First in cellulose

The Buckeye Cellulose Corporation
A Procter and Gamble Company
Mailing Address: Route 3 Box 260 Perry, Florida 32347 Phone: (904) 584-0121

November 11, 1987

DER
NOV 12 1987
BAQM

Mr. Steve Smallwood
Chief, B.A.Q.M.
Florida Department of
Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32301

Re: TRS Control Project:
Construction Permit Applications
Compliance Plan and Venting Contingency Plan
The Buckeye Cellulose Corporation

Dear Mr. Smallwood:

Enclosed are four (4) copies each of the construction permit applications' package for the applicable TRS sources at the Foley Plant, as required by Rule 17-2.960, F.A.C. Also enclosed is a check in the amount of $11,000.00 to cover the fee for filing the applications.

Basically, the enclosed construction permit applications package reflects the TRS compliance plan, which was submitted on 12/17/86. Our TRS rule compliance strategy remains fundamentally unchanged from the compliance plan that has been approved by the Department. In fact, the only significant change is the cost of compliance, which is now estimated to be over three times the cost that was expected when the rule was adopted.

We have provided a significant amount of information including an updated version of our Compliance Plan and Venting Contingency Plan to provide a good understanding of our process and the total project. The information is believed to be complete and self-explanatory. However, if you have any questions, please call Mr. Ray Andreu at (904) 584-0347.

Very truly yours,

THE BUCKEYE CELLULOSE CORPORATION
a Procter & Gamble Company

J. L. Sipple
Plant Manager

JLS/RA:msw
3025L
Enclosures

AIR PERMIT APPLICATIONS

TRS CONTROL PROJECT

PREPARED FOR

THE BUCKEYE CELLULOSE CORPORATION

A Procter & Gamble Company

PERRY, FLORIDA

THE FOLEY PLANT

SEC JOB NO. F-1612

NOVEMBER 1987

PREPARED BY

SIRRINE ENVIRONMENTAL CONSULTANTS, INC.

GREENVILLE, SOUTH CAROLINA

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SECTION 1

INTRODUCTION

This report addresses the air permit applications for the proposed TRS Control Project to be undertaken by the Buckeye Cellulose Corporation in order that the Foley Plant will be in compliance by May 12, 1989, as required in the total reduced sulfur (TRS) regulations for kraft pulp mills and tall oil plants promulgated by the State of Florida. The project will consist of the installation of new equipment and upgrades to various systems in the plant. Sirrine Environmental Consultants, Inc. and the Pulp and Paper Division of CRS Sirrine, Inc. Consulting Engineers for Buckeye Cellulose on the initial phase of the project, assisted in the preparation of the TRS Control Project air permit applications.

Section II of this report provides a Summary of the major findings of the required analyses that were performed for the air permit applications.

Section III provides an overview of the applicable regulations pertaining to the project.

Section IV consists of a general description of the kraft pulping process at the Foley Plant, including appropriate site location drawings.

Section V provides a discussion of the overall compliance plan for the Foley Plant.

Section VI includes a brief description of the various regulated TRS sources at the Foley Plant that are being brought into compliance and the appropriate air permit applications.

Section VII consists of an air quality impact analysis that addresses the potential impacts on ambient air quality of TRS-generated sulfur

dioxide (SO2) emissions and all the other SO2 emission sources at the Foley Plant.

The appendices include copies of the TRS Compliance Plan, appropriate SO2 emission rate calculations and air dispersion modeling computer printouts.

SECTION II

SUMMARY

This report addresses the air permit applications for a proposed TRS Control Project at the Foley Plant of Buckeye Cellulose Corporation in Perry, Florida, in order to bring it into compliance with the recently promulgated Florida air emissions control regulations for existing Kraft Mills and tall oil plants. The TRS Control Project will bring the Plant into compliance by May 12, 1989.

The Florida Air Pollution regulations impose new limits on most TRS sources including digesting systems, multiple effect evaporator systems, tall oil plants, and smelt dissolving tanks. Foley's three recovery boilers (No. 2, 3, and 4) and No. 4 Lime Kiln are currently in full compliance and, therefore, not included in the proposed project. Improvements are required in the No. 1 and No. 2 digesting system blow gases, multiple effect evaporator system and the tall oil system.

The digesting system relief (turpentine) gases are in full compliance. The smelt dissolving tank vents will require a change in the method of operation.

The proposed project will include the installation of equipment that will collect and direct the TRS gases from the digesting system and multiple effect evaporator system hot wells to the No. 1 Bark Boiler for incineration. Sulfur dioxide emissions resulting from TRS combustion will be controlled in the existing No. 1 Bark Boiler Scrubber. Also, a new scrubber will be installed in the tall oil plant to meet the appropriate TRS emission limits.

SECTION III

TRS REGULATIONS APPLICABILITY

The State of Florida air pollution rules restrict the amount of total reduced sulfur (TRS) compounds that can be emitted from kraft (sulfate) pulp mill sources and tall oil plants. Section 17-2.600(4)(c) of the Florida Administrative Code (FAC) sets specific limits on the TRS levels from these regulated sources (see Table III-1). For the Foley Plant, sources governed by these regulations are kraft recovery furnaces, digestion systems, multiple effect evaporation systems, dissolving tank vent stacks, lime kilns and calciners, and tall oil plants. Other combustion devices (such as boilers, incinerators, and others) used to incinerate TRS emissions are also regulated.

Owners or operators of kraft pulp mills or tall oil plants are also required to comply with Rule 17-2.710 of the Florida Administrative Code, which requires the installation of continuous monitoring systems for monitoring the TRS emissions. Also, sources subject to Rule 17-2.600(4)(c)1.-6.,FAC are also governed by Rule 17-2.960(1), FAC, which sets compliance schedules for owners or operators of kraft pulp mills and tall oil plants.

The Buckeye Cellulose Corporation Foley Plant in Perry, Florida will be subject to all of the above mentioned regulations with respect to TRS emissions.

TABLE III-1

APPLICABLE TRS EMISSION STANDARDS FOR THE FOLEY PLANT

Source	Allowable Emission Rate	Applicable Regulations
1. Digester Systems	a. 5 ppm by vol. on dry basis at std. conditions corrected to actual O_2 content of untreated flue gas as a 12-hour average, or	Rules 17-2.600(4)(c).1, FAC, 17-2.960(1), FAC, 17-2.710, FAC
	b. Incineration	
2. Multiple Effect Evaporator Systems	a. 5 ppm by vol. on dry basis at std. conditions corrected to actual O_2 content of untreated flue gas as a 12-hour average, or	Rules 17-2.600(4)(c).1, FAC, 17-2.960(1), FAC, 17-2.710, FAC
	b. Incineration	
3. Tall Oil Plants	0.05 lb. TRS per ton crude tall oil produced as a 12-hour average	Rules 17-2.600(4)(c).2, FAC, 17-2.960(1), FAC, 17-2.710, FAC
4. Smelt Dissolving Tanks	0.0480 lb. TRS (as H_2S) per 3,000 lb. black liquor solids	Rules 17-2.600(4)(c).4, FAC, 17-2.960(1), FAC, 17-2.710, FAC
5. Recovery Boilers		
- No. 2 Unit	17.5 ppm by volume on a dry basis at std. conditions corrected to 8 percent O_2 as a 12-hour average	Rules 17-2.600(4)(c).3, FAC, 17-2.960(1), FAC, 17-2.710, FAC
- No. 3 Unit	17.5 ppm by volume on a dry basis at std. conditions corrected to 8 percent O_2 as a 12-hour average	Rules 17-2.600(4)(c).3, FAC, 17-2.960(1), FAC, 17-2.710, FAC

TABLE III-1
(Continued)

APPLICABLE TRS EMISSION STANDARDS FOR THE FOLEY PLANT

Source	Allowable Emission Rate	Applicable Regulations
- No. 4 Unit	5 ppm by volume on a dry basis at std. conditions corrected to 8 percent O_2 as a 12-hour average	
6. Other Combustion Device (No. 1 Bark Boiler)	5 ppm by volume on a dry basis at std. conditions corrected to 10 percent O_2 as a 12-hour average	Rules 17-2.600(4)(c).6, FAC, 17-2.960(1), FAC, 17-2.710, FAC
7. Lime Kilns	20 ppm by volume on a dry basis at std. conditions corrected to 10 percent O_2 as a 12-hour average	Rules 17-2.600(4)(c).5, FAC, 17-2.960(1), FAC, 17-2.710, FAC

SECTION IV

FOLEY PLANT DESCRIPTION

A. USGS Location

Figure IV-1 shows the USGS location of the plant site. The plant is located at Universal Transverse Mercator (UTM) coordinates of approximately 256.74 kilometers east and 3,328.70 kilometers north.

B. Site Plot Plan

Figure IV-2 shows the location of the various sources within the plant.

C. Overall Process Description

Figure IV-3 is a simplified flow diagram representative of the kraft pulping process used at the Foley Plant of the Buckeye Cellulose Coporation's dissolving kraft pulp and paper facility in Perry, Florida. Wood chips are charged into digesters where they are cooked under pressure in a steam-heated aqueous solution of sodium hydroxide and sodium sulfide known as cooking liquor (or white liquor). In the cooking operation, the lignin binder, which holds together the cellulose fibers of the wood, is dissolved.

After cooking, the cellulose fibers (pulp) are separated from the cooking liquor in the pulp washers. The pulp then goes through several processes and finally to the paper machine.

The spent cooking liquor containing the lignin dissolved from the wood is called "black liquor". As the dilute or "weak" black liquor comes from the washers, it is first concentrated in

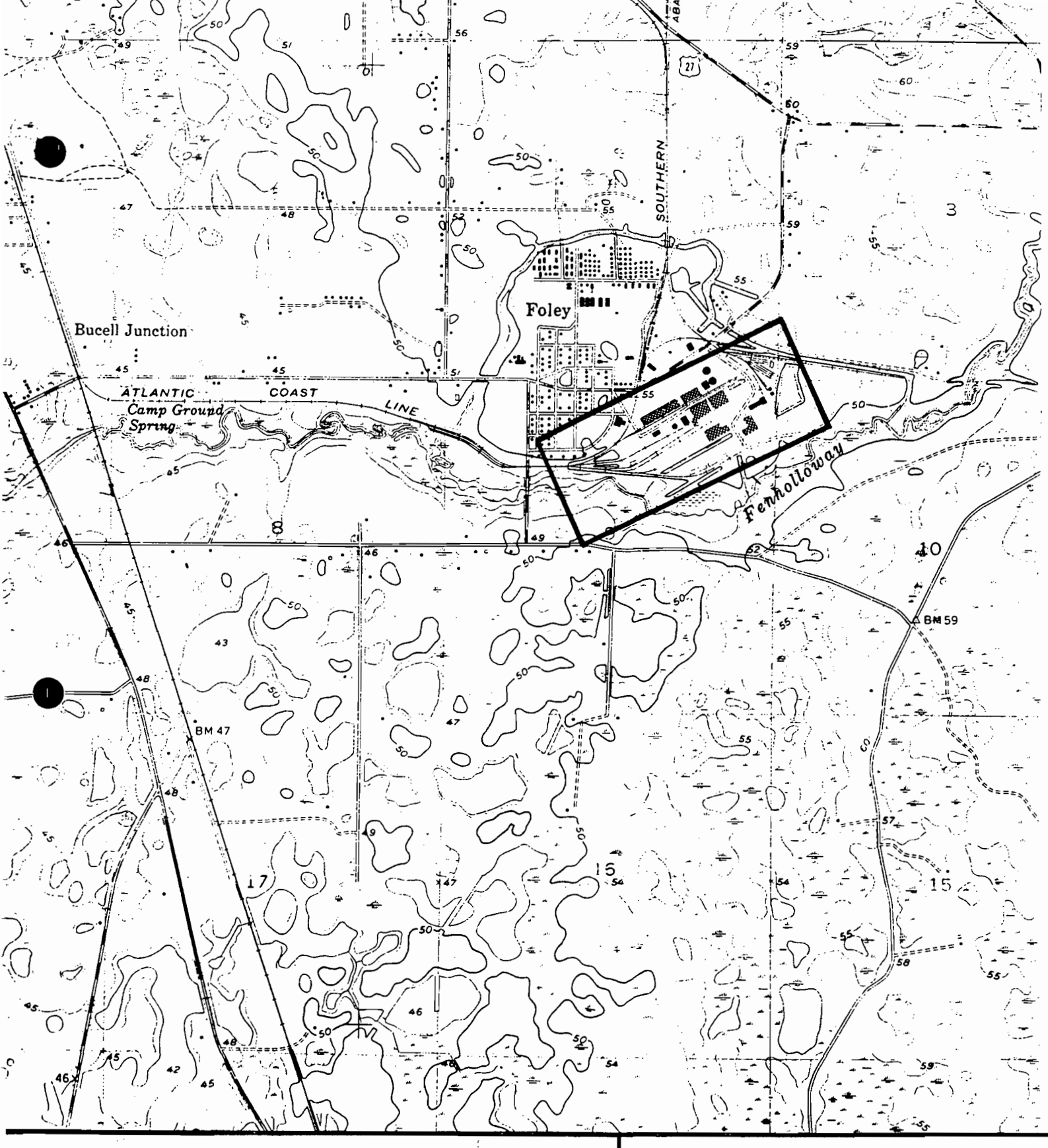

FIGURE IV-1

USGS LOCATION MAP

BUCKEYE CELLULOSE CORPORATION

FOLEY PLANT, PERRY, FLORIDA

SIRRINE ENVIRONMENTAL CONSULTANTS

PLANT NORTH

SOUTHERN RAILWAY OFFICE

L-P GAS STATION

NATURAL GAS METERING STA.

B.K.I. TEMP. RESERVOIR OFFICE

ABANDONED STATE RD.

PARKING AREA

CAR WASH

PARKING AREA

PARKING AREA

CHIP STORAGE

TRACK #9A

TRACK #9B

SHORT WOOD STORAGE

BASE LINE "B" N 24° 00' 00" W

BASE LINE "A" N 69° 31' 00" E

TURBINE DECK

BARK STORAGE PILE

CLEAR WATER RESERVOIR

CLEAR WATER RESERVOIR

WATER CLARIFIER

WATER CLARIFIER

PARKING

#1 SLUDGE POND

LOG STORAGE

LOG SORTER AREA (PAVED)

LOG STORAGE

SCRAP YARD

BARK STORAGE

MEROHANDISER

BARK STORAGE

PRIMARY CLARIFIER

RETIRED Nº 1 AERATION LAGOON (64A)

SKIMMING POND (SLUDGE POND)

FENHOLLOWAY RIVER

55	BUCKEYE STORAGE BLDG/PCB STORAGE
58	CHIP MILL/CONSTRUCTION MCC
57	CHIP MILL-#18-CONTROL BLDG.
56	LONG LOG STORAGE SHED
95	DIGESTING TOILET FACILITIES
94	WOODYARD MECHANICAL SHED
93	WOODYARD STEAM ROOM
92	NO.2 EVAPORATOR MCC BUILDING
91	NORTH DISTRICT STORAGE BUILDING
90	FIRE PUMP HOUSE
89	STORAGE BUILDING - EAST
88	NO.4 RECOVERY BOILER BUILDING
87	CAUSTICIZING RESTROOM BUILDING
86	BOILER HOUSE SHOP & OFFICE
85	
84	NO.2 WATER TREAT ELECTRIC SUBSTA 701-703
83	WOODYARD SUBSTATIONS 402-039
82	WOODYARD SUBSTATIONS 18 #19
79	NO.2 RR. SUBSTATION #1501
78	SUBSTATION #16 @ POWERHOUSE
77	SUBSTATION #15 @ POWERHOUSE
76	DIGESTING SUPERVISORS OFFICE
74	No. 1 WATER TREAT ELECT. SUBSTATION
73	FIBERGLASS SHOP
72	EVAPORATOR MCC BUILDING
71	KNOTS & SHIVES SCREENING STATION
70	CLARIFIER CONTROL BUILDING-WASTE TREAT
69	LOG SORTER OFFICE
68	SLASHER CONTROL BUILDING-SITE CLEARED
67	CONSTRUCTION RESTROOM
66	DEBARKER BLDG. @ #1 CHIP MILL - INACTIVE
65	CONSTRUCTION OFFICE
64	CORETTE PIPE WRAPPING MACHINE/RECYCLE
63	WASH/SCRN & #2 DIG. SUBSTA. & COMPTR RM
62	EVAPORATOR MECHANICAL SHOP
61	WOOD YARD MECHANICAL SHOP
60	DIGESTING MECHANICAL SHOP
59	INSUL. STORAGE SOUTH OF W.Y.
58	MAINTENANCE SHOP - MOB. EQUIP.
56	LOG SORTER CHIPPER BUILDING-INACTIVE
55	LOG SORTER, DEBARKER BUILDINGS-INACTIVE
54	LOG SORTER CONTROL HOUSE-INACTIVE
53	RAILROAD SCALE HOUSE
42	SECOND WAREHOUSE ADDITION
40	FIRST WAREHOUSE ADDITION
32	TALL OIL BUILDING
31	WAREHOUSE NO. 31
30	
29	CHLORINE DIOXIDE GENERATING
28	CHLORINE DIOXIDE CONTROL
27	
9C	WOODYARD STORAGE SHED-DELETED
25	CHIPPER - SHORT LOG - ABANDONED
24	SCREEN - CHIPS
23	WOODYARD TEAM ROOM
20	KILN FEED STRUCTURE
18A	KILN PIRING
18	KILN FEED
17	CAUSTICIZING SUBSTA/MCC
16	POWER HOUSE
15	
14	FACILITIES BUILDING
13	MAINTENANCE SHOP @ CONSTRUCTION
12	SHOPS / OFFICES
11	WEST GATE HOUSE
10	EAST GATE HOUSE
9	
8	CHEMICAL FEED HOUSE
7	FIRE PUMP HOUSE
6	WATER TREAT CONTROL
5	DIGESTING
4	WASHING AND SCREENING
3	BLEACH
2	MAIN MILL
1	MAIN OFFICE

