1,TSP,1980'S
5.	59.41	153.0	422.0	44.8	4.88	0.0	334.200	3204.200	CR2,TSP,1980'S
6.	168.13	182.9	400.0	27.4	6.86	0.0	334.700	3205.300	CR485,TSP,1980'S
7.	0.10	12.8	315.0	9.1	0.68	0.0	334.700	3205.300	CRUSHER HOUSE
8.	0.21	12.8	315.0	9.1	0.99	0.0	334.800	3205.300	EMERGING RECLAIM HOPPER
9.	0.35	12.8	315.0	9.1	0.62	0.0	334.700	3205.300	SILO DUST COLLECTORS
10.	0.55	45.7	315.0	9.1	1.13	0.0	334.700	3205.300	FLY ASH SILOS
11.	0.08	3.0	315.0	9.1	0.44	0.0	334.700	3205.300	FLY ASH VACUUM PUMP
12.	0.06	6.0	315.0	9.1	0.52	0.0	334.600	3203.900	TRANSFER POINT 1
13.	0.06	12.8	315.0	9.1	0.52	0.0	334.680	3203.900	TRANSFER POINT 2
14.	0.06	12.8	315.0	9.1	0.52	0.0	335.000	3204.100	TRANSFER POINT 3
15.	0.06	12.8	315.0	9.1	0.52	0.0	335.000	3205.000	TRANSFER POINT 4

A A A R E C E P T U R S * * *

NU.	RRREC(KM)	SREC(KM)	Z (M)
1.	332.110	3198.470	0.0
2.	332.080	3198.370	0.0
3.	332.050	3198.280	0.0
4.	332.010	3198.190	0.0
5.	331.980	3198.090	0.0
6.	331.940	3198.000	0.0
7.	331.910	3197.900	0.0
8.	331.870	3197.810	0.0
9.	331.840	3197.720	0.0
10.	331.810	3197.620	0.0
11.	331.770	3197.530	0.0
12.	331.740	3197.430	0.0
13.	331.700	3197.340	0.0
14.	331.670	3197.250	0.0
15.	331.630	3197.150	0.0
1.	308.	2.1	6
2.	355.	2.6	6
3.	24.	2.1	6
4.	18.	1.0	6
5.	21.	3.1	5
6.	30.	5.7	4
7.	12.	7.6	5
8.	4.	7.6	4
9.	14.	7.6	3
10.	3.	5.1	4
11.	358.	5.7	3
12.	51.	5.1	3
13.	2.	5.1	3
14.	350.	4.1	3
15.	311.	4.6	3
16.	331.	5.1	4
17.	300.	5.7	4
18.	313.	5.1	5
19.	328.	2.1	6

6 627. 289. 0
6 637. 289. 0
6 647. 289. 0
6 657. 289. 0
5 668. 289. 0
4 678. 286. 0
5 688. 285. 0
4 107. 285. 0
3 215. 286. 0
4 324. 288. 0
3 433. 289. 0
3 502. 290. 0
3 650. 292. 0
3 750. 293. 0
4 750. 293. 0
5 750. 293. 0
6 750. 285. 0
5 750. 285. 0
6 750. 288. 0

20.	5.	2.1	6	753.	284.0	0.0
21.	360.	1.0	7	750.	203.0	0.0
22.	5.	1.0	7	748.	283.0	0.0
23.	3.	1.0	6	745.	284.0	0.0
24.	4.	2.1	6	743.	284.0	0.0

AVERAGE CONCENTRATIONS FOR 24 HOURS.

*** RECEPTOR NUMBER ***

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.

SOURCE PARTIAL CONCENTRATIONS (G/M**3)

| | | | | | | | | | | | | |
|-----|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 1. | 9.770E-07 | 9.796E-07 | 9.697E-07 | 9.227E-07 | 9.248E-07 | 8.810E-07 | 8.833E-07 | 8.430E-07 | 8.356E-07 | 8.376E-07 | 8.004E-07 | 8.029E-07 |
| 2. | 5.927E-09 | 5.939E-09 | 5.877E-09 | 5.586E-09 | 5.597E-09 | 5.327E-09 | 5.340E-09 | 5.091E-09 | 5.045E-09 | 5.056E-09 | 4.827E-09 | 4.842E-09 |
| 3. | 4.661E-08 | 4.689E-08 | 4.668E-08 | 4.494E-08 | 4.520E-08 | 4.354E-08 | 4.381E-08 | 4.225E-08 | 4.206E-08 | 4.230E-08 | 4.079E-08 | 4.101E-08 |
| 4. | 2.124E-08 | 2.050E-08 | 2.009E-08 | 2.046E-08 | 1.977E-08 | 2.013E-08 | 1.946E-08 | 1.979E-08 | 1.942E-08 | 1.882E-08 | 1.915E-08 | 1.857E-08 |
| 5. | 2.403E-08 | 2.326E-08 | 2.284E-08 | 2.331E-08 | 2.256E-08 | 2.300E-08 | 2.227E-08 | 2.267E-08 | 2.226E-08 | 2.158E-08 | 2.196E-08 | 2.129E-08 |
| 6. | 7.812E-08 | 7.550E-08 | 7.391E-08 | 7.467E-08 | 7.219E-08 | 7.288E-08 | 7.045E-08 | 7.107E-08 | 6.957E-08 | 6.731E-08 | 6.789E-08 | 6.570E-08 |
| 7. | 4.481E-08 | 4.481E-08 | 4.449E-08 | 4.306E-08 | 4.309E-08 | 4.172E-08 | 4.177E-08 | 4.048E-08 | 4.022E-08 | 4.029E-08 | 3.903E-08 | 3.912E-08 |
| 8. | 7.747E-08 | 7.598E-08 | 7.474E-08 | 7.343E-08 | 7.220E-08 | 7.093E-08 | 6.983E-08 | 6.860E-08 | 6.762E-08 | 6.671E-08 | 6.550E-08 | 6.469E-08 |
| 9. | 1.593E-07 | 1.594E-07 | 1.582E-07 | 1.531E-07 | 1.532E-07 | 1.483E-07 | 1.485E-07 | 1.438E-07 | 1.429E-07 | 1.431E-07 | 1.386E-07 | 1.389E-07 |
| 10. | 7.792E-08 | 7.801E-08 | 7.777E-08 | 7.631E-08 | 7.644E-08 | 7.501E-08 | 7.515E-08 | 7.376E-08 | 7.354E-08 | 7.371E-08 | 7.230E-08 | 7.219E-08 |
| 11. | 6.388E-08 | 6.387E-08 | 6.337E-08 | 6.115E-08 | 6.119E-08 | 5.908E-08 | 5.915E-08 | 5.716E-08 | 5.676E-08 | 5.685E-08 | 5.494E-08 | 5.505E-08 |
| 12. | 5.692E-08 | 5.645E-08 | 5.638E-08 | 5.532E-08 | 5.528E-08 | 5.425E-08 | 5.394E-08 | 5.295E-08 | 5.238E-08 | 5.172E-08 | 5.079E-08 | 4.999E-08 |
| 13. | 3.238E-08 | 3.382E-08 | 3.461E-08 | 3.417E-08 | 3.520E-08 | 3.471E-08 | 3.550E-08 | 3.500E-08 | 3.529E-08 | 3.572E-08 | 3.517E-08 | 3.543E-08 |
| 14. | 8.796E-09 | 9.718E-09 | 1.044E-08 | 1.055E-08 | 1.162E-08 | 1.171E-08 | 1.284E-08 | 1.293E-08 | 1.374E-08 | 1.490E-08 | 1.494E-08 | 1.609E-08 |
| 15. | 3.744E-08 | 3.681E-08 | 3.619E-08 | 3.562E-08 | 3.488E-08 | 3.434E-08 | 3.356E-08 | 3.306E-08 | 3.240E-08 | 3.157E-08 | 3.113E-08 | 3.030E-08 |