BLDG. NO.	BUILDING NAME
419	CHEMICALS MODULE FACILITIES BLDG
418	PRE-COAT FILTER SUPPORT
417	DRECO FILTER SUPPORT CONT. BOOTH
416	#4 KILN SUB-STA / MCC
415	ECO FILTER SUPPORT
414	WOODYARD LOG OUTFEED OPER. CAB (E)
413	WOODYARD CHIPPER ENCLOSURE (E)
412	WOODYARD SLASHER CONT. BOOTH (E)
411	DIGESTER MODULE EQUIP. ROOM
410	WOODYARD OFFICE BUILDING
408	WOODYARD SLASHER CONT. BOOTH (W)
406	WOODYARD LOG OUTFEED OPER. CAB (W)
407	WOODYARD ENCLOSURE CHIPPER (W)
406	WOODYARD SUBSTA/MCC (SOUTH)
405	WOODYARD SUBSTA/MCC (NORTH)
404	SAND STORAGE
403	DIGESTING MCC
402	MOTOR STORAGE WEST
401	PH MAINT. SHOP
400	CALCINER
316	MERCH. OFFICE & SHOP
315	MERCH. CHIPPER, M.C.C.
314	MERCH. SLASHER M.C.C.
115	IRD STAFF BUILDING

TC NO.	
TC 1	PUMP HOUSE @ P.D. / FIN.
TC 2	BLEACH PLANT 15 KV SUB. & MCC
TC 3	NAT. GAS ODORANT INJECTION
TC 4	AIR COMPRESSOR SHED @ DIG.
TC 5	WATER/TREAT AIR COMP. BLDG.
TC 6	TOOL SHED & SHOP @ W.T.
TC 7	WATKINS GUARD HOUSE
TC 8	ELEC. STORAGE
TC 9	ICE HOUSE
TC 10	HOSE SHED
TC 11	COMPRESSOR SHED
TC 12	ELECTRICAL STORAGE
TC 13	WORK SHED
TC 14	CONDUIT STORAGE
TC 15	FIELD OFFICE
TC 16	FIBER GLASS SHOP
TC 17	FIELD OUTHOUSE
TC 18	SITE CLEARED
TC 19	OXYGEN STORAGE
TC 20	SITE CLEARED
TC 21	15 KV SUBSTATION @ LIFT STA.
TC 22	WASTE TREAT STORAGE
TC 23	TRANSFORMER PAD BLDG. ADD. TO BLDG. 56
TC 24	TIG WELDING SHOP
TC 25	CONSTRUCTION SHED
TC 26	INSTRUMENT CALIBRATION ROOM
TC 27	AIR COMPRESSOR SHED
TC 28	NURSES STATION
TC 29	PRECIPITATOR COVER

TC NO.	
TC 30	FIRE VALVES BLDG. @ #4 R/B C.T.
TC 31	HVAC EQUIPMENT BLDG. BEHIND BLDG 12
TC 32	SITE CLEARED
TC 33	WORK ORDER CREW FAB. SHOP
TC 34	SITE CLEARED
TC 35	DEFOAMER @ #2 LAGOON FLC-1-835
TC 36	DEFOAMER @ #1 LAGOON FLC-1-835
TC 37	RESTROOM & PICNIC AREA FLC-1-835
TC 38	ANDERSON HOUSE FLC-1-835
TC 39	ANDERSON GARAGE FLC-1-835
TC 40	ANDERSON PUMPHOUSE FLC-1-835
TC 41	CHIPPER BLDG @ MERCH.
TC 42	FLAMMABLE STORAGE @ MERCH.
TC 43	PUMP HOUSE @ MERCH.
TC 44	AIR COMPRESSOR BLDG. @ MERCH.
TC 45	FWL COOLING TW FIRE PROT. ENCLOSURE
TC 46	PAINT STORAGE (PART FROM TC 15)
TC 47	ELECT. STORAGE
TC 48	RAILROAD MATERIAL STORAGE SHED
TC 49	CONST. MATERIAL STORAGE SHED
TC 50	TRS BUILDING
TC 51	TEMP. STORES UNLOADING
TC 52	W.E.C. ENGINEERING OFFICES
TC 82	TEMP. CONST. MECH. SHELTER

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CHECKED BY			
APPROVED BY			

THE BUCKEYE CELLULOSE CORP.

PLANT & PROPERTY MAP

PLANT FOLEY

FIGURE IV-2

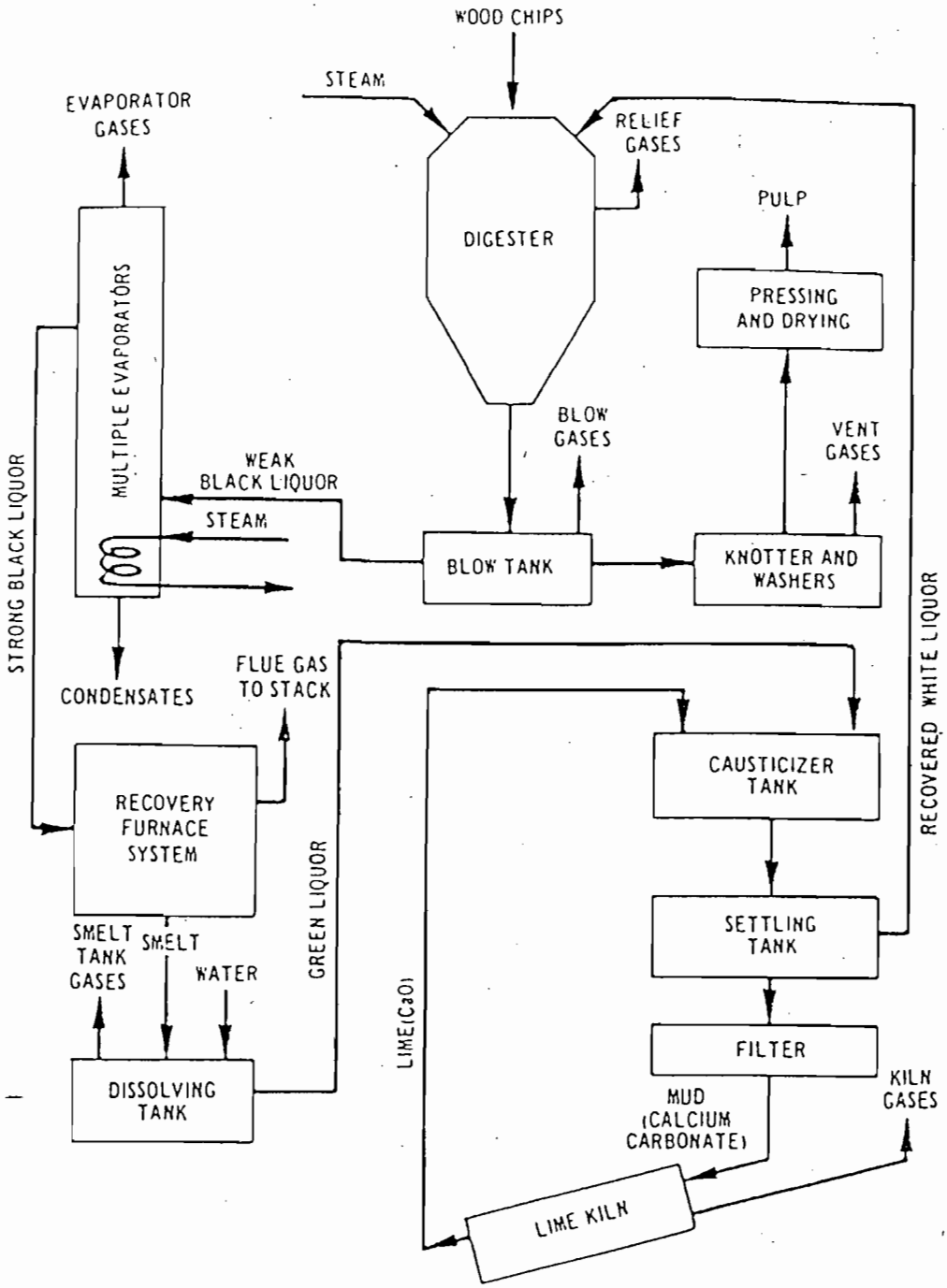


FIGURE IV-3

TYPICAL KRAFT PULPING PROCESS

SIRRINE ENVIRONMENTAL CONSULTANTS

multiple effect evaporators with the use of steam. The concentrated black liquor then passes to the recovery units, where it is further concentrated to "strong" black liquor in direct contact evaporators using the sensible heat of the flue gas (as in the No. 2 and 3 Recovery Boilers) or in a concentrator (for use in No. 4 Recovery Boiler). The strong black liquor is then fired in the recovery furnaces where heat is obtained from the combustion of the organic liquor constituents for steam production, and the inorganic constituents (sodium salts) in the liquor are recovered as molten ash (smelt). An essential function of the recovery furnaces is the reduction of the sodium sulfate content of the black liquor to sodium sulfide.

The smelt, composed largely of sodium sulfide and sodium carbonate, is tapped from the furnace and dissolved in water (weak wash) in the dissolving tank to form "green liquor." The green liquor is then subjected to a causticizing treatment with lime to convert the sodium carbonate to sodium hydroxide. In this step, the sodium sulfide remains unchanged. The liquor, now known as "white liquor", is then ready for re-use as cooking liquor in the digesters. The calcium carbonate sludge (lime mud) from the white liquor in the causticizing operation can be reburned in the lime kiln to yield calcium oxide (lime), which is re-used to again causticize green liquor to white liquor.

The kraft pulping process generally results in the discharge of gaseous odorous compounds called total reduced sulfur (TRS). The TRS compounds are:

- Hydrogen sulfide (H_2S)
- Methyl mercaptan (CH_3SH)
- Dimethyl sulfide (CH_3SCH_3)
- Dimethyl disulfide (CH_3SSCH_3)

SECTION V

DISCUSSION OF OVERALL COMPLIANCE PLAN

The TRS Control Project is being undertaken by the Buckeye Cellulose Corporation at Perry, Florida, in order to bring the Foley Plant into compliance by May 12, 1989, with the laws promulgated by the State of Florida.

A compliance plan was developed and submitted by the Buckeye Cellulose Corporation for approval to the State of Florida DER on December 17, 1986, in accordance with Section 17-2.960(1)(b) of the Florida Administrative Code (FAC). The plan was approved by the DER on April 7, 1987.

Buckeye Cellulose Corporation is submitting the plan with minor revisions to reflect the current air permit applications and plans. The revised plan is shown in Appendix A.

The regulated sources at the Foley Plant are as follows:

1. Digesting Systems

    a) No. 1 Digesting System
    b) No. 2 Digesting System

2. Multiple Effect Evaporator Systems

    a) No. 1 Multiple Effect Evaporator System
    b) No. 2 Multiple Effect Evaporator System
    c) No. 3 Multiple Effect Evaporator System
    d) No. 4 Multiple Effect Evaporator System

3. Tall Oil Plant

4. Kraft Recovery Furnaces

   a) No. 2 Kraft Recovery Boilers (Old Design)
   b) No. 3 Kraft Recovery Boilers (Old Design)
   c) No. 4 Kraft Recovery Boilers (New Design)

5. Smelt Dissolving Tanks

   a) No. 2 Smelt Dissolving Tank
   b) No. 3 Smelt Dissolving Tank
   c) No. 4 Smelt Dissolving Tank

6. Lime Kilns and Calciner

   a) No. 1 Lime Kiln (no longer operating)
   b) No. 2 Lime Kiln (no longer operating)
   c) No. 3 Lime Kiln (no longer operating)
   d) No. 4 Lime Kiln (new source)
   e) Calciner (no longer operating)

7. Combustion Device for Digesting and Multiple Effect Evaporator Systems, (No. 1 Bark Boiler).

SECTION VI

TRS AIR PERMIT APPLICATIONS

A. TRS Sources in Compliance

The Foley Plant is currently operating systems that control TRS emissions from:

- Digesting System Relief Gases (Turpentine Recovery System),
- Multiple Effect Evaportors,
- Chemical Recovery Boilers,
- Smelt Dissolving Tanks,
- Lime Kiln,
- Tall Oil System

All these existing systems require significant upgrades except for the turpentine recovery system, recovery boilers, and the lime kilns.

The No. 1 and No. 2 Digesting System relief gases (common turpentine recovery system) are currently incinerated in the No. 1 Bark Boiler and are in compliance.

The No. 2, 3, and 4 Recovery Boilers are currently in compliance. No additional equipment installations are proposed for the purpose of controlling TRS emissions from these furnaces.

The new No. 4 Lime Kiln constructed under Permit No. AC62-107958 is meeting New Source Performance Standards for Lime Kilns. It replaced the exisitng No. 1, 2, and 3 lime kilns and calciner which are no longer operated.

B. Digesting Systems

The Foley Plant has two digesting systems with a total of nineteen (19) digesters. The No. 1 Digesting System is served by digesters 1 through 11. The No. 2 Digesting System is served by digesters 10 through 19. Individual digesters 10 and 11 are swing units and can be used in either system. TRS gases formed in the digestive cooking press include hydrogen sulfide, methyl mercaptotan, dimethyl sulfide, and dimethyl disulfide.

The TRS and other gases from the batch digestion are vented to maintain proper cooking conditions. These are called "relief" gases, which are directed to a common turpentine recovery system for both digesting systems. TRS gases from the turpentine recovery system are currently incinerated in the No. 1 Bark Boiler and in compliance with the TRS regulations.

At the end of the digesting cooking cycle, the contents of the vessel are blown to a tank (for each digesting system) at atmospheric pressure, flashing off steam as well as other gases. These are called "blow" gases. In accordance with the scope of the TRS Control Project, the digester blow gases will be incinerated in the No. 1 Bark Boiler.

The work to be done in this area includes a single new blow heat accumulator with new condensers and heat exchangers. This additional condensing equipment will condense the steam and other condensible gases liberated by the blows from the No. 1 and No. 2 Digesting Systems. Heat is recovered from the condensates and the excess sewered to the waste water treatment process.

Gases from the existing entrainment separators, the blow tanks, and associated flash tanks will be routed to the new hot water accumulator. Piping design will allow capability to isolate the accumulator from either digesting system for maintenance while the other continues to operate.

Equipment will be installed to transport the noncondensible/TRS gases to the No. 1 Bark Boiler for incineration. (See Section VI F for discussion on the noncondensible gas incineration).

Figure VI-1 is a block diagram of the No. 1 and No. 2 digesting system.