TOTAL CONCENTRATION (G/M**3)

1.711E-06 1.710E-06 1.695E-06 1.634E-06 1.633E-06 1.576E-06 1.575E-06 1.522E-06 1.509E-06 1.507E-06 1.457E-06 1.456E-06

*** RECEPTOR NUMBER ***

13. 14. 15.

SOURCE PARTIAL CONCENTRATIONS (G/M**3)

| | | | |
|-----|-----------|-----------|-----------|
| 1. | 7.678E-07 | 7.618E-07 | 7.376E-07 |
| 2. | 4.626E-09 | 4.589E-09 | 4.440E-09 |
| 3. | 3.956E-08 | 3.939E-08 | 3.841E-08 |
| 4. | 1.889E-08 | 1.858E-08 | 1.866E-08 |
| 5. | 2.166E-08 | 2.130E-08 | 2.137E-08 |
| 6. | 6.626E-08 | 6.491E-08 | 6.467E-08 |
| 7. | 3.791E-08 | 3.769E-08 | 3.684E-08 |
| 8. | 6.351E-08 | 6.273E-08 | 6.164E-08 |
| 9. | 1.346E-07 | 1.338E-07 | 1.308E-07 |
| 10. | 7.110E-08 | 7.091E-08 | 6.993E-08 |
| 11. | 5.322E-08 | 5.289E-08 | 5.159E-08 |
| 12. | 4.913E-08 | 4.833E-08 | 4.743E-08 |
| 13. | 3.488E-08 | 3.484E-08 | 3.444E-08 |
| 14. | 1.609E-08 | 1.686E-08 | 1.719E-08 |
| 15. | 2.989E-08 | 2.923E-08 | 2.869E-08 |

TOTAL CONCENTRATION (G/M**3)

1.409E-06 1.398E-06 1.364E-06

CR FLY ASH DAY 136, 1974--FDER BASELINE

1. 7.0

*** SOURCES ***

| NO. | Q (G/SEC) | HP (M) | TB (DEG-K) | VS (M/SEC) | D(M) | VF(M**3/SEC) | R (KM) | S (KM) | |
|-----|-----------|--------|------------|------------|------|--------------|---------|----------|--------------|
| 1. | 56.80 | 152.0 | 416.0 | 35.7 | 4.57 | 0.0 | 334.200 | 3204.200 | CR1,TSP,1974 |
| 2. | 77.20 | 153.0 | 416.0 | 38.7 | 4.88 | 0.0 | 334.200 | 3204.200 | CR2,TSP,1974 |

*** RECEIVERS ***

| NO. | RREC(KM) | SREC(KM) | Z (M) | | | | |
|-----|----------|----------|-------|-------|-------|-----|--|
| 1. | 332.590 | 3205.550 | 0.0 | | | | |
| 2. | 332.510 | 3205.610 | 0.0 | | | | |
| 3. | 332.440 | 3205.680 | 0.0 | | | | |
| 4. | 332.360 | 3205.740 | 0.0 | | | | |
| 5. | 332.280 | 3205.810 | 0.0 | | | | |
| 6. | 89. | 3.1 | 6 | 1539. | 293.0 | 0.0 | |
| 7. | 124. | 3.1 | 6 | 1539. | 293.0 | 0.0 | |
| 8. | 126. | 5.1 | 5 | 1540. | 294.0 | 0.0 | |
| 9. | 127. | 5.1 | 5 | 1541. | 294.0 | 0.0 | |
| 10. | 131. | 3.6 | 5 | 1541. | 294.0 | 0.0 | |
| 11. | 128. | 3.1 | 4 | 49. | 294.0 | 0.0 | |
| 12. | 126. | 4.6 | 3 | 236. | 295.0 | 0.0 | |
| 13. | 127. | 6.2 | 4 | 423. | 298.0 | 0.0 | |
| 14. | 120. | 5.1 | 3 | 611. | 299.0 | 0.0 | |
| 15. | 131. | 5.1 | 3 | 798. | 301.0 | 0.0 | |
| 16. | 131. | 5.1 | 3 | 985. | 303.0 | 0.0 | |
| 17. | 154. | 4.6 | 2 | 1172. | 304.0 | 0.0 | |
| 18. | 129. | 4.6 | 2 | 1360. | 305.0 | 0.0 | |
| 19. | 56. | 5.1 | 3 | 1547. | 302.0 | 0.0 | |
| 20. | 27. | 4.6 | 4 | 1547. | 301.0 | 0.0 | |
| 21. | 58. | 8.2 | 4 | 1547. | 297.0 | 0.0 | |
| 22. | 92. | 6.7 | 4 | 1547. | 295.0 | 0.0 | |
| 23. | 127. | 3.6 | 4 | 1547. | 295.0 | 0.0 | |
| 24. | 87. | 3.6 | 4 | 1547. | 295.0 | 0.0 | |
| 25. | 99. | 3.6 | 4 | 1537. | 294.0 | 0.0 | |
| 26. | 86. | 4.1 | 4 | 1524. | 294.0 | 0.0 | |
| 27. | 105. | 3.6 | 4 | 1512. | 294.0 | 0.0 | |
| 28. | 75. | 2.6 | 5 | 1500. | 294.0 | 0.0 | |
| 29. | 61. | 2.6 | 5 | 1488. | 294.0 | 0.0 | |

AVERAGE CONCENTRATIONS FOR 24 HOURS:

*** RECEPTOR NUMBER ***

1. 2. 3. 4. 5.

SOURCE PARTIAL CONCENTRATIONS (G/M**3)

| | | | | | |
|----|-----------|-----------|-----------|-----------|-----------|
| 1. | 6.728E-07 | 7.272E-07 | 7.757E-07 | 8.223E-07 | 8.664E-07 |
| 2. | 6.630E-07 | 7.250E-07 | 7.815E-07 | 8.371E-07 | 8.913E-07 |

TOTAL CONCENTRATION (G/M**3)

1.336E-06 1.452E-06 1.557E-06 1.659E-06 (1.758E-06)

CR INTERACTION WD 92, 1975

1. 7.0

A A A S O U R C E S A A A

| NO. | Q (G/SEC) | HP (M) | TS (DEG-K) | VS (M/SEC) | D(M) | VF(M**3/SEC) | R (KM) | S (KM) | |
|-----|-----------|--------|------------|------------|------|--------------|---------|----------|--------------|
| 1. | 58.80 | 152.0 | 416.0 | 35.7 | 4.57 | 0.0 | 334.200 | 3204.200 | CR1,TSP,1974 |
| 2. | 77.20 | 153.0 | 416.0 | 38.7 | 4.88 | 0.0 | 334.200 | 3204.200 | CR2,TSP,1974 |

A A A R E F E R T U R S A A A

| NO. | RRFC(KM) | SREC(KM) | Z (M) |
|-----|----------|----------|-------|
|-----|----------|----------|-------|

| | | | | | |
|-----|---------|----------|-------|-------|-----|
| 1. | 335.090 | 3206.640 | 0.0 | | |
| 2. | 335.120 | 3206.740 | 0.0 | | |
| 3. | 335.160 | 3206.830 | 0.0 | | |
| 4. | 335.190 | 3206.930 | 0.0 | | |
| 5. | 335.230 | 3207.020 | 0.0 | | |
| 6. | 335.260 | 3207.110 | 0.0 | | |
| 7. | 335.290 | 3207.210 | 0.0 | | |
| 8. | 335.330 | 3207.300 | 0.0 | | |
| 9. | 335.360 | 3207.390 | 0.0 | | |
| 10. | 335.400 | 3207.490 | 0.0 | | |
| 1. | 214. | 2.1 | 5 | | |
| 2. | 215. | 1.0 | 6 | | |
| 3. | 239. | 1.5 | 6 | | |
| 4. | 237. | 1.0 | 5 | | |
| 5. | 244. | 1.0 | 4 | | |
| 6. | 92. | 2.1 | 4 | | |
| 7. | 137. | 3.1 | 4 | | |
| 8. | 120. | 3.1 | 4 | | |
| 9. | 139. | 4.6 | 4 | | |
| 10. | 151. | 4.6 | 4 | | |
| 11. | 214. | 4.1 | 3 | | |
| 12. | 201. | 4.1 | 2 | | |
| 13. | 199. | 4.6 | 2 | | |
| 14. | 197. | 4.6 | 3 | | |
| 15. | 210. | 5.1 | 3 | | |
| 16. | 229. | 5.1 | 3 | | |
| 17. | 220. | 4.6 | 3 | | |
| 18. | 195. | 5.1 | 4 | | |
| 19. | 244. | 2.6 | 5 | | |
| 20. | 246. | 3.1 | 6 | | |
| 21. | 239. | 3.1 | 6 | | |
| 22. | 239. | 4.6 | 5 | | |
| 23. | 228. | 4.1 | 5 | | |
| 24. | 216. | 4.6 | 5 | | |
| | | | 1708. | 295.0 | 0.0 |
| | | | 1701. | 295.0 | 0.0 |
| | | | 1695. | 294.0 | 0.0 |
| | | | 1688. | 295.0 | 0.0 |
| | | | 1681. | 295.0 | 0.0 |
| | | | 1675. | 295.0 | 0.0 |
| | | | 1668. | 295.0 | 0.0 |
| | | | 1661. | 296.0 | 0.0 |
| | | | 1654. | 297.0 | 0.0 |
| | | | 1648. | 299.0 | 0.0 |
| | | | 1641. | 301.0 | 0.0 |
| | | | 1634. | 302.0 | 0.0 |
| | | | 1628. | 303.0 | 0.0 |
| | | | 1621. | 304.0 | 0.0 |
| | | | 1621. | 304.0 | 0.0 |
| | | | 1621. | 303.0 | 0.0 |
| | | | 1621. | 302.0 | 0.0 |
| | | | 1621. | 300.0 | 0.0 |
| | | | 1614. | 299.0 | 0.0 |
| | | | 1589. | 298.0 | 0.0 |
| | | | 1564. | 298.0 | 0.0 |
| | | | 1539. | 298.0 | 0.0 |
| | | | 1513. | 298.0 | 0.0 |
| | | | 1488. | 298.0 | 0.0 |

AVERAGE CONCENTRATIONS FOR 24 HOURS.