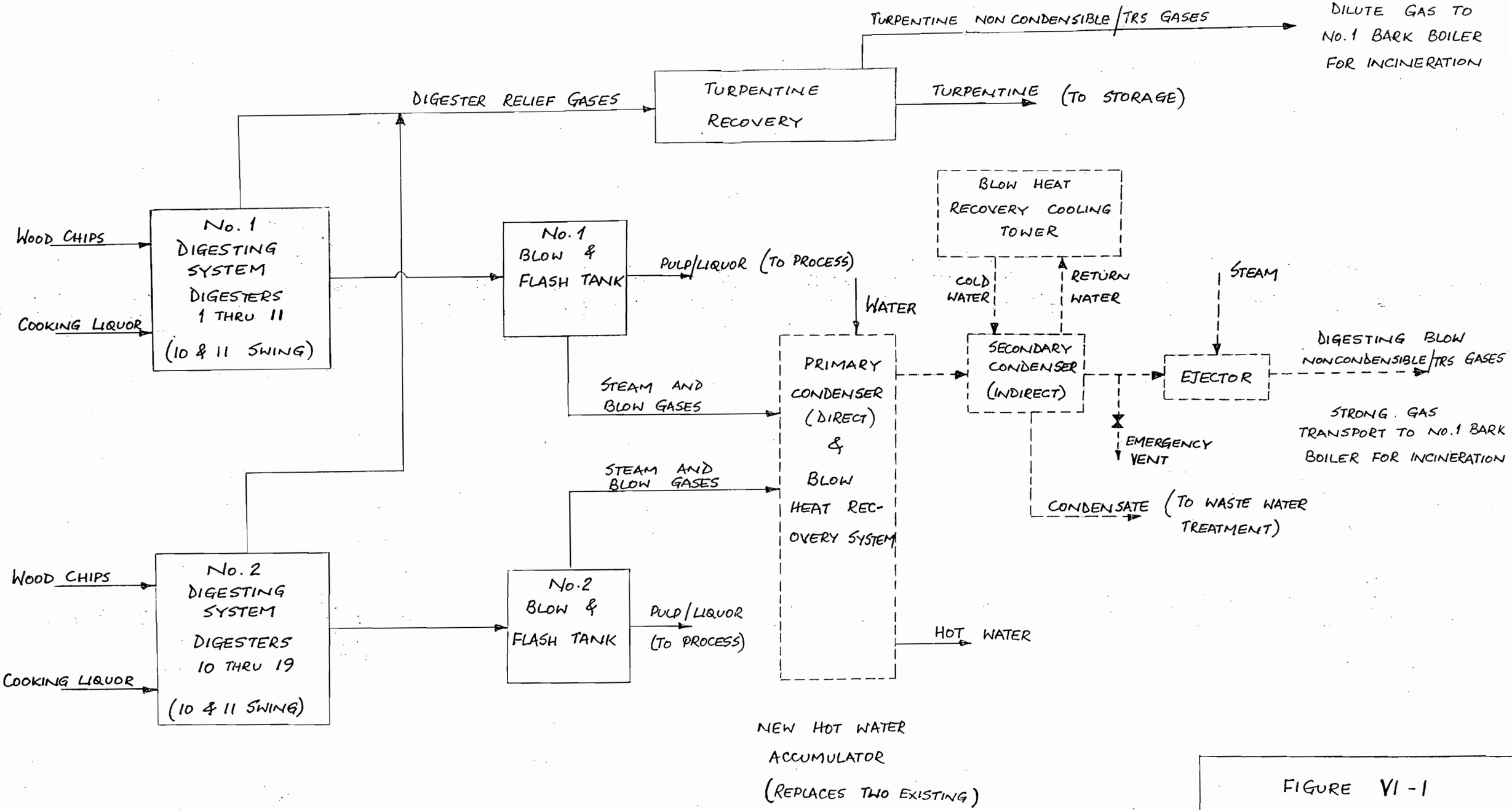


FIGURE VI-1

No 1 & No. 2 DIGESTING SYSTEMS

BUCKEYE CELLULOSE CORP.

FOLEY PLANT, PERRY, FLORIDA

SIRRINE ENVIRONMENTAL CONSULTANTS

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

DER
NOV 12 1987
BAQM

Receipt #76197
#002029
$1000.00

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

AC62-141916

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Kraft Pulp & Paper [ ] New[1] [X] Existing[1]

APPLICATION TYPE: [X] Construction [ ] Operation [ ] Modification

COMPANY NAME: The Buckeye Cellulose Corporation COUNTY: Taylor

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) No. 1 Digesting System

SOURCE LOCATION: Street 5 to 6 Miles Southeast of Perry City Perry

UTM: East 256,740 North 3,328,700

Latitude 30 ° 03 ' 59 "N Longitude 83 ° 33 ' 12 "W

APPLICANT NAME AND TITLE: J. L. Sipple, Plant Manager

APPLICANT ADDRESS: Route 3, Box 260; Perry, Florida 32347

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Buckeye Cellulose Corp.

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: J. L. Sipple

J. L. Sipple, Plant Manager
Name and Title (Please Type)

Date: 11/11/87 Telephone No. 904/584-0121

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

[1] See Florida Administrative Code Rule 17-2.100(57) and (104)

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed A. M. Kinghorn

A. M. Kinghorn
Name (Please Type)

Sirrine Environmental Consultants, Inc.
Company Name (Please Type)

P. O. Box 5229, Greenville, SC 29606
Mailing Address (Please Type)

Florida Registration No. 38928 Date: 11-10-87 Telephone No. 803/234-3004

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

Pursuant to DER Rule 17-2.600(4)(c)1.a FAC TRS emissions from the No. 1 (and No. 2) digesting system will be incinerated in the No. 1 Bark Boiler rather than being vented to the atmosphere as is presently done. This will result in lower TRS emissions and in full compliance with DER Rule 17-2.600(4)(c)6.a. FAC for "other combustion devices."

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction June, 1988 Completion of Construction April, 1989

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

Cost of overall TRS compliance project $16,000,000 (approximately)

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

DER Permit A062-113897 issued July 8, 1986, and amended April 7, 1987, expiration date August 10, 1989; original application filed December 19, 1985; additional information sent March 20, 1986, and April 14, 1986. A request for correction is in progress.

E. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52 ;

if power plant, hrs/yr _____; if seasonal, describe: _____

Not Applicable

F. If this is a new source or major modification, answer the following questions. (Yes or No)

NOT APPLICABLE

1. Is this source in a non-attainment area for a particular pollutant? _____

   a. If yes, has "offset" been applied? _____

   b. If yes, has "Lowest Achievable Emission Rate" been applied? _____

   c. If yes, list non-attainment pollutants. _____

2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. _____

3. Does the State "Prevention of Significant Deterioriation" (PSD) requirement apply to this source? If yes, see Sections VI and VII. _____

4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? _____

5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? _____

H. Do "Reasonably Available Control Technology" (RACT) requirements apply to this source? No

   a. If yes, for what pollutants? Not Applicable

   b. If yes, in addition to the information required in this form, any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Wood chips and			231,833	
Cooking liquor			77,245	

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): 231,833 lb./hr. (dry weight) wood chips plus 77,245 lb/hr. (dry weight) cooking liquor (as Na_2O)

2. Product Weight (lbs/hr): 110,000 lb./hr. of unbleached pulp (dry)

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission[1]		Allowed[2] Emission Rate per Rule 17-2	Allowable[3] Emission lbs/hr	Potential[4] Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
	5ppm	5ppm	5ppm by vol.,	5ppm	641.7*	2811	No. 1 Bark
			dry basis at				Boiler
			SC corr. to				scrubber
			10% O_2, 12-hr.				discharge
			avg.				

17-2.600(4)(c)6.a.

[1]See Section V, Item 2.

[2]Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

[3]Calculated from operating rate and applicable standard.

[4]Emission, if source operated without control (See Section V, Item 3).

* Potential based on 10.5 lb TRS/ADTP (unbleached) from Interim Operating Permit.

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
No. 1 Bark Boiler	TRS	99.99	Not Applicable	0.8 sec to 1.2 sec residence time above 1200°F

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Not Applicable			

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average Not Applicable Maximum _____

G. Indicate liquid or solid wastes generated and method of disposal.

All liquid wastes are recycled or sewered to the NPDES waste water treatment system.

All solid wastes are recycled or landfilled on site.

4. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):
See No. 1 Bark Boiler Permit Applications

Stack Height: _____ ft. Stack Diameter: _____ ft.

Gas Flow Rate: _____ ACFM _____ DSCFM Gas Exit Temperature: _____ °F.

Water Vapor Content: _____ % Velocity: _____ FPS

SECTION IV: INCINERATOR INFORMATION

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq.& Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diamter: _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity: _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: [ ] Cyclone [ ] Wet Scrubber [ ] Afterburner

[ ] Other (specify) _____

Brief description of operating characteristics of control devices:

Not Applicable

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

Not Applicable

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]

2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.

3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).

4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)

5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).

6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.

7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).

8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

NOT APPLICABLE

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

[ ] Yes [ ] No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

[ ] Yes [ ] No

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology?

Contaminant	Rate or Concentration

D. Describe the existing control and treatment technology (if any).

1. Control Device/System:
2. Operating Principles:
3. Efficiency:*
4. Capital Costs:

*Explain method of determining

NOT APPLICABLE

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant	Rate or Concentration

10. Stack Parameters

a. Height: ft.

b. Diameter: ft.

c. Flow Rate: ACFM

d. Temperature: °F.

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

[1] Explain method of determining efficiency.
[2] Energy to be reported in units of electrical power - KWH design rate.

NOT APPLICABLE

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device:

2. Efficiency:[1]

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:[2]

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

[1] Explain method of determining efficiency.
[2] Energy to be reported in units of electrical power - KWH design rate.

NOT APPLICABLE

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

b. (1) Company:

(2) Mailing Address:

(3) City: (4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

10. Reason for selection and description of systems:

[1]Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

NOT APPLICABLE

A. Company Monitored Data

1. _____no. sites _____. TSP _____( ) SO^{2}* _____ Wind spd/dir

Period of Monitoring _____/_____/_____ to _____/_____/_____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

*Specify bubbler (B) or continuous (C).

NOT APPLICABLE

2. Instrumentation, Field and Laboratory

a. Was instrumentation EPA referenced or its equivalent? [ ] Yes [ ] No

b. Was instrumentation calibrated in accordance with Department procedures?

[ ] Yes [ ] No [ ] Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from ____/____/____ to ____/____/____
month day year month day year

2. Surface data obtained from (location)_____

3. Upper air (mixing height) data obtained from (location)_____

4. Stability wind rose (STAR) data obtained from (location)_____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate	
TSP	_____	grams/sec
SO^2	_____	grams/sec

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description of point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

Receipt #76197
VH002029
$1000.00

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

DER

NOV 12 1987

BAQM

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

AC62-141917

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Kraft Pulp & Paper [ ] New[1] [X] Existing[1]

APPLICATION TYPE: [X] Construction [ ] Operation [ ] Modification

COMPANY NAME: The Buckeye Cellulose Corporation COUNTY: Taylor

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) No. 2 Digesting System

SOURCE LOCATION: Street 5 to 6 Miles Southeast of Perry City Perry

UTM: East 256,740 North 3,328,700

Latitude 30 ° 03 ' 59 "N Longitude 83 ° 33 ' 12 "W

APPLICANT NAME AND TITLE: J. L. Sipple, Plant Manager

APPLICANT ADDRESS: Route 3, Box 260; Perry, Florida 32347

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Buckeye Cellulose Corp.

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: J. L. Sipple

J. L. Sipple, Plant Manager
Name and Title (Please Type)

Date: 11/11/87 Telephone No. 904/584-0121

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

[1] See Florida Administrative Code Rule 17-2.100(57) and (104)

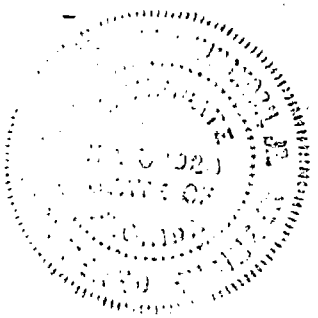
the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed A. M. Kinghorn

A. M. Kinghorn
Name (Please Type)

Sirrine Environmental Consultants, Inc.
Company Name (Please Type)

P. O. Box 5229, Greenville, SC 29606
Mailing Address (Please Type)



Florida Registration No. 38928 Date: 11.10.87 Telephone No. 803/234-3004

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project: Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

Pursuant to DER Rule 17-2.600(4)(c)1.a FAC, TRS emissions from the No. 2 (and No. 1) digesting system will be incinerated in the No. 1 Bark Boiler rather than being vented the atmosphere as is presently done. This will result in lower TRS emissions and in full compliance with DER Rule 17-2.600(4)(c)6.1., FAC, for "other combusion devices."

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction June, 1988 Completion of Construction April, 1989

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

Cost of overall TRS compliance project $16,000,000 (approximately)

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

DER Permit No. A062-113898 issued July 8, 1986, and amended April 7, 1987, expiration date August 10, 1989; original application filed December 19, 1985; additional information sent March 20, 1986, and April 14, 1986. A request for correction is in progress.

E. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52

if power plant, hrs/yr_____; if seasonal, describe:

Not Applicable

F. If this is a new source or major modification, answer the following questions. (Yes or No)

NOT APPLICABLE

1. Is this source in a non-attainment area for a particular pollutant? _____

   a. If yes, has "offset" been applied? _____

   b. If yes, has "Lowest Achievable Emission Rate" been applied? _____

   c. If yes, list non-attainment pollutants. _____

2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. _____

3. Does the State "Prevention of Significant Deterioriation" (PSD) requirement apply to this source? If yes, see Sections VI and VII. _____

4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? _____

5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? _____

H. Do "Reasonably Available Control Technology" (RACT) requirements apply to this source? No

   a. If yes, for what pollutants? Not Applicable

   b. If yes, in addition to the information required in this form, any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Wood chips			212,333	
Cooking liquor			70,748	

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): 212,333 lb./hr. (dry weight) wood chips plus 70,748 lb./hr. (dry weight) cooking liquor (as Na_2O)

2. Product Weight (lbs/hr): 100,000 lb./hr. of unbleached pulp (dry weight)

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission[1]		Allowed[2] Emission Rate per Rule 17-2	Allowable[3] Emission lbs/hr	Potential[4] Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
	5 ppm	5 ppm	5 ppm by vol.,	5 ppm	583.3*	2555	No. 1 Bark
			dry basis at				Boiler
			SC corr. to				scrubber
			10% 02, 12-hr				discharge
			avg.				

17-2.600(4)(c)6.a.

[1]See Section V, Item 2.

[2]Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

[3]Calculated from operating rate and applicable standard.

[4]Emission, if source operated without control (See Section V, Item 3).

* Potential based on 10.5 lb. TRS/ADTP (unbleached) from Interim Operating Permit

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
No. 1 Bark Boiler	TRS	99.99	Not Applicable	0.8 sec to 1.2 sec residence time above 1200°F

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Not Applicable			

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average Not Applicable Maximum _____

G. Indicate liquid or solid wastes generated and method of disposal.

All liquid wastes are recycled or sewered to the NPDES waste water treatment system.

All solid wastes are recycled or landfilled on site.

J. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):
See No. 1 Bark Boiler Permit Applications

Stack Height: _____ ft. Stack Diameter: _____ ft.

Gas Flow Rate: _____ ACFM _____ DSCFM Gas Exit Temperature: _____ °F.

Water Vapor Content: _____ % Velocity: _____ FPS

SECTION IV: INCINERATOR INFORMATION

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq.& Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diamter: _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity: _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: [ ] Cyclone [ ] Wet Scrubber [ ] Afterburner

[ ] Other (specify) _____

Brief description of operating characteristics of control devices:

Not Applicable

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

Not Applicable

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]

2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.

3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).

4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)

5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).

6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.

7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).

8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

NOT APPLICABLE

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

[ ] Yes [ ] No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

[ ] Yes [ ] No

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology?

Contaminant	Rate or Concentration

D. Describe the existing control and treatment technology (if any).

1. Control Device/System:
2. Operating Principles:
3. Efficiency:*
4. Capital Costs:

*Explain method of determining

NOT APPLICABLE

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant	Rate or Concentration

10. Stack Parameters

a. Height: ft. b. Diameter: ft.

c. Flow Rate: ACFM d. Temperature: °F.

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable use additional pages if necessary).

1.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

[1]Explain method of determining efficiency.
[2]Energy to be reported in units of electrical power - KWH design rate.

NOT APPLICABLE

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device:

2. Efficiency:[1]

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:[2]

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

[1] Explain method of determining efficiency.
[2] Energy to be reported in units of electrical power - KWH design rate.

NOT APPLICABLE

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

b. (1) Company:

(2) Mailing Address:

(3) City: (4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

10. Reason for selection and description of systems:

[1]Applicant must provide this information when available. Should this information not b available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

NOT APPLICABLE

A. Company Monitored Data

1. _____ no. sites _____ TSP _____ ( ) SO_2* _____ Wind spd/dir

Period of Monitoring ____/____/____ to ____/____/____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

*Specify bubbler (B) or continuous (C).

NOT APPLICABLE

2. Instrumentation, Field and Laboratory

a. Was instrumentation EPA referenced or its equivalent? [ ] Yes [ ] No

b. Was instrumentation calibrated in accordance with Department procedures?