ACCEPTOR NUMBER AAA

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

SOURCE PARTIAL CONCENTRATIONS (G/M**3)

1. 1.114E-06 1.123E-06 1.126E-06 1.126E-06 1.121E-06 1.115E-06 1.106E-06 1.095E-06 1.083E-06 1.067E-06
2. 1.224E-06 1.244E-06 1.257E-06 1.266E-06 1.270E-06 1.270E-06 1.267E-06 1.260E-06 1.252E-06 1.240E-06

TOTAL CONCENTRATION (G/M**3)

2.538E-06 2.367E-06 2.383E-06 2.392E-06 2.391E-06 2.385E-06 2.373E-06 2.355E-06 2.335E-06 2.307E-06

CR DAY 281, 1974--BASELINE--CR445 TO CR142

1. 7.0

*** SOURCEES ***

| NO | G (G/SEC) | HP (M) | TS (DEG-K) | VS (M/SEC) | D(M) | VF(M**3/SEC) | R (KM) | S (KM) | |
|----|-----------|--------|------------|------------|------|--------------|---------|----------|----------------|
| 1. | 50.00 | 152.0 | 416.0 | 35.7 | 4.57 | 0.0 | 334.200 | 3204.200 | CR1, TEP, 1974 |
| 2. | 77.20 | 153.0 | 416.0 | 38.7 | 4.88 | 0.0 | 334.200 | 3204.200 | CR2, TEP, 1974 |

*** RECEPTORS ***

| NO | RREC(KM) | SREC(KM) | Z (M) | | | | |
|-----|----------|----------|-------|--------|-------|-----|--|
| 1. | 332.110 | 3198.470 | 0.0 | | | | |
| 2. | 332.080 | 3198.370 | 0.0 | | | | |
| 3. | 332.050 | 3198.280 | 0.0 | | | | |
| 4. | 332.010 | 3198.190 | 0.0 | | | | |
| 5. | 331.980 | 3198.090 | 0.0 | | | | |
| 6. | 331.940 | 3198.000 | 0.0 | | | | |
| 7. | 331.910 | 3197.900 | 0.0 | | | | |
| 8. | 331.870 | 3197.810 | 0.0 | | | | |
| 9. | 331.840 | 3197.720 | 0.0 | | | | |
| 10. | 331.810 | 3197.620 | 0.0 | | | | |
| 11. | 331.770 | 3197.530 | 0.0 | | | | |
| 12. | 331.740 | 3197.430 | 0.0 | | | | |
| 13. | 331.700 | 3197.340 | 0.0 | | | | |
| 14. | 331.670 | 3197.250 | 0.0 | | | | |
| 15. | 331.630 | 3197.150 | 0.0 | | | | |
| 1. | 5. | 2.6 | 0 | 1389.0 | 296.0 | 0.0 | |
| 2. | 319. | 2.6 | 4 | 1435.0 | 296.0 | 0.0 | |
| 3. | 330. | 3.1 | 4 | 1482.0 | 296.0 | 0.0 | |
| 4. | 321. | 3.6 | 4 | 1528.0 | 296.0 | 0.0 | |
| 5. | 336. | 3.6 | 0 | 1575.0 | 296.0 | 0.0 | |
| 6. | 175. | 3.1 | 4 | 1621.0 | 296.0 | 0.0 | |
| 7. | 11. | 3.6 | 0 | 1668.0 | 296.0 | 0.0 | |
| 8. | 19. | 4.1 | 4 | 1715.0 | 296.0 | 0.0 | |
| 9. | 17. | 4.6 | 3 | 1761.0 | 299.0 | 0.0 | |
| 10. | 20. | 5.1 | 3 | 1808.0 | 301.0 | 0.0 | |
| 11. | 31. | 4.1 | 3 | 1854.0 | 302.0 | 0.0 | |
| 12. | 32. | 3.6 | 2 | 1901.0 | 303.0 | 0.0 | |
| 13. | 354. | 5.1 | 3 | 1947.0 | 303.0 | 0.0 | |
| 14. | 359. | 4.6 | 3 | 1994.0 | 304.0 | 0.0 | |
| 15. | 53. | 4.6 | 3 | 1994.0 | 304.0 | 0.0 | |
| 16. | 325. | 6.2 | 4 | 1994.0 | 304.0 | 0.0 | |
| 17. | 328. | 5.7 | 4 | 1994.0 | 302.0 | 0.0 | |
| 18. | 354. | 4.1 | 4 | 1994.0 | 300.0 | 0.0 | |
| 19. | 340. | 3.6 | 5 | 1991.0 | 297.0 | 0.0 | |
| 20. | 357. | 4.6 | 5 | 1988.0 | 296.0 | 0.0 | |
| 21. | 5. | 4.1 | 5 | 1984.0 | 295.0 | 0.0 | |
| 22. | 54. | 2.6 | 6 | 1981.0 | 294.0 | 0.0 | |
| 23. | 47. | 3.6 | 5 | 1977.0 | 294.0 | 0.0 | |
| 24. | 61. | 3.1 | 6 | 1974.0 | 293.0 | 0.0 | |

AVERAGE CONCENTRATIONS FOR 24 HOURS.

*** RECEPTOR NUMBER ***

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.

SOURCE PARTIAL CONCENTRATIONS (G/M**3)

1. 6.277E-07 6.190E-07 6.109E-07 6.019E-07 5.936E-07 5.848E-07 5.766E-07 5.681E-07 5.607E-07 5.530E-07 5.449E-07 5.375E-07
2. 7.526E-07 7.435E-07 7.349E-07 7.251E-07 7.160E-07 7.063E-07 6.972E-07 6.876E-07 6.792E-07 6.704E-07 6.610E-07 6.524E-07

TOTAL CONCENTRATION (G/M**3)

1.380E-06 1.362E-06 1.346E-06 1.327E-06 1.310E-06 1.291E-06 1.274E-06 1.256E-06 1.240E-06 1.223E-06 1.206E-06 1.190E-06

*** RECEPTOR NUMBER ***

13. 14. 15.

SOURCE PARTIAL CONCENTRATIONS (G/M**3)

1. 5.297E-07 5.230E-07 5.151E-07
2. 6.433E-07 6.354E-07 6.261E-07

TOTAL CONCENTRATION (G/M**3)

1.173E-06 1.158E-06 1.141E-06

DAY 320, 1972---CLASS 1

1. 7.0.

A A A S O U R C E S * * *

| NO. | O (G/SEC) | HP (M) | TS (DEG-K) | VS (M/SEC) | U (M) | VF(MA*3/SEC) | R (KM) | S (KM) | |
|-----|-----------|--------|------------|------------|-------|--------------|---------|----------|-------------------------|
| 1. | 0.67 | 2.4 | 339.0 | 37.2 | 0.20 | 0.0 | 334.200 | 3204.200 | FLY ASH TRANSFER SILO |
| 2. | 0.01 | 10.7 | 339.0 | 0.5 | 0.59 | 0.0 | 334.200 | 3204.200 | FLY ASH TRANSFER SILO |
| 3. | 0.11 | 28.3 | 339.0 | 13.7 | 0.48 | 0.0 | 334.200 | 3204.200 | FLY ASH STRAGF SILO |
| 4. | 49.01 | 152.0 | 422.0 | 42.1 | 4.57 | 0.0 | 334.200 | 3204.200 | CR1, TSP, 1980'S |
| 5. | 59.41 | 153.0 | 422.0 | 41.8 | 4.88 | 0.0 | 334.200 | 3204.200 | CR2, TSP, 1980'S |
| 6. | 168.13 | 182.9 | 400.0 | 27.4 | 6.86 | 0.0 | 334.700 | 3205.300 | CR485, TSP, 1980'S |
| 7. | 0.10 | 12.8 | 315.0 | 9.1 | 0.68 | 0.0 | 334.700 | 3205.300 | CRUSHER HOUSE |
| 8. | 0.21 | 12.8 | 315.0 | 9.1 | 0.99 | 0.0 | 334.800 | 3205.300 | EMERGING RECLAIM HOPPER |
| 9. | 0.35 | 12.8 | 315.0 | 9.1 | 0.62 | 0.0 | 334.700 | 3205.300 | SILO DUST COLLECTORS |
| 10. | 0.55 | 45.7 | 315.0 | 9.1 | 1.13 | 0.0 | 334.700 | 3205.300 | FLY ASH SILOS |
| 11. | 0.08 | 3.0 | 315.0 | 9.1 | 0.44 | 0.0 | 334.700 | 3205.300 | FLY ASH VACUUM PUMP |
| 12. | 0.06 | 6.4 | 315.0 | 9.1 | 0.52 | 0.0 | 334.600 | 3203.900 | TRANSFER POINT 1 |
| 13. | 0.06 | 12.8 | 315.0 | 9.1 | 0.52 | 0.0 | 334.680 | 3203.900 | TRANSFER POINT 2 |
| 14. | 0.06 | 12.8 | 315.0 | 9.1 | 0.52 | 0.0 | 335.000 | 3204.100 | TRANSFER POINT 3 |
| 15. | 0.06 | 12.8 | 315.0 | 9.1 | 0.52 | 0.0 | 335.000 | 3205.000 | TRANSFER POINT 4 |

A A A R E C E P T O R S * * *

NO. PRFC(KM) SREC(KM)

| NO. | PRFC(KM) | SREC(KM) | Z (M) |
|-----|----------|----------|-------|
| 1. | 331.000 | 3184.100 | 0.0 |
| 2. | 331.500 | 3184.100 | 0.0 |
| 3. | 332.000 | 3184.100 | 0.0 |
| 4. | 332.500 | 3184.100 | 0.0 |
| 5. | 333.000 | 3184.100 | 0.0 |
| 6. | 333.500 | 3184.100 | 0.0 |
| 7. | 334.000 | 3184.100 | 0.0 |
| 8. | 334.500 | 3184.100 | 0.0 |
| 9. | 335.000 | 3184.100 | 0.0 |
| 10. | 335.500 | 3184.100 | 0.0 |
| 11. | 336.000 | 3184.100 | 0.0 |
| 12. | 336.500 | 3184.100 | 0.0 |
| 13. | 337.000 | 3184.100 | 0.0 |
| 14. | 337.500 | 3184.100 | 0.0 |
| 15. | 338.000 | 3184.100 | 0.0 |
| 16. | 338.500 | 3184.100 | 0.0 |
| 17. | 339.000 | 3184.100 | 0.0 |
| 18. | 339.500 | 3184.100 | 0.0 |
| 19. | 340.000 | 3184.100 | 0.0 |
| 20. | 340.500 | 3184.100 | 0.0 |
| 21. | 341.000 | 3184.100 | 0.0 |
| 22. | 341.500 | 3184.100 | 0.0 |
| 23. | 342.000 | 3184.100 | 0.0 |
| 24. | 342.500 | 3184.100 | 0.0 |
| 25. | 343.000 | 3184.100 | 0.0 |
| 26. | 343.500 | 3184.100 | 0.0 |
| 27. | 344.000 | 3184.100 | 0.0 |
| 1. | 323. | 346 | 0 |
| 2. | 308. | 2.6 | 0 |
| 3. | 307. | 3.6 | 0 |
| 4. | 329. | 5.7 | 0 |
| 5. | 337. | 5.7 | 0 |
| 6. | 356. | 7.6 | 0 |
| 7. | 359. | 7.6 | 0 |