[ ] Yes [ ] No [ ] Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from ____/____/____ to ____/____/____
month day year month day year

2. Surface data obtained from (location)_____

3. Upper air (mixing height) data obtained from (location)_____

4. Stability wind rose (STAR) data obtained from (location)_____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate
TSP	_____ grams/sec
SO^2	_____ grams/sec

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description of point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

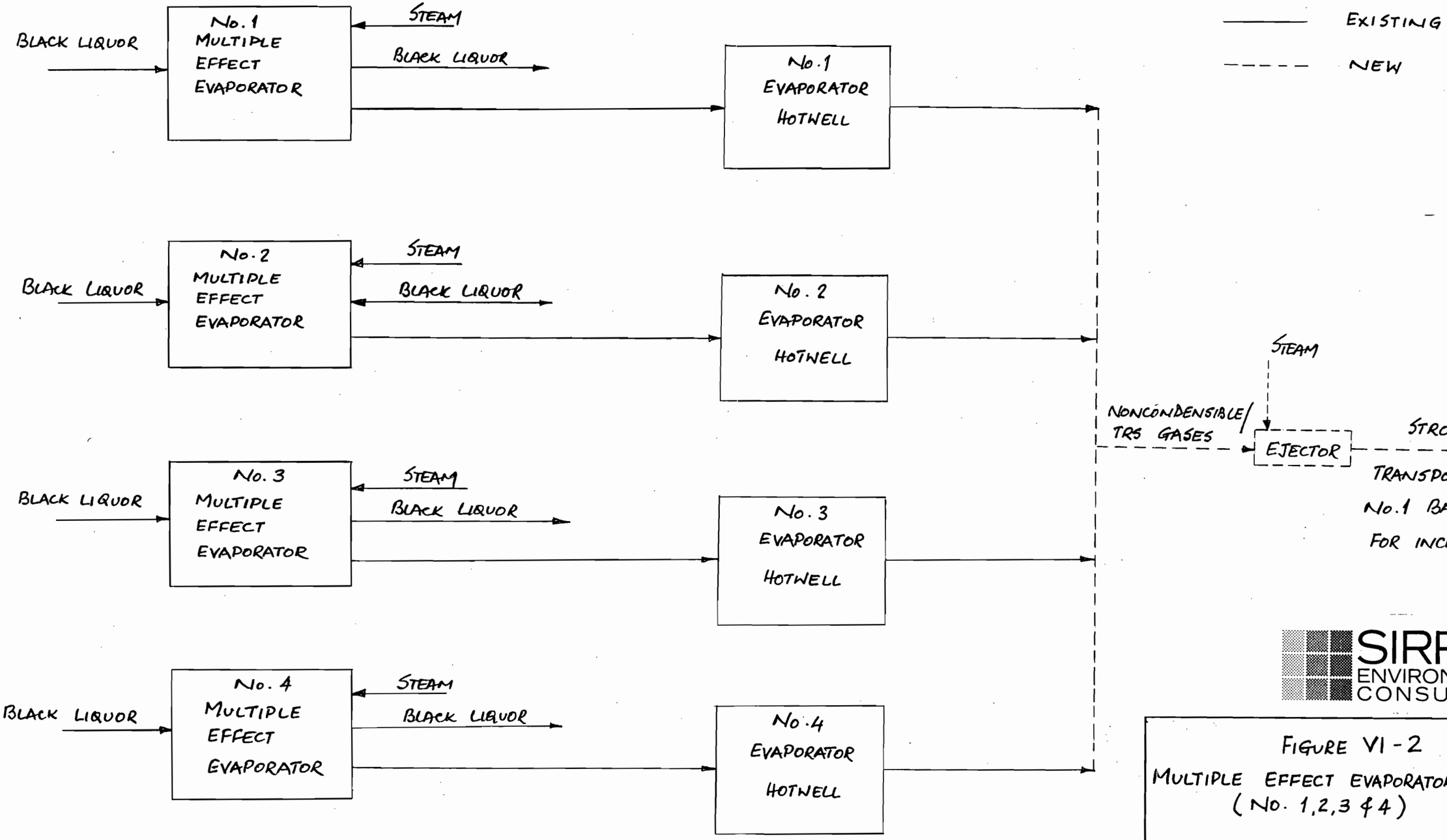
H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

C. Multiple Effect Evaporator Systems

The kraft process utilizes multiple effect evaporation to concentrate weak black liquor washed from the pulp prior to combustion of the organic material in a recovery furnace. The liquor is concentrated in the multiple effect evaporators from a solids content of between 12 to 18 percent to one of between 40 to 55 percent.

Noncondensible/TRS gases from the evaporator hotwells of the Nos. 1, 2, 3, and 4 multiple effect evaporators are currently directed to the smelt dissolving tank scrubbers. Equipment will be installed to transport these noncondensible/TRS gases to the No. 1 Bark Boiler for incineration.

A more detailed description of the noncondensible gas transport system and incineration in the No. 1 Bark Boiler is given in Sections VI F. Figure VI-2 is a block diagram of the multiple effect evaporation system.



SIRRINE ENVIRONMENTAL CONSULTANTS

FIGURE VI-2

MULTIPLE EFFECT EVAPORATOR SYSTEMS (No. 1, 2, 3 & 4)

BUCKEYE CELLULOSE CORPORATION

FOLEY PLANT, PERRY, FLORIDA.

Receipt # 76197
√ # 002029
$1000.00

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

DER

NOV 12 1987

BAQM

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

AC 62-141918

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Kraft Pulp & Paper [ ] New[1] [X] Existing[1]

APPLICATION TYPE: [X] Construction [ ] Operation [ ] Modification

COMPANY NAME: The Buckeye Cellulose Corporation COUNTY: Taylor

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) No. 1 ME Evaporator System

SOURCE LOCATION: Street 5 to 6 Miles Southeast of Perry City Perry

UTM: East 256,740 North 3,328,700

Latitude 30 ° 03 ' 59 "N Longitude 83 ° 33 ' 12 "W

APPLICANT NAME AND TITLE: J. L. Sipple, Plant Manager

APPLICANT ADDRESS: Route 3, Box 260; Perry, Florida 32347

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Buckeye Cellulose Corp.

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: J. L. Sipple

J. L. Sipple, Plant Manager
Name and Title (Please Type)

Date: 11/11/87 Telephone No. 904/584-0121

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

[1] See Florida Administrative Code Rule 17-2.100(57) and (104)

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed A. M. Kingborn

A. M. Kingborn
Name (Please Type)

Sirrine Environmental Consultants, Inc.
Company Name (Please Type)

P. O. Box 5229, Greenville, SC 29606
Mailing Address (Please Type)

Florida Registration No. 38928 Date: 11-10-87 Telephone No. 803/234-3004

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

Pursuant to DER Rule 17-2.600(4)(c)1.a., FAC, the No. 1 Multiple Effect Evaporator TRS emissions will be incinerated in the No. 1 Bark Boiler. They are presently exhausted to the No. 2 Smelt Dissolving Tank Scrubber. This will result in lower TRS emissions and will be in full compliance with DER Rule 17-2.600(4)(c)6., FAC, for "other combustion devices" used to incinerate TRS.

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction June, 1988 Completion of Construction April, 1989

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

Cost of overall TRS compliance project $16,000,000 (approximately)

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

DER Interim Operating Permit No. A062-113893, dated July 8, 1986, and amended April 7, 1987, (expiration date August 10, 1989) to operate the No. 1 ME Evaporator in accordance with Section 403.087, Florida Statutes; an Interim Permit based on application dated December 19, 1985, and additional information received by DER on March 20, 1986, and April 14, 1986.

E. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52 ;

if power plant, hrs/yr _____; if seasonal, describe: _____

Not Applicable

F. If this is a new source or major modification, answer the following questions. (Yes or No)

NOT APPLICABLE

1. Is this source in a non-attainment area for a particular pollutant? _____

   a. If yes, has "offset" been applied? _____

   b. If yes, has "Lowest Achievable Emission Rate" been applied? _____

   c. If yes, list non-attainment pollutants. _____

2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. _____

3. Does the State "Prevention of Significant Deterioriation" (PSD) requirement apply to this source? If yes, see Sections VI and VII. _____

4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? _____

5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? _____

H. Do "Reasonably Available Control Technology" (RACT) requirements apply to this source? No

   a. If yes, for what pollutants? Not Applicable

   b. If yes, in addition to the information required in this form, any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Black Liquor			156,000 lb./hr. (dry weight)	Refer attached flow diagram

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): 156,000 lb./hr. black liquor (dry)

2. Product Weight (lbs/hr): 156,000 lb./hr. black liquor (dry)

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission[1]		Allowed[2] Emission Rate per Rule 17-2	Allowable[3] Emission lbs/hr	Potential[4] Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
TRS	5 ppm	5 ppm	5 ppm by vol., dry basis, at SC corr. to 10% 02, 12-hr. average	5 ppm	128.7	563.8	No. 1 Bark Boiler scrubber discharge

17-2.600(4)(c)6

[1]See Section V, Item 2.

[2]Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

[3]Calculated from operating rate and applicable standard.

[4]Emission, if source operated without control (See Section V, Item 3).

* Potential based on 6.3 lb TRS/ADTP (unbleached) from Interim Operating Permit.

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
No. 1 Bark Boiler	TRS	99.99	Not Applicable	0.8 sec to
				1.2 sec
				residence
				time above
				1200°F

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Not Applicable			

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average Not Applicable Maximum _____

G. Indicate liquid or solid wastes generated and method of disposal.

All liquid wastes are recycled or sewered to the NPDES waste water treatment system.

All solid wastes are recycled or landfilled on site.

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):
See No. 1 Bark Boiler Permit Applications

Stack Height: _____ ft. Stack Diameter: _____ ft.

Gas Flow Rate: _____ ACFM _____ DSCFM Gas Exit Temperature: _____ °F.

Water Vapor Content: _____ % Velocity: _____ FPS

SECTION IV: INCINERATOR INFORMATION

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq.& Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diamter: _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity: _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: [ ] Cyclone [ ] Wet Scrubber [ ] Afterburner

[ ] Other (specify) _____

Brief description of operating characteristics of control devices:

Not Applicable

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

Not Applicable

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]

2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.

3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).

4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)

5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).

6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify th individual operations and/or processes. Indicate where raw materials enter, where sol id and liquid waste exit, where gaseous emissions and/or airborne particles are evolve and where finished products are obtained.

7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of air borne emissions, in relation to the surrounding area, residences and other permanen structures and roadways (Example: Copy of relevant portion of USGS topographic map).

8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processe and outlets for airborne emissions. Relate all flows to the flow diagram.

The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

NOT APPLICABLE

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

[ ] Yes [ ] No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

[ ] Yes [ ] No

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology?

Contaminant	Rate or Concentration

D. Describe the existing control and treatment technology (if any).

1. Control Device/System:
2. Operating Principles:
3. Efficiency:*
4. Capital Costs:

*Explain method of determining

NOT APPLICABLE

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant	Rate or Concentration

10. Stack Parameters

a. Height: ft.

b. Diameter: ft.

c. Flow Rate: ACFM

d. Temperature: °F.

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

[1]Explain method of determining efficiency.
[2]Energy to be reported in units of electrical power - KWH design rate.

NOT APPLICABLE

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device:

2. Efficiency:[1]

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:[2]

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

[1]Explain method of determining efficiency.
[2]Energy to be reported in units of electrical power - KWH design rate.

NOT APPLICABLE

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

b. (1) Company:

(2) Mailing Address:

(3) City: (4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

10. Reason for selection and description of systems:

[1]Applicant must provide this information when available. Should this information not b available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

NOT APPLICABLE

A. Company Monitored Data

1. _____no. sites _____. TSP _____( ) SO^{2}* _____ Wind spd/dir

Period of Monitoring ____/____/____ to ____/____/____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

*Specify bubbler (B) or continuous (C).

NOT APPLICABLE

2. Instrumentation, Field and Laboratory

a. Was instrumentation EPA referenced or its equivalent? [ ] Yes [ ] No

b. Was instrumentation calibrated in accordance with Department procedures?

[ ] Yes [ ] No [ ] Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from ____/____/____ to ____/____/____
month day year month day year

2. Surface data obtained from (location)_____

3. Upper air (mixing height) data obtained from (location)_____

4. Stability wind rose (STAR) data obtained from (location)_____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate	
TSP	_____	grams/sec
SO^2	_____	grams/sec

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description of point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

Receipt # 76197
✓ # 002029
$1000.00

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
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DER

NOV 12 1987

BAQM

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

AC62-141919

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Kraft Pulp & Paper [ ] New[1] [X] Existing[1]

APPLICATION TYPE: [X] Construction [ ] Operation [ ] Modification

COMPANY NAME: The Buckeye Cellulose Corporation COUNTY: Taylor

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) No. 2 ME Evaporator System

SOURCE LOCATION: Street 5 to 6 Miles Southeast of Perry City Perry

UTM: East 256,740 North 3,328,700

Latitude 30 ° 03 ' 59 "N Longitude 83 ° 33 ' 12 "W

APPLICANT NAME AND TITLE: J. L. Sipple, Plant Manager

APPLICANT ADDRESS: Route 3, Box 260; Perry, Florida 32347

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Buckeye Cellulose Corp.

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: J. Sipple

J. L. Sipple, Plant Manager
Name and Title (Please Type)

Date: 11/11/87 Telephone No. 904/584-0121

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

[1] See Florida Administrative Code Rule 17-2.100(57) and (104)

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed A. M. Kinghorn

A. M. Kinghorn
Name (Please Type)

Sirrine Environmental Consultants, Inc.
Company Name (Please Type)

P. O. Box 5229, Greenville, SC 29606
Mailing Address (Please Type)

Florida Registration No. 38928 Date: 11-10-87 Telephone No. 803/234-3004

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

Pursuant to DER Rule 17-2.600(4)(c)1.a., FAC, the No. 2 Multiple Effect Evaporator TRS emissions will be incinerated in the No. 1 Bark Boiler. They are presently exhausted to the No. 2 Smelt Dissolving Tank Scrubber. This will result in lower TRS emissions and in full compliance with DER Rule 17-2.600(4)(c)6., FAC, for "other combustion devices" used to incinerate TRS.

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction June, 1988 Completion of Construction April, 1989

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

Cost of overall TRS compliance project $16,000,000 (approximately)

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

DER Interim Operating Permit No. A062-113894, dated July 8, 1986, and amended April 7, 1987, (expiration date August 10, 1989) to operate the No. 2 ME Evaporator in accordance with Section 403.087, Florida Statutes; Interim permit based on application dated December 19, 1985, and additional information received by the DER on March 20, 1986, and April 14, 1986.

E. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52 ;

if power plant, hrs/yr_____; if seasonal, describe:_____

Not Applicable

F. If this is a new source or major modification, answer the following questions. (Yes or No)

NOT APPLICABLE

1. Is this source in a non-attainment area for a particular pollutant? _____

   a. If yes, has "offset" been applied? _____

   b. If yes, has "Lowest Achievable Emission Rate" been applied? _____

   c. If yes, list non-attainment pollutants. _____

2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. _____

3. Does the State "Prevention of Significant Deterioriation" (PSD) requirement apply to this source? If yes, see Sections VI and VII. _____

4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? _____

5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? _____

H. Do "Reasonably Available Control Technology" (RACT) requirements apply to this source? No

   a. If yes, for what pollutants? Not Applicable

   b. If yes, in addition to the information required in this form, any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Black Liquor			195,000 lb./hr.	Refer attached flow
				diagram

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): 195,000 lb./hr. black liquor (dry)

2. Product Weight (lbs/hr): 195,000 lb./hr. black liquor (dry)

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission[1]		Allowed[2] Emission Rate per Rule 17-2	Allowable[3] Emission lbs/hr	Potential[4] Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
TRS	5 ppm	5 ppm	5 ppm by vol.,	5 ppm	160.9	704.7	No. 1 Bark
			dry basis, at				Boiler
			SC corr. to				scrubber
			10% 02, 12-hr				discharge
			average				

17-2.600(4)(c)6.

[1]See Section V, Item 2.

[2]Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

[3]Calculated from operating rate and applicable standard.

[4]Emission, if source operated without control (See Section V, Item 3).

* Potential based on 6.3 lb TRS/ADTP (unbleached) from Interim Operating Permit.

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
No. 1 Bark Boiler	TRS	99.99	Not Applicable	0.8 sec to
				1.2 sec
				residence
				time above
				1200°F

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Not Applicable			

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average Not Applicable Maximum _____

G. Indicate liquid or solid wastes generated and method of disposal.

All liquid wastes are recycled or sewered to the NPDES waste water treatment system.

All solid wastes are recycled or landfilled on site.

1. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):
See No. 1 Bark Boiler Permit Applications

Stack Height: _____ ft. Stack Diameter: _____ ft.

Gas Flow Rate: _____ ACFM _____ DSCFM Gas Exit Temperature: _____ °F.

Water Vapor Content: _____ % Velocity: _____ FPS

SECTION IV: INCINERATOR INFORMATION

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq.& Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diamter: _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity: _____ FPS

*If 50 or more tons per day design capacity, submit the emissiona rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: [ ] Cyclone [ ] Wet Scrubber [ ] Afterburner

[ ] Other (specify) _____

Brief description of operating characteristics of control devices:

Not Applicable

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

Not Applicable

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]

2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.