| | | | | | | |
|----|------|-----|---|------|-------|-----|
| 1. | 323. | 346 | 0 | 438. | 295.0 | 0.0 |
| 2. | 308. | 2.6 | 0 | 453. | 294.0 | 0.0 |
| 3. | 307. | 3.6 | 0 | 467. | 294.0 | 0.0 |
| 4. | 329. | 5.7 | 0 | 482. | 293.0 | 0.0 |
| 5. | 337. | 5.7 | 0 | 496. | 291.0 | 0.0 |
| 6. | 356. | 7.6 | 0 | 510. | 290.0 | 0.0 |
| 7. | 359. | 7.6 | 0 | 525. | 290.0 | 0.0 |

| | | | | | | |
|-----|------|-----|---|------|-------|-----|
| 8. | 16. | 5.1 | 4 | 530. | 289.0 | 0.0 |
| 9. | 300. | 5.7 | 4 | 554. | 290.0 | 0.0 |
| 10. | 8. | 5.7 | 4 | 568. | 289.0 | 0.0 |
| 11. | 356. | 6.2 | 4 | 583. | 290.0 | 0.0 |
| 12. | 356. | 5.7 | 3 | 597. | 292.0 | 0.0 |
| 13. | 354. | 6.2 | 4 | 612. | 293.0 | 0.0 |
| 14. | 349. | 6.7 | 4 | 626. | 292.0 | 0.0 |
| 15. | 336. | 6.2 | 4 | 626. | 293.0 | 0.0 |
| 16. | 326. | 6.7 | 4 | 626. | 292.0 | 0.0 |
| 17. | 348. | 5.1 | 4 | 626. | 290.0 | 0.0 |
| 18. | 12. | 5.7 | 4 | 637. | 289.0 | 0.0 |
| 19. | 356. | 3.1 | 5 | 662. | 288.0 | 0.0 |
| 20. | 369. | 2.6 | 6 | 688. | 286.0 | 0.0 |
| 21. | 5. | 1.5 | 6 | 713. | 286.0 | 0.0 |
| 22. | 2. | 1.5 | 5 | 738. | 286.0 | 0.0 |
| 23. | 1. | 1.5 | 5 | 764. | 285.0 | 0.0 |
| 24. | 12. | 3.1 | 5 | 789. | 284.0 | 0.0 |

WD 328, 1972, BASELINE AND 1980'S, CLASS 1 AREA

1. 7.0

*** SOURCES ***

| NO. | A (G/SEC) | HP (M) | TG (DEG-K) | VS (M/SEC) | D(M) | VF(M**3/SEC) | R (KM) | S (KM) | |
|-----|-----------|--------|------------|------------|------|--------------|---------|----------|--------------|
| 1. | 58.80 | 152.0 | 416.0 | 35.7 | 4.57 | 0.0 | 334.200 | 3204.200 | CR1,TSP,1974 |
| 2. | 77.20 | 153.0 | 416.0 | 38.7 | 4.88 | 0.0 | 334.200 | 3204.200 | CR2,TSP,1974 |

*** REFLECTORS ***

| NO. | RRFC(KM) | SREC(KM) | Z (M) | | | |
|-----|----------|----------|-------|------|-------|-----|
| 1. | 331.000 | 3184.100 | 0.0 | | | |
| 2. | 331.500 | 3184.100 | 0.0 | | | |
| 3. | 332.000 | 3184.100 | 0.0 | | | |
| 4. | 332.500 | 3184.100 | 0.0 | | | |
| 5. | 333.000 | 3184.100 | 0.0 | | | |
| 6. | 333.500 | 3184.100 | 0.0 | | | |
| 7. | 334.000 | 3184.100 | 0.0 | | | |
| 8. | 334.500 | 3184.100 | 0.0 | | | |
| 9. | 335.000 | 3184.100 | 0.0 | | | |
| 10. | 335.500 | 3184.100 | 0.0 | | | |
| 11. | 336.000 | 3184.100 | 0.0 | | | |
| 12. | 336.500 | 3184.100 | 0.0 | | | |
| 13. | 337.000 | 3184.100 | 0.0 | | | |
| 14. | 337.500 | 3184.100 | 0.0 | | | |
| 15. | 338.000 | 3184.100 | 0.0 | | | |
| 16. | 338.500 | 3184.100 | 0.0 | | | |
| 17. | 339.000 | 3184.100 | 0.0 | | | |
| 18. | 339.500 | 3184.100 | 0.0 | | | |
| 19. | 340.000 | 3184.100 | 0.0 | | | |
| 20. | 340.500 | 3184.100 | 0.0 | | | |
| 21. | 341.000 | 3184.100 | 0.0 | | | |
| 22. | 341.500 | 3184.100 | 0.0 | | | |
| 23. | 342.000 | 3184.100 | 0.0 | | | |
| 24. | 342.500 | 3184.100 | 0.0 | | | |
| 25. | 343.000 | 3184.100 | 0.0 | | | |
| 26. | 343.500 | 3184.100 | 0.0 | | | |
| 27. | 344.000 | 3184.100 | 0.0 | | | |
| 1. | 359. | 4.6 | 5 | 892. | 283.0 | 0.0 |
| 2. | 354. | 4.1 | 5 | 891. | 283.0 | 0.0 |
| 3. | 346. | 3.6 | 4 | 891. | 281.0 | 0.0 |
| 4. | 347. | 4.6 | 4 | 890. | 281.0 | 0.0 |
| 5. | 351. | 3.6 | 4 | 890. | 281.0 | 0.0 |
| 6. | 358. | 3.6 | 4 | 890. | 281.0 | 0.0 |
| 7. | 336. | 4.1 | 4 | 889. | 280.0 | 0.0 |
| 8. | 337. | 4.1 | 4 | 889. | 280.0 | 0.0 |
| 9. | 10. | 4.1 | 4 | 888. | 282.0 | 0.0 |
| 10. | 11. | 4.6 | 4 | 888. | 285.0 | 0.0 |
| 11. | 21. | 3.6 | 4 | 887. | 286.0 | 0.0 |
| 12. | 4. | 5.1 | 4 | 887. | 288.0 | 0.0 |
| 13. | 359. | 5.1 | 4 | 886. | 289.0 | 0.0 |
| 14. | 356. | 6.2 | 4 | 886. | 290.0 | 0.0 |
| 15. | 7. | 6.7 | 4 | 886. | 290.0 | 0.0 |
| 16. | 338. | 7.2 | 4 | 886. | 289.0 | 0.0 |
| 17. | 2. | 5.1 | 4 | 886. | 288.0 | 0.0 |
| 18. | 357. | 3.1 | 5 | 883. | 287.0 | 0.0 |
| 19. | 357. | 4.1 | 4 | 877. | 286.0 | 0.0 |
| 20. | 359. | 5.1 | 4 | 871. | 285.0 | 0.0 |

| | | | | | | |
|-----|------|-----|---|------|-------|-----|
| 21. | 6. | 3.1 | 5 | 865. | 286.0 | 0.0 |
| 22. | 355. | 3.1 | 6 | 859. | 283.0 | 0.0 |
| 23. | 25. | 3.1 | 5 | 853. | 283.0 | 0.0 |
| 24. | 351. | 4.1 | 5 | 846. | 283.0 | 0.0 |

BEST AVAILABLE COPY

AVERAGE CONCENTRATIONS FOR 24 HOURS.

ACADEPTOR NUMBER R***

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.

SOURCE PARTIAL CONCENTRATIONS (G/M**3)

1. 3.023E-07 3.341E-07 3.561E-07 3.674E-07 3.866E-07 4.415E-07 5.317E-07 6.132E-07 6.281E-07 5.601E-07 4.491E-07 3.492E-07
2. 3.275E-07 3.656E-07 3.920E-07 4.047E-07 4.241E-07 4.806E-07 5.744E-07 6.591E-07 6.734E-07 5.997E-07 4.799E-07 3.709E-07

TOTAL CONCENTRATION (G/M**3)

6.298E-07 6.997E-07 7.481E-07 7.721E-07 8.108E-07 9.220E-07 1.106E-06 1.272E-06 1.301E-06 1.160E-06 9.290E-07 7.201E-07

ACADEPTOR NUMBER R***

13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24.

SOURCE PARTIAL CONCENTRATIONS (G/M**3)

1. 2.873E-07 2.572E-07 2.421E-07 2.305E-07 2.118E-07 1.789E-07 1.407E-07 1.197E-07 1.335E-07 1.799E-07 2.361E-07 2.718E-07
2. 3.014E-07 2.662E-07 2.480E-07 2.348E-07 2.155E-07 1.823E-07 1.448E-07 1.263E-07 1.449E-07 1.973E-07 2.588E-07 2.966E-07

TOTAL CONCENTRATION (G/M**3)

5.887E-07 5.234E-07 4.902E-07 4.653E-07 4.273E-07 3.613E-07 2.855E-07 2.460E-07 2.784E-07 3.773E-07 4.948E-07 5.684E-07

ACADEPTOR NUMBER R***

25. 26. 27.

SOURCE PARTIAL CONCENTRATIONS (G/M**3)

1. 2.676E-07 2.250E-07 1.624E-07
2. 3.995E-07 2.431E-07 1.748E-07

TOTAL CONCENTRATION (G/M**3)

5.581E-07 4.681E-07 3.372E-07

APPENDIX B

**DESCRIPTIONS OF ATMOSPHERIC
DISPERSION MODELS**

DESCRIPTIONS OF ATMOSPHERIC DISPERSION MODELSTHE AIR QUALITY DISPLAY MODEL

The Air Quality Display Model (AQDM) was developed by the U.S. Environmental Protection Agency and is an approved technique for computing annual or seasonal arithmetic average concentrations of gaseous and suspended particulate pollutants. The AQDM is based on the diffusion model developed by Martin and Tikvart (1968). It uses the Pasquill-Gifford plume dispersion equation, which is summarized by Turner (1969) and the plume rise equation developed by Briggs (1972) to simulate plume behavior.

Annual average emissions data and stack parameters from multiple point sources are used as inputs to the AQDM in conjunction with annual or seasonal meteorological stability wind rose data to determine ground-level concentrations at designated receptor points and points comprising a receptor grid network. The model can be calibrated by comparing ambient air quality data for a given annual time period with computed concentrations obtained from the AQDM using emissions and meteorological data for the same period. Once calibrated, the AQDM may be used to predict ambient air quality for any annual time period by adjusting the input data to correspond to the time period of interest.

According to the Pasquill-Gifford diffusion equation, the concentration, C, at a position (x, y, z) for the substances emitted at (0, 0, H) is given by:

$$C(x, y, z; H) = \frac{Q}{2\pi\sigma_y\sigma_z u} \exp [-1/2(y\sigma_y)^2] A$$

for:

$$A = \exp [-1/2(z-H/\sigma_z)^2] + \exp [(-1/2)(z+H/\sigma_z)^2]$$

where:

C (x, y, z; H) = pollutant concentration (grams/meter³) at point x, y, z
for an effective stack height, H

Q = emission rate (grams/sec)

σ_y, σ_z = standard deviation of the plume concentration distribution in the cross plume and vertical directions (meters). (σ_y and σ_z are given as functions of downwind distance and atmospheric stability.)

In the AQDM, the effective stack height, H , is computed from the Briggs plume rise equation according to the relation:

$$H = h + 1.6F^{1/3}u^{-1} (3.5z)^{2/3} \text{ for } r > 3.5z$$

and

$$H = h + 1.6F^{1/3}u^{-1} r^{2/3} \text{ for } r \leq 3.5z$$

$$z = 34F^{2/5} \text{ if } F > 55$$

$$z = 14F^{5/8} \text{ if } F \leq 55$$

H = effective stack height (meters)

h = actual stack height (meters)

$$F = gV_s R_s^2 [(T_s - T_a)/T_s] \text{ (meters}^4/\text{seconds}^3\text{)}$$

g = acceleration due to gravity (meters/sec²)

V_s = exit velocity of stack gases (meters/sec)

R_s = inside radius of stack (meters)

T_s = exit temperature of stack gases (°K)

T_a = ambient air temperature

U = wind speed at stack height

r = distance from source to receptor (meters)

THE PTMTPW SHORT-TERM MODEL

The PTMTPW is an EPA model which is a modified version of the PTMTP model. The major difference in the PTMTPW is that this model accounts for the vertical wind shear effect (increase in wind speed with height) which is known to exist in the atmospheric boundary layer. Hourly wind speeds are input into the model along with the height at which the measurements were made. The wind shear correction at stack height for each source is then accomplished by use of the following equation:

$$U_Z = U_L \left(\frac{Z}{Z_0} \right)^P$$

where U_L is the wind speed at height Z_0 , Z is the stack height or emission release point, and P depends upon atmospheric stability class (De-Marrais, 1959).