3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).

4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)

5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).

6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.

7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).

8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

9. The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

NOT APPLICABLE

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

[ ] Yes [ ] No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

[ ] Yes [ ] No

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology?

Contaminant	Rate or Concentration

D. Describe the existing control and treatment technology (if any).

1. Control Device/System:
2. Operating Principles:
3. Efficiency:*
4. Capital Costs:

*Explain method of determining

NOT APPLICABLE

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant	Rate or Concentration

10. Stack Parameters

a. Height: ft.

b. Diameter: ft.

c. Flow Rate: ACFM

d. Temperature: °F.

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

[1]Explain method of determining efficiency.
[2]Energy to be reported in units of electrical power - KWH design rate.

NOT APPLICABLE

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device:

2. Efficiency:[1]

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:[2]

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

[1] Explain method of determining efficiency.
[2] Energy to be reported in units of electrical power - KWH design rate.

NOT APPLICABLE

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

b. (1) Company:

(2) Mailing Address:

(3) City: (4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

10. Reason for selection and description of systems:

[1]Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

NOT APPLICABLE

A. Company Monitored Data

1. _____no. sites _____. TSP _____( ) SO^{2}* _____ Wind spd/dir

Period of Monitoring _____/____/____ to _____/____/____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

*Specify bubbler (B) or continuous (C).

NOT APPLICABLE

2. Instrumentation, Field and Laboratory

a. Was instrumentation EPA referenced or its equivalent? [ ] Yes [ ] No

b. Was instrumentation calibrated in accordance with Department procedures?

[ ] Yes [ ] No [ ] Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from ____/____/____ to ____/____/____
month day year month day year

2. Surface data obtained from (location)_____

3. Upper air (mixing height) data obtained from (location)_____

4. Stability wind rose (STAR) data obtained from (location)_____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate	
TSP	_____	grams/sec
SO^2	_____	grams/sec

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description of point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

Recupt # 76197
V# 002029
$1000.00

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

DER

NOV 12 1987

BAQM

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

AC 62-141920

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Kraft Pulp & Paper [ ] New[1] [X] Existing[1]

APPLICATION TYPE: [X] Construction [ ] Operation [ ] Modification

COMPANY NAME: The Buckeye Cellulose Corporation COUNTY: Taylor

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) No. 3 ME Evaporator System

SOURCE LOCATION: Street 5 to 6 Miles Southeast of Perry City Perry

UTM: East 256,740 North 3,328,700

Latitude 30 ° 03 ' 59 "N Longitude 83 ° 33 ' 12 "W

APPLICANT NAME AND TITLE: J. L. Sipple, Plant Manager

APPLICANT ADDRESS: Route 3, Box 260; Perry, Florida 32347

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Buckeye Cellulose Corp.

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: J. L. Sipple

J. L. Sipple, Plant Manager
Name and Title (Please Type)

Date: 11/11/87 Telephone No. 904/584-0121

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

[1] See Florida Administrative Code Rule 17-2.100(57) and (104)

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed _____

A. M. Kinghorn

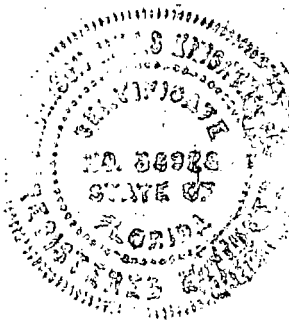
Name (Please Type)

Sirrine Environmental Consultants, Inc.

Company Name (Please Type)

P. O. Box 5229, Greenville, SC 29606

Mailing Address (Please Type)



Florida Registration No. 38928 Date: 11-10-87 Telephone No. 803/234-3004

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

Pursuant to DER Rule 17-2.600(4)(c)1.a., FAC, the No. 3 Multiple Effect Evaporator TRS emission will be incinerated in the No. 1 Bark Boiler. They are presently exhausted to the No. 3 Smelt Dissolving Tank Scrubber. This will result in lower TRS emissions and in full compliance with DER Rule 17-2.600(4)(c)b., FAC, for "other combustion devices" used to incinerate TRS.

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction June, 1988 Completion of Construction April, 1989

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

Cost of overall TRS compliance project $16,000,000 (approximately)

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

DER Interim Operating Permit No. A062-113895, dated July 8, 1986, and amended April 7, 1987, (expiration date August 10, 1989) to operate the No. 3 ME Evaporator in accordance with Section 403.087, Florida Statutes; Interim Permit based on application dated December 19, 1985, and additional information received by the DER on March 20, 1986, and April 14, 1986.

E. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52

if power plant, hrs/yr _____; if seasonal, describe: _____

Not Applicable

F. If this is a new source or major modification, answer the following questions. (Yes or No)

NOT APPLICABLE

1. Is this source in a non-attainment area for a particular pollutant? _____

   a. If yes, has "offset" been applied? _____

   b. If yes, has "Lowest Achievable Emission Rate" been applied? _____

   c. If yes, list non-attainment pollutants. _____

2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. _____

3. Does the State "Prevention of Significant Deterioriation" (PSD) requirement apply to this source? If yes, see Sections VI and VII. _____

4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? _____

5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? _____

H. Do "Reasonably Available Control Technology" (RACT) requirements apply to this source? No

   a. If yes, for what pollutants? Not Applicable

   b. If yes, in addition to the information required in this form, any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Black Liquor			195,000 lb/hr.	Refer attached flow
			(dry weight)	diagram

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): 195,000 lb./hr. black liquor (dry)

2. Product Weight (lbs/hr): 195,000 lb./hr. black liquor (dry)

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission[1]		Allowed[2] Emission Rate per Rule 17-2	Allowable[3] Emission lbs/hr	Potential[4] Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
TRS	5 ppm	5 ppm	5 ppm by vol.,	5 ppm	160.9	704.7	No. 1 Bark
			dry basis, at				Boiler
			SC corr. to				scrubber
			10% 02, 12-hr.				discharge
			average				

17-2.600(4)(c)6.

[1]See Section V, Item 2.

[2]Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

[3]Calculated from operating rate and applicable standard.

[4]Emission, if source operated without control (See Section V, Item 3).

* Potential based on 6.3 lb TRS/ADTP (unbleached) from Interim Operating Permit.

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
No. 1 Bark Boiler	TRS	99.99	Not Applicable	0.8 sec to
				1.2 sec
				residence
				time above
				1200°F

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Not Applicable			

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average Not Applicable Maximum _____

G. Indicate liquid or solid wastes generated and method of disposal.

All liquid wastes are recycled or sewered to the NPDES waste water treatment system.

All solid wastes are recycled or landfilled on site.

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):
See No. 1 Bark Boiler Permit Applications

Stack Height: _____ ft. Stack Diameter: _____ ft.

Gas Flow Rate: _____ ACFM _____ DSCFM Gas Exit Temperature: _____ °F.

Water Vapor Content: _____ % Velocity: _____ FPS

SECTION IV: INCINERATOR INFORMATION

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq.& Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Deacription of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diamter: _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity: _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: [ ] Cyclone [ ] Wet Scrubber [ ] Afterburner

[ ] Other (specify) _____

Brief description of operating characteristics of control devices:

Not Applicable

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

Not Applicable

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]

2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.

3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).

4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)

5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).

6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.

7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).

8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

NOT APPLICABLE

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

[ ] Yes [ ] No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

[ ] Yes [ ] No

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology?

Contaminant	Rate or Concentration

D. Describe the existing control and treatment technology (if any).

1. Control Device/System:
2. Operating Principles:
3. Efficiency:*
4. Capital Costs:

*Explain method of determining

NOT APPLICABLE

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant	Rate or Concentration

10. Stack Parameters

a. Height: ft.

b. Diameter: ft.

c. Flow Rate: ACFM

d. Temperature: °F.

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

[1]Explain method of determining efficiency.
[2]Energy to be reported in units of electrical power - KWH design rate.

NOT APPLICABLE

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device:

2. Efficiency:[1]

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:[2]

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

[1] Explain method of determining efficiency.
[2] Energy to be reported in units of electrical power - KWH design rate.

NOT APPLICABLE

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

b. (1) Company:

(2) Mailing Address:

(3) City: (4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

10. Reason for selection and description of systems:

[1]Applicant must provide this information when available. Should this information not b available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

NOT APPLICABLE

A. Company Monitored Data

1. _____ no. sites _____ . TSP _____ ( ) SO^2* _____ Wind spd/dir

Period of Monitoring ____/____/____ to ____/____/____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

*Specify bubbler (B) or continuous (C).

NOT APPLICABLE

2. Instrumentation, Field and Laboratory

a. Was instrumentation EPA referenced or its equivalent? [ ] Yes [ ] No

b. Was instrumentation calibrated in accordance with Department procedures?

[ ] Yes [ ] No [ ] Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from _____/_____/_____ to _____/_____/_____
month day year month day year

2. Surface data obtained from (location)_____

3. Upper air (mixing height) data obtained from (location)_____

4. Stability wind rose (STAR) data obtained from (location)_____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate
TSP	_____ grams/sec
SO^2	_____ grams/sec

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description of point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

Receipt # 76197
002029
$1000.00

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

DER

NOV 12 1987

BAQM

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

AC 62-141921

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Kraft Pulp & Paper [ ] New[1] [X] Existing[1]

APPLICATION TYPE: [X] Construction [ ] Operation [ ] Modification

COMPANY NAME: The Buckeye Cellulose Corporation COUNTY: Taylor

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) No. 4 ME Evaporator System

SOURCE LOCATION: Street 5 to 6 Miles Southeast of Perry City Perry

UTM: East 256,740 North 3,328,700

Latitude 30 ° 03 ' 59 "N Longitude 83 ° 33 ' 12 "W

APPLICANT NAME AND TITLE: J. L. Sipple, Plant Manager

APPLICANT ADDRESS: Route 3, Box 260; Perry, Florida 32347

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Buckeye Cellulose Corp.

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: J. L. Sipple

J. L. Sipple, Plant Manager
Name and Title (Please Type)

Date: 11/11/87 Telephone No. 904/584-0121

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

[1] See Florida Administrative Code Rule 17-2.100(57) and (104)

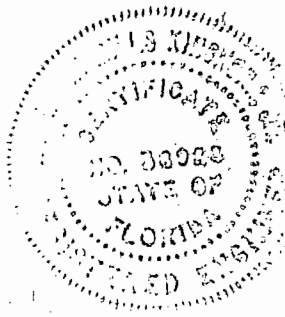
the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed A. M. Kinghorn

A. M. Kinghorn
Name (Please Type)

Sirrine Environmental Consultants, Inc.
Company Name (Please Type)

P. O. Box 5229, Greenville, SC 29606
Mailing Address (Please Type)



Florida Registration No. 38928 Date: 11.10.87 Telephone No. 803/234-3004

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

Pursuant to DER Rule 17-2.600(4)(c)1.a., FAC, the No. 4 Multiple Effect Evaporator TRS emission will be incinerated in the No. 1 Bark Boiler. They are presently exhausted to the No. 4 Smelt Dissolving Tank Scrubber. This will result in lower TRS emissions and in full compliance with DER Rule 17-2.600(4)(c)b., FAC, for "other combustion devices" used to incinerate TRS.

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction June, 1988 Completion of Construction April, 1989

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

Cost of overall TRS compliance project $16,000,000 (approximately)

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

DER Interim Operating Permit No. A062-113895, dated July 8, 1986, and amended April 7, 1987, (expiration date August 10, 1989) to operate the No. 4 ME Evaporator in accordance with Section 403.087, Florida Statutes; Interim Permit based on application dated December 19, 1985, and additional information received by the DER on March 20, 1986, and April 14, 1986.

E. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52

if power plant, hrs/yr_____; if seasonal, describe:

Not Applicable

F. If this is a new source or major modification, answer the following questions. (Yes or No)

NOT APPLICABLE

1. Is this source in a non-attainment area for a particular pollutant? _____

   a. If yes, has "offset" been applied? _____

   b. If yes, has "Lowest Achievable Emission Rate" been applied? _____

   c. If yes, list non-attainment pollutants. _____

2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. _____

3. Does the State "Prevention of Significant Deterioriation" (PSD) requirement apply to this source? If yes, see Sections VI and VII. _____

4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? _____

5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? _____

H. Do "Reasonably Available Control Technology" (RACT) requirements apply to this source? No

   a. If yes, for what pollutants? Not Applicable

   b. If yes, in addition to the information required in this form, any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Black Liquor			260,000 lb./hr.	Refer attached flow
			(dry)	diagram

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): 260,000 lb./hr. black liquor (dry)

2. Product Weight (lbs/hr): 250,000 lb./hr. black liquor (dry)

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission[1]		Allowed[2] Emission Rate per Rule 17-2	Allowable[3] Emission lbs/hr	Potential[4] Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
TRS	5 ppm	5 ppm	5 ppm by vol.,	5 ppm	214.5	939.6	No. 1 Bark
			dry basis, at				Boiler
			SC corr. to				scrubber
			10% 02, 12-hr.				discharge
			average				

17-2.600(4)(c)6.

[1]See Section V, Item 2.

[2]Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

[3]Calculated from operating rate and applicable standard.

[4]Emission, if source operated without control (See Section V, Item 3).

* Potential based on 6.3 lb TRS/ADTP (unbleached) from Interim Operating Permit.

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
No. 1 Bark Boiler	TRS	99.99	Not Applicable	0.8 sec to
				1.2 sec
				residence
				time above
				1200°F

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Not Applicable			

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average Not Applicable Maximum _____

G. Indicate liquid or solid wastes generated and method of disposal.

All liquid wastes are recycled or sewered to the NPDES waste water treatment system.

All solid wastes are recycled or landfilled on site.

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):
See No. 1 Bark Boiler Permit Applications

Stack Height: _____ ft. Stack Diameter: _____ ft.

Gas Flow Rate: _____ ACFM _____ DSCFM Gas Exit Temperature: _____ °F.

Water Vapor Content: _____ % Velocity: _____ FPS

SECTION IV: INCINERATOR INFORMATION

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq.& Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diamter: _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity: _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: [ ] Cyclone [ ] Wet Scrubber [ ] Afterburner

[ ] Other (specify) _____

Brief description of operating characteristics of control devices:

Not Applicable

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

Not Applicable

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]

2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.

3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).

4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)

5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).

6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.

7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).

8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

NOT APPLICABLE

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

[ ] Yes [ ] No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

[ ] Yes [ ] No

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology?

Contaminant	Rate or Concentration

D. Describe the existing control and treatment technology (if any).

1. Control Device/System:
2. Operating Principles:
3. Efficiency:*
4. Capital Costs:

*Explain method of determining

NOT APPLICABLE

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant	Rate or Concentration

10. Stack Parameters

a. Height: ft.

b. Diameter: ft.

c. Flow Rate: ACFM

d. Temperature: °F.

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

[1]Explain method of determining efficiency.
[2]Energy to be reported in units of electrical power - KWH design rate.

NOT APPLICABLE

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device:

2. Efficiency:[1]

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:[2]

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

[1]Explain method of determining efficiency.
[2]Energy to be reported in units of electrical power - KWH design rate.

NOT APPLICABLE

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

b. (1) Company:

(2) Mailing Address:

(3) City: (4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

10. Reason for selection and description of systems:

[1]Applicant must provide this information when available. Should this information not b
available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

NOT APPLICABLE

A. Company Monitored Data

1. _____no. sites _____. TSP _____( ) SO^2* _____ Wind spd/dir

Period of Monitoring ____/____/____ to ____/____/____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

*Specify bubbler (B) or continuous (C).

NOT APPLICABLE

2. Instrumentation, Field and Laboratory

a. Was instrumentation EPA referenced or its equivalent? [ ] Yes [ ] No

b. Was instrumentation calibrated in accordance with Department procedures?