The effect of the wind shear modification is to increase ground-level concentrations as compared to those calculated by the PTMTP model. All other calculation techniques used by the PTMTPW to estimate ground-level pollutant concentrations are the same as those used in the PTMTP. It is important to note that since the wind shear modification tends to increase ground-level concentrations over those calculated by the PTMTP, the PTMTPW should overcalculate actual concentrations even more severely than the PTMTP.

In addition to a wind shear law, the model uses an hourly average emission inventory and stack data from multiple point sources in conjunction with hourly meteorological data to calculate hourly pollutant concentrations at designated receptor points. These hourly concentrations can be averaged over longer periods of time, such as 3 hours or 24 hours, in order to aid in the comparison of calculated concentrations with concentrations observed over a period of time greater than one hour. The PTMTPW uses the Pasquill-Gifford plume dispersion equation in conjunction with the plume rise equation developed by Briggs to simulate plume behavior. Using the Briggs

equation, effective stack height, H , is determined according to the following relation:

$$H = h + 1.6F^{1/3}u^{-1}(3.5z)^{2/3} \text{ for } r > 3.5z$$

and

$$H = h + 1.6F^{1/3}u^{-1}r^{2/3} \text{ for } r \leq 3.5z$$

$$z = 34F^{2/5} \text{ if } F > 55$$

$$z = 14F^{5/8} \text{ if } F \leq 55$$

H = effective stack height (meters)

h = actual stack height (meters)

$$F = gV_s R_s^2 [(T_s - T_a)/T_s] \text{ (meters}^4/\text{seconds}^3\text{)}$$

g = acceleration due to gravity (meters/sec²)

V_s = exit velocity of stack gases (meters/sec)

R_s = inside radius of stack (meters)

T_s = exit temperature of stack gases ($^{\circ}$ K)

T_a = ambient air temperature

U = wind speed at stack height

r = distance from source to receptor (meters)

THE CRSTER MODEL

CRSTER is a steady state Gaussian plume model applicable in flat or complex terrain. The purposes of the model are to: (1) determine the maximum concentrations from a single facility for various averaging times using one or more years of meteorological data, (2) determine the meteorological conditions which cause these maximum concentrations and, (3) store concentration information useful in calculating frequency distributions for various averaging times.

A concentration for each hour of the year is calculated from emissions data, stack parameters, and hourly meteorological conditions. Twenty-four hour averages are calculated from midnight-to-midnight of each day. Three-hour averages are calculated for non-overlapping consecutive three-hour periods. Variable averaging times of 8, 4, 2-hour and others are also available through a program option.

General output for the model includes tables of the highest and second highest 1, 3, and 24-hour concentrations at each receptor for each year of meteorological data input plus a table of the annual arithmetical average concentration at each receptor. Receptors are specified for five downwind distances. For each downwind distance, receptors are located along the 36 standard wind directions (10° , 20° , ... 360°), resulting in a total of 180 receptors. Hourly concentrations for each receptor can be output onto magnetic tape for further processing of frequency distributions.

ESE's CRSTER model has the following added options:

1. A variable number of years of meteorological data can be entered into one computer run.
2. Composite concentration tables are printed after all years have been processed. There are composite concentration tables for the annual 24, 3, 1, and variable-hour highest and second

highest concentrations at each receptor. This option facilitates the development of concentration isopleth maps for selected averaging times.

3. An option is available for writing the composite tables onto disk or tape in order to simplify the determination of maximum PSD increments over the entire 180-receptor grid.

Using the final plume rise equation of Briggs (1972), the effective stack height, H, is determined according to the following equations:

$$H = h + 1.6F^{1/3}U^{-1} (3.5z)^{2/3} \text{ for } r > 3.5z$$

and

$$H = h + 1.6F^{1/3}U^{-1} r^{2/3} \quad \text{for } r \leq 3.5z$$

$$z = 34F^{2/5} \quad \text{if } F > 55$$

$$z = 14F^{5/8} \quad \text{if } F \leq 55$$

H = effective stack height (m)

h = physical stack height (m)

F = buoyancy flux term $gV_s R_s^2 [(T_s - T_a)/T_s]$ (m^4/sec^3)

g = acceleration of gravity (m/sec^2)

V_s = stack gas exit velocity (m/sec)

R_s = stack inner radius (m)

T_s = exit stack gases temperature ($^{\circ}K$)

T_a = ambient air temperature ($^{\circ}K$)

U = wind speed at stack height (m/sec)

r = distance from source to receptor (m)

BIBLIOGRAPHY

- Briggs, G.A. 1972. "Discussion of Chimney Plumes in Neutral and Stable Surroundings." *Atmospheric Environment* 6, pp. 507-570.
- DeMarrais, G.A. 1959. "Wind Speed Profiles at Brookhaven National Laboratory," J. Applied Meteorology, 16: pp. 181-189.
- Martin, D.O. and J.A. Tikvart. 1968. "A General Atmospheric Diffusion Model for Estimating the Effects on Air Quality of One or More Sources," APCA Paper.
- Turner, D.B. 1969. "Workbook of Atmospheric Dispersion Estimates," PHS No. 00-AP026 (NTIS PB 191 482), Office of Technical Information and Publications, U.S. EPA, Research Triangle Park, North Carolina.