[ ] Yes [ ] No [ ] Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from ____/____/____ to ____/____/____
month day year month day year

2. Surface data obtained from (location)_____

3. Upper air (mixing height) data obtained from (location)_____

4. Stability wind rose (STAR) data obtained from (location)_____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate	
TSP	_____	grams/sec
SO^2	_____	grams/sec

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description of point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

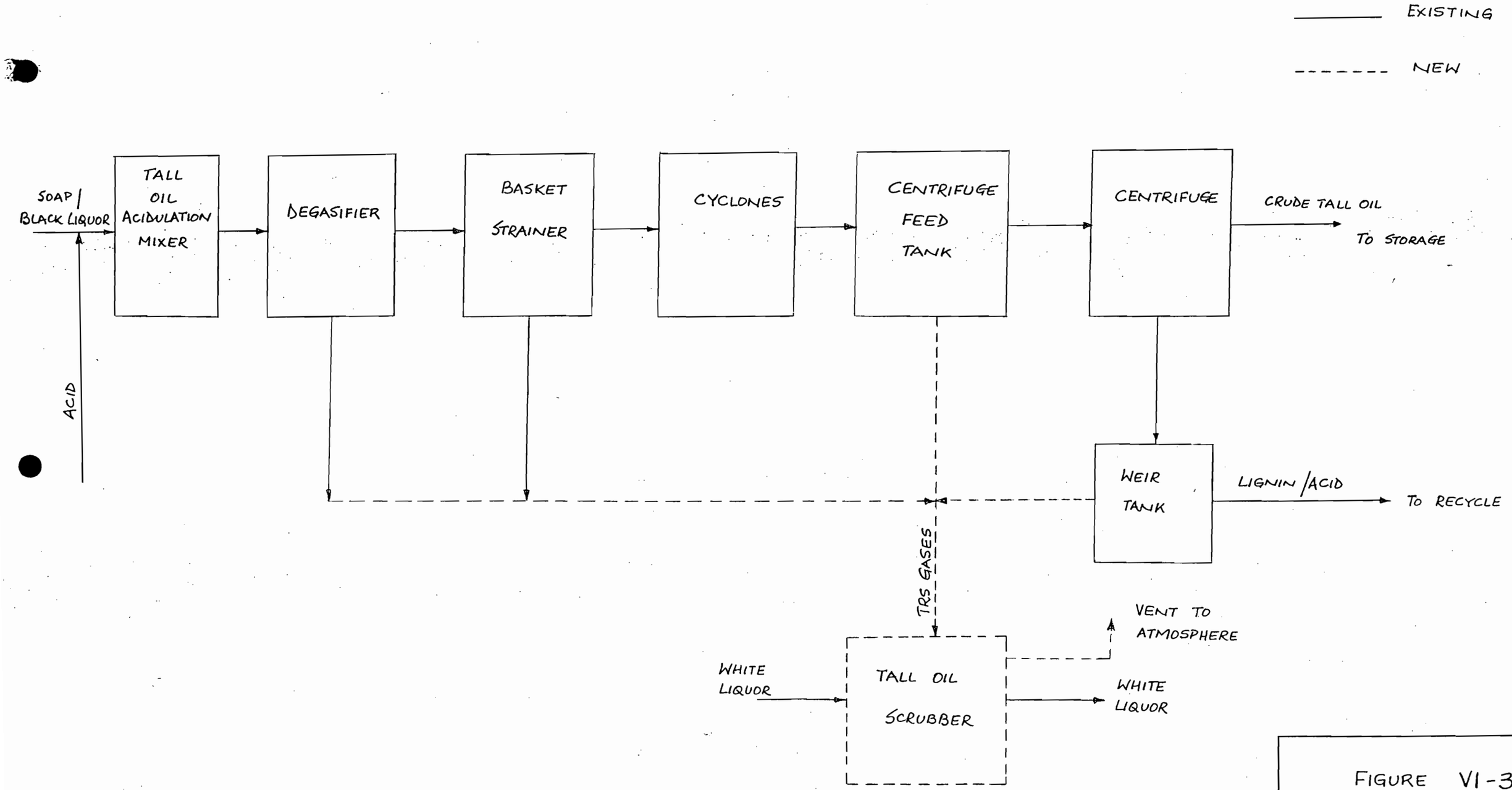
H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

D. Tall Oil System

Equipment will be installed to scrub the TRS gases (primarily H2S) liberated from the continuous tall oil acidulation process. A new high efficiency scrubber will replace the existing scrubber in the tall oil plant in order to limit the TRS emissions from the plant to the required 0.05 pound per ton of crude tall oil (on a dry basis). The scrubber will use an alkaline scrubbing medium.

The new Tall Oil Scrubber will be constructed of 316 Stainless Steel. A new fan will convey gases from the vents of the centrifugal feed tank, the weir tank, the degasifier tank, the basket-strainer, and the degasifier condenser through the new scrubber. The gases from the degasifier and basket strainer vents are currently being collected and scrubbed in the existing scrubber in the tall oil plant.

An alkaline scrubbing solution will be supplied to the scrubber from the digester feed system for use as the scrubbing medium. After passing through the scrubber, the liquor will be returned to the plant. The existing vent piping will be replaced. Figure VI-3 is a block diagram of the tall oil system.



SIRRINE ENVIRONMENTAL CONSULTANTS

FIGURE VI-3

TALL OIL PLANT

BUCKEYE CELLULOSE CORPORATION

FOLEY PLANT, PERRY, FLORIDA

Receipt #76197
I# 002029
$1000.00

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

DER

NOV 12 1987

BAQM

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

AC62-141922

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Kraft Pulp & Paper [ ] New[1] [X] Existing[1]

APPLICATION TYPE: [X] Construction [ ] Operation [ ] Modification

COMPANY NAME: The Buckeye Cellulose Corporation COUNTY: Taylor

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) Tall Oil System

SOURCE LOCATION: Street 5 to 6 Miles Southeast of Perry City Perry

UTM: East 256,740 North 3,328,700

Latitude 30 ° 03 ' 59 "N Longitude 83 ° 33 ' 12 "W

APPLICANT NAME AND TITLE: J. L. Sipple, Plant Manager

APPLICANT ADDRESS: Route 3, Box 260; Perry, Florida 32347

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Buckeye Cellulose Corp.

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: J. L. Sipple

J. L. Sipple, Plant Manager
Name and Title (Please Type)

Date: 11/11/87 Telephone No. 904/584-0121

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

[1] See Florida Administrative Code Rule 17-2.100(57) and (104)

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed A. M. Kinghorn

A. M. Kinghorn
Name (Please Type)

Sirrine Environmental Consultants, Inc.
Company Name (Please Type)

P. O. Box 5229, Greenville, SC 29606
Mailing Address (Please Type)

Florida Registration No. 38928 Date: 11.10.87 Telephone No. 803/234-3004

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

A new scrubber will be added in the tall oil plant. The scrubber will use white liquor as a scrubbing medium. This will result in lower TRS emissions and in full compliance with DER Rule 17-2.600(4)(c)2., FAC, for tall oil plants.

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction June, 1988 Completion of Construction April, 1989

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

Cost of overall TRS compliance project $16,000,000 (approximately)

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

The system is subject to DER Permit No. A062-113892, dated July 8, 1986, and amended April 7, 1987, and November 2, 1987, (expiration date August 10, 1989) based on application dated December 19, 1985, and additional information submitted March 20, 1986, and April 14, 1986, and September 15, 1987.

E. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52

if power plant, hrs/yr _____; if seasonal, describe: _____

Not Applicable

F. If this is a new source or major modification, answer the following questions. (Yes or No)

NOT APPLICABLE

1. Is this source in a non-attainment area for a particular pollutant? _____

   a. If yes, has "offset" been applied? _____

   b. If yes, has "Lowest Achievable Emission Rate" been applied? _____

   c. If yes, list non-attainment pollutants. _____

2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. _____

3. Does the State "Prevention of Significant Deterioriation" (PSD) requirement apply to this source? If yes, see Sections VI and VII. _____

4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? _____

5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? _____

H. Do "Reasonably Available Control Technology" (RACT) requirements apply to this source? No

   a. If yes, for what pollutants? Not Applicable

   b. If yes, in addition to the information required in this form, any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Soap & Black Liquor			26,833	
Sulfuric Acid			9,000	
(H_2SO_4)				

B. Process Rate, if applicable: (See Section V, Item 1) 26,833 lb./hr. soap + black liquor +

1. Total Process Input Rate (lbs/hr): 9,000 lb/hr. H_2SO_4 (dry)

2. Product Weight (lbs/hr): 14,583 lb./hr. tall oil (dry)

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission[1]		Allowed[2] Emission Rate per Rule 17-2	Allowable[3] Emission lbs/hr	Potential[4] Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
TRS	0.365	1.6	0.05 lb.	0.365	No factor	---	New
			per ton Crude		Limited information		Scrubber
			12-hr. avg.				discharge
			17-2.600(4)				
			(c)2.a.				

[1]See Section V, Item 2.

[2]Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

[3]Calculated from operating rate and applicable standard.

[4]Emission, if source operated without control (See Section V, Item 3).

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
Wet Scrubber	TRS	To be determined	Not applicable	To be determined
(Vendor not selected)				

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Not applicable			

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average _____ Maximum _____

G. Indicate liquid or solid wastes generated and method of disposal.

All liquid wastes will be recycled or sewered to the NPDES waste water treatment system.

All solid wastes will be landfilled on site.

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: To be determined ft. Stack Diameter: To be determined ft.

Gas Flow Rate: Approximately 2,700 ACFM _____ DSCFM Gas Exit Temperature: To be determined °F.

Water Vapor Content: Saturated % Velocity: To be determined FPS

SECTION IV: INCINERATOR INFORMATION

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuae)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq.& Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr)_____

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr._____

Manufacturer_____

Date Constructed _____ Model No. _____

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diamter: _____ Stack Temp. _____

Gas Flow Rate: _____ACFM _____ DSCFM* Velocity: _____FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: [ ] Cyclone [ ] Wet Scrubber [ ] Afterburner

[ ] Other (specify)_____

Brief description of operating characteristics of control devices:

Not Applicable

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

Not Applicable

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]

2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.

3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).

4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)

5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).

6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.

7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).

8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

NOT APPLICABLE

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

[ ] Yes [ ] No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

[ ] Yes [ ] No

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology?

Contaminant	Rate or Concentration

D. Describe the existing control and treatment technology (if any).

1. Control Device/System:
2. Operating Principles:
3. Efficiency:*
4. Capital Costs:

*Explain method of determining

NOT APPLICABLE

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant	Rate or Concentration

10. Stack Parameters

a. Height: ft. b. Diameter: ft.

c. Flow Rate: ACFM d. Temperature: °F.

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

[1]Explain method of determining efficiency.
[2]Energy to be reported in units of electrical power - KWH design rate.

NOT APPLICABLE

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device:

2. Efficiency:[1]

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:[2]

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

[1]Explain method of determining efficiency.
[2]Energy to be reported in units of electrical power - KWH design rate.

NOT APPLICABLE

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

b. (1) Company:

(2) Mailing Address:

(3) City: (4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

10. Reason for selection and description of systems:

[1]Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

NOT APPLICABLE

A. Company Monitored Data

1. _____no. sites _____. TSP _____( ) SO^{2}* _____ Wind spd/dir

Period of Monitoring ____/____/____ to ____/____/____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

*Specify bubbler (B) or continuous (C).

NOT APPLICABLE

2. Instrumentation, Field and Laboratory

a. Was instrumentation EPA referenced or its equivalent? [ ] Yes [ ] No

b. Was instrumentation calibrated in accordance with Department procedures?

[ ] Yes [ ] No [ ] Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from ____/____/____ to ____/____/____
month day year month day year

2. Surface data obtained from (location)_____

3. Upper air (mixing height) data obtained from (location)_____

4. Stability wind rose (STAR) data obtained from (location)_____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate	
TSP	_____	grams/sec
SO^2	_____	grams/sec

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description of point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

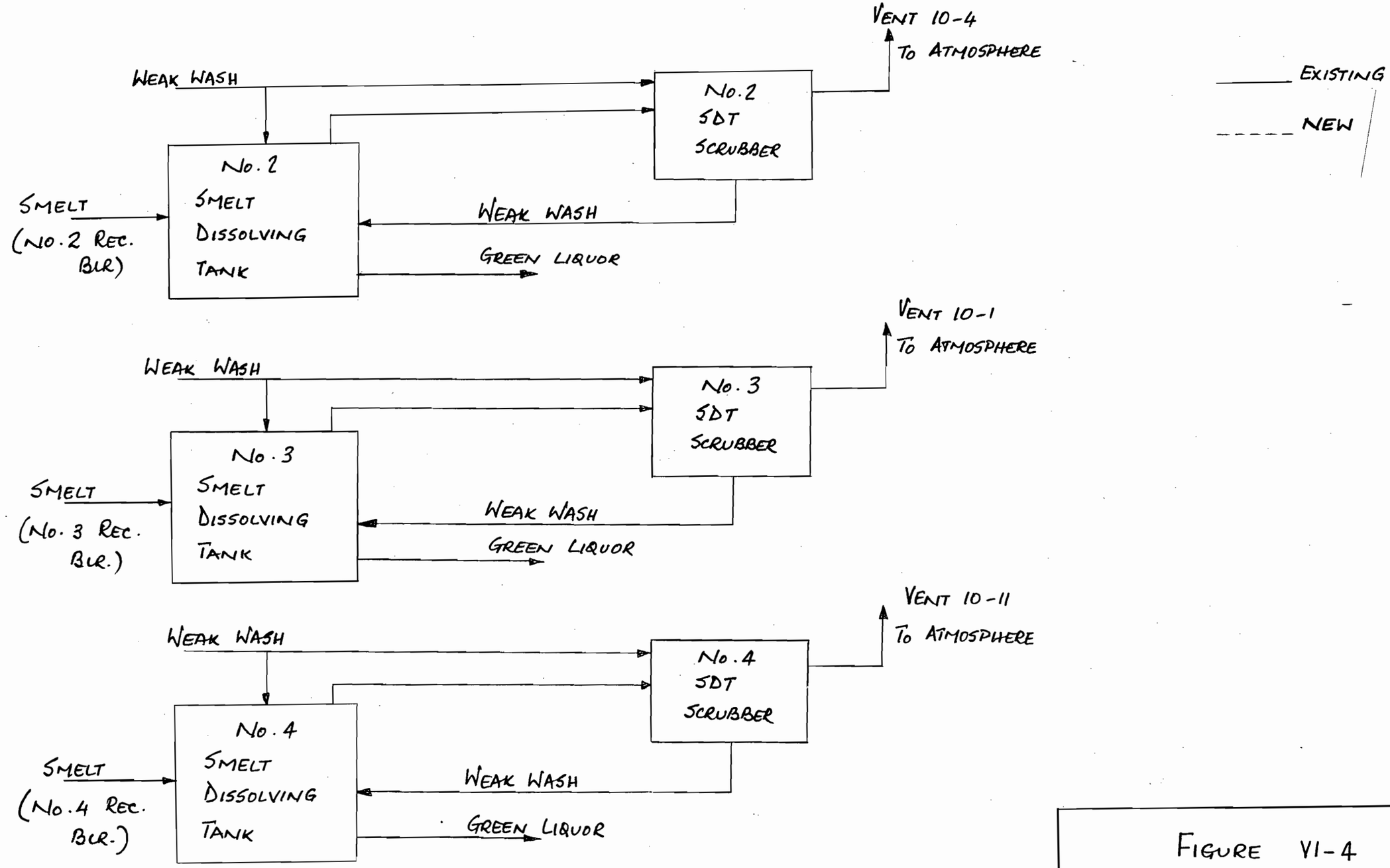
G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

E. Smelt Dissolving Tank Vents

New equipment will be installed as needed to monitor surrogate parameters for the existing alkaline scrubbers on Smelt Dissolving Tank Vent Nos. 2, 3, and 4. While these sources will not require the installation of major capital equipment, compliance will be achieved concurrently with the redirection of the noncondensible gases from the Multiple Effect Evaporators to the No. 1 Bark Boiler for incineration, which does require the installation of major capital equipment.

Figure VI-4 is a block diagram of the smelt dissolving tanks.



SIRRINE ENVIRONMENTAL CONSULTANTS

FIGURE VI-4

No. 2,3 & 4 SMELT DISSOLVING TANKS

BUCKEYE CELLULOSE CORPORATION
FOLEY PLANT, PERRY, FLORIDA.

Receipt #76197
1# 002029
$1000.00

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

DER

NOV 12 1987

BAQM

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

AC 62-141924

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Kraft Pulp & Paper [ ] New[1] [X] Existing[1]

APPLICATION TYPE: [X] Construction [ ] Operation [ ] Modification

COMPANY NAME: The Buckeye Cellulose Corporation COUNTY: Taylor

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) No. 2 Smelt Dissolving Tank

SOURCE LOCATION: Street 5 to 6 Miles Southeast of Perry City Perry

UTM: East 256,740 North 3,328,700

Latitude 30 ° 03 ' 59 "N Longitude 83 ° 33 ' 12 "W

APPLICANT NAME AND TITLE: J. L. Sipple, Plant Manager

APPLICANT ADDRESS: Route 3, Box 260; Perry, Florida 32347

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Buckeye Cellulose Corp.

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: J. L. Sipple

J. L. Sipple, Plant Manager
Name and Title (Please Type)

Date: 11/11/87 Telephone No. 904/584-0121

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

[1] See Florida Administrative Code Rule 17-2.100(57) and (104)

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed A. M. Kinghorn

A. M. Kinghorn
Name (Please Type)

Sirrine Environmental Consultants, Inc.
Company Name (Please Type)

P. O. Box 5229, Greenville, SC 29606
Mailing Address (Please Type)

Florida Registration No. 38928 Date: 11.10.87 Telephone No. 803/234-3004

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

Pursuant to DER Rule 17-2.600(4)(c)1.a., FAC, TRS emissions from the multiple effect evaporators will be incinerated in the No. 1 Bark Boiler rather than being vented to the smelt dissolving tank scrubbers as is presently done. This will result in lower TRS emissions and in full compliance with DER Rule 17-2.600(4)(c)4., FAC, for smelt dissolving tank vents.

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction June, 1988 Completion of Construction April, 1989

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

Cost of overall TRS compliance project $16,000,000 (approximately)

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

DER Permit No. A062-116703, issued June 12, 1986, and revised July 16, 1986, (and amended April 4, 1986, November 3, 1986, April 7, 1987, and April 24, 1987) based on application addendum dated December 19, 1985, and additional information received March 20, 1986, April 14, 1986, and June 30, 1986. Permit expires April 28, 1991.

E. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52

if power plant, hrs/yr _____; if seasonal, describe: _____

Not Applicable

F. If this is a new source or major modification, answer the following questions. (Yes or No)

NOT APPLICABLE

1. Is this source in a non-attainment area for a particular pollutant? _____

   a. If yes, has "offset" been applied? _____

   b. If yes, has "Lowest Achievable Emission Rate" been applied? _____

   c. If yes, list non-attainment pollutants. _____

2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. _____

3. Does the State "Prevention of Significant Deterioriation" (PSD) requirement apply to this source? If yes, see Sections VI and VII. _____

4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? _____

5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? _____

H. Do "Reasonably Available Control Technology" (RACT) requirements apply to this source? No

   a. If yes, for what pollutants? Not Applicable

   b. If yes, in addition to the information required in this form, any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Smelt to SDT			41,187*	Refer to attached flow
Weak wash solids			9,773	diagram
to SDT				

* Equivalent to 97,600 lb./hr. black liquor solids

B. Process Rate, if applicable: (See Section V, Item 1)

1. **Total Process Input Rate (lbs/hr):** 41,187 lb./hr. smelt + 9,773 lb./hr. weak wash solids

2. **Product Weight (lbs/hr):** 50,960 lb/hr. green liquor solids

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission[1]		Allowed[2] Emission Rate per Rule 17-2	Allowable[3] Emission lbs/hr	Potential[4] Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
TRS as H_2S	1.56	6.83	0.0480 lb.	1.56	59.38	259.39	Attached
			per 3000 lb.				Flow
			BLS as H_2S				Diagram
			17-2.600(4)				
			(c)4				

[1] See Section V, Item 2.

[2] Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

[3] Calculated from operating rate and applicable standard.

[4] Emission, if source operated without control (See Section V, Item 3).

Based on Interim Operating Permit condition, 811 ppm (vol), 16,500 ACFM and 170°F (dated July 16, 1986).

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
Ducon Scrubber	TRS	64.5*	Not Applicable	USEPA TRS
#22-4-0298				Guideline
(Existing)				

* Based on average uncontrolled emission rate of 60 ppm (per USEPA TRS Guideline)

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Not Applicable			

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average Not Applicable Maximum _____

G. Indicate liquid or solid wastes generated and method of disposal.

All liquid wastes are recycled or sewered to the NPDES waste water treatment system.

All solid wastes are recycled or landfilled on site.

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: 142 ft. Stack Diameter: 3 ft.

Gas Flow Rate: 16,500 ACFM 8,700 DSCFM Gas Exit Temperature: ~ 170 °F.

Water Vapor Content: 37 % Velocity: 39 FPS

SECTION IV: INCINERATOR INFORMATION

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq.& Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diamter: _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity: _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: [ ] Cyclone [ ] Wet Scrubber [ ] Afterburner

[ ] Other (specify) _____

Brief description of operating characteristics of control devices:

Not Applicable

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

Not Applicable

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]

2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.

3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).

4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)

5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).

6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.

7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).

8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

NOT APPLICABLE

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

[ ] Yes [ ] No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

[ ] Yes [ ] No

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology?

Contaminant	Rate or Concentration

D. Describe the existing control and treatment technology (if any).

1. Control Device/System:
2. Operating Principles:
3. Efficiency:*
4. Capital Costs:

*Explain method of determining

NOT APPLICABLE

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant	Rate or Concentration

10. Stack Parameters

a. Height: ft.

b. Diameter: ft.

c. Flow Rate: ACFM

d. Temperature: °F.

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

[1]Explain method of determining efficiency.
[2]Energy to be reported in units of electrical power - KWH design rate.

NOT APPLICABLE

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device:

2. Efficiency:[1]

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:[2]

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

[1]Explain method of determining efficiency.
[2]Energy to be reported in units of electrical power - KWH design rate.

NOT APPLICABLE

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

b. (1) Company:

(2) Mailing Address:

(3) City: (4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

10. Reason for selection and description of systems:

[1]Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

NOT APPLICABLE

A. Company Monitored Data

1. _____no. sites _____. TSP _____( ) SO^2* _____ Wind spd/dir

Period of Monitoring _____/_____/_____ to _____/_____/_____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

*Specify bubbler (B) or continuous (C).

NOT APPLICABLE

2. Instrumentation, Field and Laboratory

a. Was instrumentation EPA referenced or its equivalent? [ ] Yes [ ] No

b. Was instrumentation calibrated in accordance with Department procedures?

[ ] Yes [ ] No [ ] Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from ____/____/____ to ____/____/____
month day year month day year

2. Surface data obtained from (location)_____

3. Upper air (mixing height) data obtained from (location)_____

4. Stability wind rose (STAR) data obtained from (location)_____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate	
TSP	_____	grams/sec
SO^2	_____	grams/sec

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description of point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

Receipt #76197
V# 002029
$1000.00

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

DER

NOV 12 1987

BAQM

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

AC62-141925

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Kraft Pulp & Paper [ ] New[1] [X] Existing[1]

APPLICATION TYPE: [X] Construction [ ] Operation [ ] Modification

COMPANY NAME: The Buckeye Cellulose Corporation COUNTY: Taylor

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) No. 3 Smelt Dissolving Tank

SOURCE LOCATION: Street 5 to 6 Miles Southeast of Perry City Perry

UTM: East 256,740 North 3,328,700

Latitude 30 ° 03 ' 59 "N Longitude 83 ° 33 ' 12 "W

APPLICANT NAME AND TITLE: J. L. Sipple, Plant Manager

APPLICANT ADDRESS: Route 3, Box 260; Perry, Florida 32347

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Buckeye Cellulose Corp.

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: J. L. Sipple

J. L. Sipple, Plant Manager
Name and Title (Please Type)

Date: 11/11/87 Telephone No. 904/584-0121

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

[1] See Florida Administrative Code Rule 17-2.100(57) and (104)

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed A. M. Kinghorn

A. M. Kinghorn
Name (Please Type)

Sirrine Environmental Consultants, Inc.
Company Name (Please Type)

P. O. Box 5229, Greenville, SC 29606
Mailing Address (Please Type)

Florida Registration No. 38928 Date: 11-10-87 Telephone No. 803/234-3004

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

Pursuant to DER Rule 17-2.600(4)(c)1.a., FAC, TRS emissions from the multiple effect evaporators will be incinerated in the No. 1 Bark Boiler rather than being vented to the smelt dissolving tank scrubber as is presently done. This will result in lower TRS emissions and in full compliance with DER Rule 17-2.600(4)(c)4., FAC, for smelt dissolving tank vents.

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction June, 1988 Completion of Construction April, 1989

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

Cost of overall TRS compliance project $16,000,000 (approximately)

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

DER Permit No. A-062-110326, issued January 17, 1986, and revised July 16, 1986, amended on August 4, 1986, November 3, 1986, April 7, 1987, April 24, 1987, based on application addendums dated December 19, 1985, and additional information received by the DER March 20, 1986, April 14, 1986, and June 30, 1986; expires January 17, 1991.

E. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52

if power plant, hrs/yr_____; if seasonal, describe:

Not Applicable

F. If this is a new source or major modification, answer the following questions. (Yes or No)

NOT APPLICABLE

1. Is this source in a non-attainment area for a particular pollutant? _____

   a. If yes, has "offset" been applied? _____

   b. If yes, has "Lowest Achievable Emission Rate" been applied? _____

   c. If yes, list non-attainment pollutants. _____

2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. _____

3. Does the State "Prevention of Significant Deterioriation" (PSD) requirement apply to this source? If yes, see Sections VI and VII. _____

4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? _____

5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? _____

H. Do "Reasonably Available Control Technology" (RACT) requirements apply to this source? No

   a. If yes, for what pollutants? Not Applicable

   b. If yes, in addition to the information required in this form, any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Smelt to SDT			34,752*	
Weak wash solids			8,246	
to SDT				

* Equivalent to 82,350 lb./Hr. black liquor solids (dry)

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): 34,752 lb./hr. smelt + 8,246 lb/hr. weak wash solids

2. Product Weight (lbs/hr): 42,998 lb./hr. green liquor solids

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission[1]		Allowed[2] Emission Rate per Rule 17-2	Allowable[3] Emission lbs/hr	Potential[4] Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
TRS as H_2S	1.32	5.76	0.0480 lb.	1.32	79.09	345.46	
			per 3,000 lb.				
			BLS as H_2S				
			17-2.600(4)				
			(c)4.				

[1] See Section V, Item 2.

[2] Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

[3] Calculated from operating rate and applicable standard.

[4] Emission, if source operated without control (See Section V, Item 3).

Potential based on Interim Operating Permit condition of 811 ppm (vol), 21,800 ACFM, 165°F (dated July 16, 1986).

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
Ducon Scrubber	TRS	77.5*	Not Applicable	USEPA TRS
#22-4-0400				Guidelines
(Existing)				

* Based on average uncontrolled TRS emissions at 60 ppm (USEPA TRS Guidelines)

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Not Applicable			

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average Not Applicable Maximum _____

G. Indicate liquid or solid wastes generated and method of disposal.

All liquid wastes are recycled or sewered to the NPDES waste water treatment system.

All solid wastes are recycled or landfilled on site.

Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: 140 ft. Stack Diameter: 4 ft.

Gas Flow Rate: 21,800 ACFM 12,000 DSCFM Gas Exit Temperature: 165 °F.

Water Vapor Content: 35 % Velocity: 28 FPS

SECTION IV: INCINERATOR INFORMATION

NOT APPLICABLE

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq.& Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diamter: _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity: _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: [ ] Cyclone [ ] Wet Scrubber [ ] Afterburner

[ ] Other (specify) _____

Brief description of operating characteristics of control devices:

Not Applicable

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

Not Applicable

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]

2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.

3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).

4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)

5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).

6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.

7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).

8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

9. The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

NOT APPLICABLE

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

[ ] Yes [ ] No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

[ ] Yes [ ] No

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology?

Contaminant	Rate or Concentration

D. Describe the existing control and treatment technology (if any).

1. Control Device/System:
2. Operating Principles:
3. Efficiency:*
4. Capital Costs:

*Explain method of determining

NOT APPLICABLE

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant	Rate or Concentration

10. Stack Parameters

a. Height: ft.

b. Diameter: ft.

c. Flow Rate: ACFM

d. Temperature: °F.

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

[1]Explain method of determining efficiency.
[2]Energy to be reported in units of electrical power - KWH design rate.

NOT APPLICABLE

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device:

2. Efficiency:[1]

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:[2]

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

[1] Explain method of determining efficiency.
[2] Energy to be reported in units of electrical power - KWH design rate.

NOT APPLICABLE

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

b. (1) Company:

(2) Mailing Address:

(3) City: (4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

10. Reason for selection and description of systems:

[1]Applicant must provide this information when available. Should this information not b available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

NOT APPLICABLE

A. Company Monitored Data

1. _____ no. sites _____ TSP _____ ( ) SO^2* _____ Wind spd/dir

Period of Monitoring ____/____/____ to ____/____/____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

*Specify bubbler (B) or continuous (C).

NOT APPLICABLE

2. Instrumentation, Field and Laboratory

a. Was instrumentation EPA referenced or its equivalent? [ ] Yes [ ] No

b. Was instrumentation calibrated in accordance with Department procedures?

[ ] Yes [ ] No [ ] Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from ____/____/____ to ____/____/____
month day year month day year

2. Surface data obtained from (location)_____

3. Upper air (mixing height) data obtained from (location)_____

4. Stability wind rose (STAR) data obtained from (location)_____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate	
TSP	_____	grams/sec
SO^2	_____	grams/sec

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description of point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

Receipt #76197
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2600 BLAIR STONE ROAD
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DER

NOV 12 1987

BAQM

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

AC62-141926

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Kraft Pulp & Paper [ ] New[1] [X] Existing[1]

APPLICATION TYPE: [X] Construction [ ] Operation [ ] Modification

COMPANY NAME: The Buckeye Cellulose Corporation COUNTY: Taylor

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) No. 4 Smelt Dissolving Tank

SOURCE LOCATION: Street 5 to 6 Miles Southeast of Perry City Perry

UTM: East 256,740 North 3,328,700

Latitude 30 ° 03 ' 59 "N Longitude 83 ° 33 ' 12 "W

APPLICANT NAME AND TITLE: J. L. Sipple, Plant Manager

APPLICANT ADDRESS: Route 3, Box 260; Perry, Florida 32347

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Buckeye Cellulose Corp.

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: J. L. Sipple

J. L. Sipple, Plant Manager
Name and Title (Please Type)

Date: 11/11/87 Telephone No. 904/584-0121

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

[1] See Florida Administrative Code Rule 17-2.100(57) and (104)

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed A. M. Kinghorn

A. M. Kinghorn
Name (Please Type)

Sirrine Environmental Consultants, Inc.
Company Name (Please Type)

P. O. Box 5229, Greenville, SC 29606
Mailing Address (Please Type)

Florida Registration No. 38928 Date: 11.10.87 Telephone No. 803/234-3004

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

Pursuant to DER Rule 17-2.600(4)(c)1.a., FAC, TRS emissions from the multiple effect evaporators will be incinerated in the No. 1 Bark Boiler rather than being vented to the smelt dissolving tank scrubber as is presently done. This will result in lower TRS emissions and in full compliance with DER Rule 17-2.600(4)(c)4., FAC, for smelt dissolving tank vents.

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction June, 1988 Completion of Construction April, 1989

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

Cost of overall TRS compliance project $16,000,000 (approximately)

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

DER Permit No. A062-54432, issued July 16, 1986, with revisions on August 4, 1986, November 3, 1986, April 7, 1987, April 24, 1987. New permit issued June 5, 1987. Expiration date June 15, 1992. DER Permit No. A062-130573

E. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52

if power plant, hrs/yr _____; if seasonal, describe: _____

Not Applicable

F. If this is a new source or major modification, answer the following questions. (Yes or No)

NOT APPLICABLE

1. Is this source in a non-attainment area for a particular pollutant? _____

   a. If yes, has "offset" been applied? _____

   b. If yes, has "Lowest Achievable Emission Rate" been applied? _____

   c. If yes, list non-attainment pollutants. _____

2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. _____

3. Does the State "Prevention of Significant Deterioriation" (PSD) requirement apply to this source? If yes, see Sections VI and VII. _____

4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? _____

5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? _____

H. Do "Reasonably Available Control Technology" (RACT) requirements apply to this source? No

   a. If yes, for what pollutants? Not Applicable

   b. If yes, in addition to the information required in this form, any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Smelt to SDT			52,254*	Vent 10-11
Weak wash solids			12,399	Vent 10-11
to SDT				

* Equivalent to 123,825 lb./hr. black liquor solids (dry)

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): 52,254 lb./hr. smelt + 12,399 lb./hr. weak wash solids

2. Product Weight (lbs/hr): 64,653 lb./hr. green liquor solids

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission[1]		Allowed[2] Emission Rate per Rule 17-2	Allowable[3] Emission lbs/hr	Potential[4] Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
TRS as H_2S	1.98	8.67	0.0480 lb.	1.98	96.14	421.08	Vent 10-11
			per 3,000				
			lb. BLS as				
			H_2S				
			17-2.600(4) (c)4.				

[1] See Section V, Item 2.

[2] Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

[3] Calculated from operating rate and applicable standard.

[4] Emission, if source operated without control (See Section V, Item 3).

Potential based on interim operating condition of 811 ppm (vol), at 26,500 ACFM, at 165°F, (dated June 5, 1987).

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
Ducon Scrubber	TRS	72.2*	Not Applicable	USEPA TRS
#20-4-0340				Guidelines
(Existing)				

* Based on average uncontrolled TRS emissions (USEPA TRS Guidelines)

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Not Applicable			

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average Not Applicable Maximum _____

G. Indicate liquid or solid wastes generated and method of disposal.

All liquid wastes are recycled or sewered to the NPDES waste water treatment system.

All solid wastes are recycled or landfilled on site.

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: 162 ft. Stack Diameter: 4 ft.

Gas Flow Rate: 26,500 ACFM 14,250 DSCFM Gas Exit Temperature: 165 °F.

Water Vapor Content: 35 % Velocity: 35 FPS

SECTION IV: INCINERATOR INFORMATION

NOT APPLICABLE

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq.& Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diamter: _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity: _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: [ ] Cyclone [ ] Wet Scrubber [ ] Afterburner

[ ] Other (specify) _____

Brief description of operating characteristics of control devices:

Not Applicable

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

Not Applicable

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]

2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.

3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).

4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)

5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).

6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.

7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).

8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

NOT APPLICABLE

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

[ ] Yes [ ] No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

[ ] Yes [ ] No

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology?

Contaminant	Rate or Concentration

D. Describe the existing control and treatment technology (if any).

1. Control Device/System:
2. Operating Principles:
3. Efficiency:*
4. Capital Costs:

*Explain method of determining

NOT APPLICABLE

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant	Rate or Concentration

10. Stack Parameters

a. Height: ft.

b. Diameter: ft.

c. Flow Rate: ACFM

d. Temperature: °F.

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

[1] Explain method of determining efficiency.
[2] Energy to be reported in units of electrical power - KWH design rate.

NOT APPLICABLE

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device:

2. Efficiency:[1]

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:[2]

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

[1] Explain method of determining efficiency.
[2] Energy to be reported in units of electrical power - KWH design rate.

NOT APPLICABLE

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

b. (1) Company:

(2) Mailing Address:

(3) City: (4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

10. Reason for selection and description of systems:

[1]Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

NOT APPLICABLE

A. Company Monitored Data

1. _____ no. sites _____. TSP _____ ( ) SO^{2}* _____ Wind spd/dir

Period of Monitoring _____/_____/_____ to _____/_____/_____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

*Specify bubbler (B) or continuous (C).

NOT APPLICABLE

2. Instrumentation, Field and Laboratory

a. Was instrumentation EPA referenced or its equivalent? [ ] Yes [ ] No

b. Was instrumentation calibrated in accordance with Department procedures?

[ ] Yes [ ] No [ ] Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from ____/____/____ to ____/____/____
month day year month day year

2. Surface data obtained from (location)_____

3. Upper air (mixing height) data obtained from (location)_____

4. Stability wind rose (STAR) data obtained from (location)_____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate	
TSP	_____	grams/sec
SO^2	_____	grams/sec

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description of point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

F. Noncondensible Gas Transport and Incineration System (No. 1 Bark Boiler)

The noncondensible/TRS gases from the turpentine recovery system are generated at concentrations below their explosive limit (i.e., dilute or weak gases). These weak gases are currently incinerated gases in the No. 1 Bark Boiler.

The noncondensible/TRS gases from the multiple effect evaporator hot wells and the digesting blow heat recovery system are generated at concentrations above their explosive limit (i.e., "strong" gases). These rich gases will be collected and transported to the No. 1 Bark Boiler for incineration.

These gases will be injected into the No. 1 Bark Boiler. The incineration residence time exceeds 0.8 seconds at a temperature above 1,200^{o}F for all possible situations. This ensures almost complete oxidation (greater than 99.99 percent) of the TRS compounds. SO2 emissions from the bark boiler will be increased as a result of the incineration of the TRS compounds.

Modification to the boiler air and flue gas system will be necessary to prevent corrosion of the boiler as a result of the incineration of the noncondensible/TRS gases.

A new corrosion resistant mist eliminator will be installed in the existing venturi scrubber. A pH control system will be added to the scrubber water recycle system to ensure adequate pH control and SO2 removal.

Wet scrubbers of the type installed on the No. 1 Bark Boiler are proved technology and have been successfully used for SO2 control in the industry. The degree of SO2 capture is dependent on the type of scrubbing medium and its pH. A minimum level of 40

percent reduction in incoming SO2 can be expected with the pH control system in place. A 15% caustic solution will also be available, if needed, to neutralize the scrubber recycle water.

Vents from the four evaporator hotwells will be collected and conveyed to the No. 1 Bark Boiler by a new steam ejector. Existing vent piping will be used where possible. The emergency vents will be used primarily on loss of ejector steam and will discharge above the evaporator and away from personnel areas.

The blow heat recovery system secondary condenser vent will also be collected and conveyed to the No. 1 Bark Boiler by a new steam ejector. An emergency vent will be provided at the accumulator for use during times of loss of ejector steam.

Steam will be piped to the two new ejectors that will convey gases from the evaporator hot wells and the blow heat recovery system. The discharge from these ejectors will be piped into a separator for removal of condensate. Gases leaving the separator will be piped through a flame arrestor and into the No. 1 Bark Boiler. Purge steam will be provided to evacuate the gas feed line during maintenance or emergency outages. The transport system will have safety features which are essential to protect life and property.

Gases from the evaporator hotwells and from the blow heat recovery system can be diverted to the atmosphere if conditions in the boiler prevent the gases from being incinerated (including but not limited to flame out or low temperature). The preferred mode of operation when the No. 1 Bark Boiler cannot be used for incineration is to vent the strong gases to the noncondensible/TRS gases back-up scrubber as proposed in the Contingency Plan shown in Section VII.

Figure VI-5 is a block diagram of this system.

Noncondensible/TRS Gases Back-up Scrubber

Pursuant to Rule 17-2.600(4)(c)1.c., FAC, it is proposed to mitigate TRS emissions in the event of an emergency, essential maintenance, malfunctions, startup or shutdown of the No. 1 Bark Boiler with a new back-up scrubber to scrub the No. 1-4 multiple effect evaporator hot well gases and the No. 1 and No. 2 Digester System blow heat recovery gases. Digester relief gases (turpentine) will not be scrubbed. The scrubber will use an alkaline scrubbing medium.

If the No. 1 Bark Boiler goes down, gases from the strong gas system will be diverted to a new back-up scrubber. Gases entering the scrubber will pass through new flame arrestors. Gases exiting the scrubber will be exhausted to the atmosphere through an existing stack near the No. 2 Recovery Boiler dissolving tank scrubber vent.

The design alkaline liquor flow rate will be that required to remove a substantial portion of the H2S in the incoming noncondensible gas stream. A portion of the methyl mercaptan will also be removed. However, the dimethyl sulfide and the dimethyl disulfide will remain in the scrubber discharge.

The back-up scrubber will mitigate the impact of TRS emissions when conditions in the No. 1 Bark Boiler prevent incineration of the noncondensible/TRS gases, but will not control the emissions to the same level as the No. 1 Bark Boiler. Our proposal to use the backup scrubber is contingent on the Department's agreement that the system will constitute acceptable mitigation under DER rules 17-2.600(4)(c)1.c., FAC, and best operating practices under 17.2.250(1), FAC.

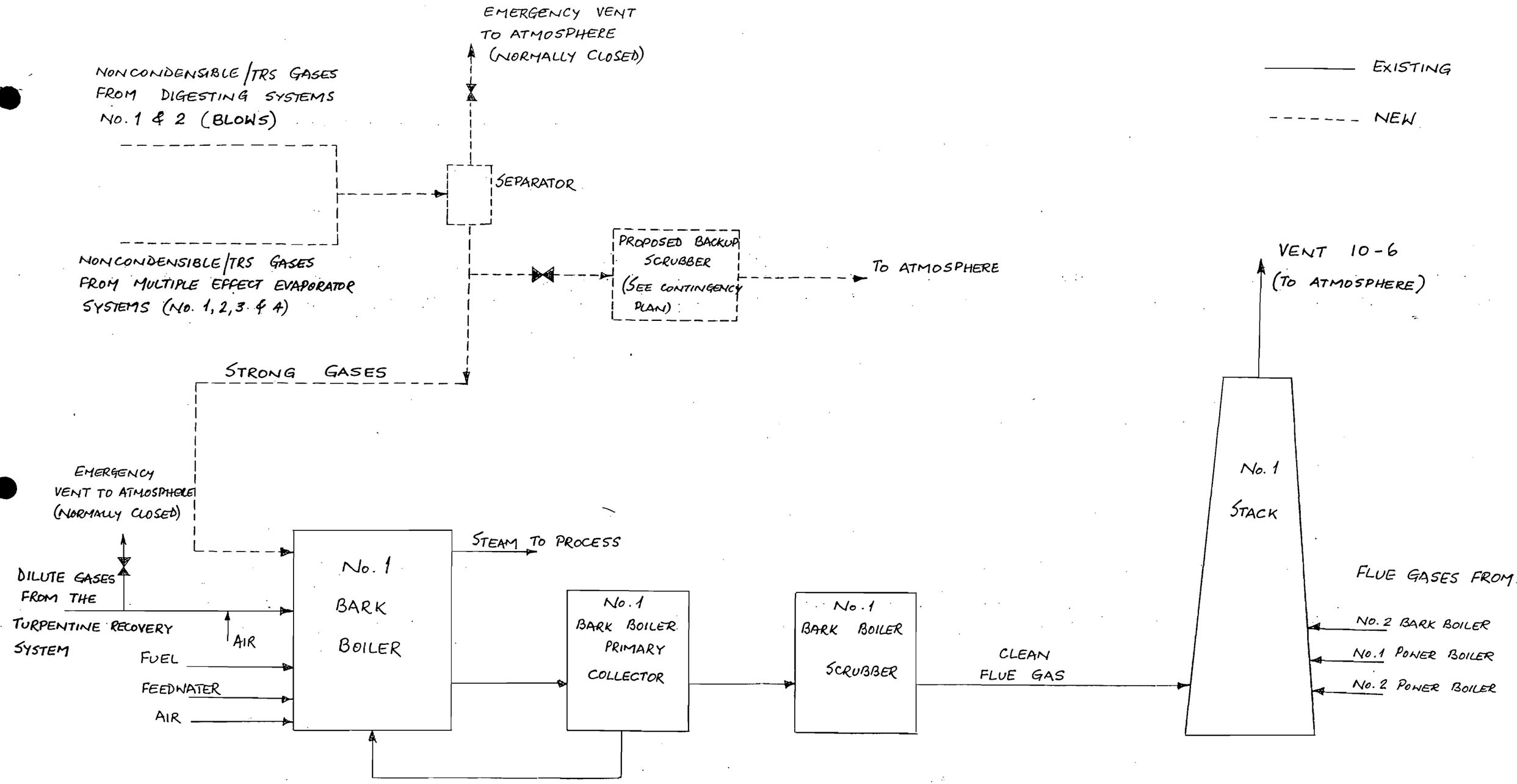


FIGURE VI-5

NONCONDENSIBLE/TRS GAS INCINERATION

BUCKEYE CELLULOSE CORPORATION

FOLEY PLANT, PERRY, FLORIDA

SIRRINE ENVIRONMENTAL CONSULTANTS

Receipt #76197
#002029
$1000.00

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

DER

NOV 12 1987

BAQM

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

AC 62-141927

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Kraft Pulp & Paper [ ] New[1] [X] Existing[1]

APPLICATION TYPE: [X] Construction [ ] Operation [ ] Modification

COMPANY NAME: The Buckeye Cellulose Corporation COUNTY: Taylor

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) No. 1 Bark Boiler

SOURCE LOCATION: Street 5 to 6 Miles Southeast of Perry City Perry

UTM: East 256,740 North 3,328,700

Latitude 30 ° 03 ' 59 "N Longitude 83 ° 33 ' 12 "W

APPLICANT NAME AND TITLE: J. L. Sipple, Plant Manager

APPLICANT ADDRESS: Route 3, Box 260; Perry, Florida 32347

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Buckeye Cellulose Corp.

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: J. L. Sipple

J. L. Sipple, Plant Manager
Name and Title (Please Type)

Date: 11/10/87 Telephone No. 904/584-0121

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

[1] See Florida Administrative Code Rule 17-2.100(57) and (104)

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed A. M. Kinghorn

A. M. Kinghorn
Name (Please Type)

Sirrine Environmental Consultants, Inc.
Company Name (Please Type)

P. O. Box 5229, Greenville, SC 29606
Mailing Address (Please Type)

Florida Registration No. 38928 Date: 11·10·87 Telephone No. 803/234-3004

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

TRS emissions from the digesters and multiple effect evaporators will be incinerated in the No. 1 Bark Boiler, along with TRS emissions from the turpentine condenser as is presently done. This will result in lower TRS emissions (and an increase in SO2 emissions) and in full compliance with DER Rule 17-2.600(4)(c)6.a., FAC, for "other combustion devices."

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction June, 1988 Completion of Construction April, 1989

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

Cost of overall TRS compliance project $16,000,000 (approximately)

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

A062-2093, 5/18/73-7/1/75; A062-2245, 7/29/74-7/1/75 (Mechanical Collector Consent Order 7/10/79-11/15/76); A062-2663, 3/1/77-2/28/82; A062-30463, 7/21/80-8/31/82; A062-48928, 1/5/82-1/4/87; A062-1126397, 1/30/87-1/4/92, and revised 4/7/87.

E. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52 ;

if power plant, hrs/yr _____; if seasonal, describe: _____

Not Applicable

F. If this is a new source or major modification, answer the following questions. (Yes or No)

NOT APPLICABLE

1. Is this source in a non-attainment area for a particular pollutant? _____

   a. If yes, has "offset" been applied? _____

   b. If yes, has "Lowest Achievable Emission Rate" been applied? _____

   c. If yes, list non-attainment pollutants. _____

2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. _____

3. Does the State "Prevention of Significant Deterioriation" (PSD) requirement apply to this source? If yes, see Sections VI and VII. _____

4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? _____

5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? _____

H. Do "Reasonably Available Control Technology" (RACT) requirements apply to this source? No

   a. If yes, for what pollutants? Not Applicable

   b. If yes, in addition to the information required in this form, any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Waste Wood Products			23.5 TPH	Refer attached flow diagram
			(30% moisture)	
Waste Wood Products			*	
and/or Fossil Fuel				

* See page 5

B. Process Rate, if applicable: (See Section V, Item 1)

1. **Total Process Input Rate (lbs/hr):** 23.5 TPH Waste Wood Products
2. **Product Weight (lbs/hr):** Waste Wood Products 200 M lbs/hr; Waste Wood Products and Fossil Fuel 200 M lbs/hr expressed as steam

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission[1]		Allowed[2] Emission Rate per Rule 17-2	Allowable[3] Emission lbs/hr	Potential[4] Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
TRS**	5 ppm**		5 ppm**	5 ppm**	1229.1+	5383.5+	Vent 10-6
PM (Bark)	47.25	206.96	0.158 lb/10^6 BTU	47.25	Not available		
PM (#6 FO)	24.0		0.10 lb/10^6 BTU	24.0	Not available		
SO_2*	1448.9*	6346.1*	Not Applic.*	Not Applic.*	2414.8*	10576.8*	
NO_x	Not available		Not Applic.	Not Applic.	Not available		

[1] See Section V, Item 2.

[2] Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

[3] Calculated from operating rate and applicable standard.

[4] Emission, if source operated without control (See Section V, Item 3).

\+ See appendix B of TRS Control Project Report

* Max and Potential 502 emissions based on max oil fuel and supplemental bark fuel and NCG incineration. Refer Appendix B.

TRS limited by DER 17-2.600(4)(c)6.a, FAC to 5 ppm by vol., dry basis at Std. conditions corrected to 10% 02, 12-hour average.

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
A. Research Cottrell/	Flyash	Overall System	Not Available	Design
Cyclotrell Series 8x				
B. Ducon Wet Venturi	Flyash	Minimum of 93%	Not Available	Design
Scrubber 92R/180	SO_2	Minimum 40%	Not Applicable	Engineering
Type VVO				Judgment
C. No. 1 Bark Boiler	TRS	99.99	Not Applicable	0.8 sec to 1.2 sec residence time

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Waste Wood Products	90-95% Max	23.5 T/hr, 30% H_2O	300
Waste Wood Products and/or	*	*	300
Fossil Fuel + NCG/TRS			
Fossil Fuel (#6 FO)		1,644 gal/hr	240

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis: #6 Fuel Oil **

Percent Sulfur: 2.5 Percent Ash: Oil typical

Density: 8.1 lbs/gal Typical Percent Nitrogen: 0.4 based on 1 test

Heat Capacity: 18,000 BTU/lb 146,000 BTU/gal

Waste wood products: 8000-9000 BTU/lb

Other Fuel Contaminants (which may cause air pollution): Noncondensible gases from digesting, and multiple effect evaporator systems contain TRS compounds which will be incinerated to sulfur dioxide.

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average 0 Maximum 0

G. Indicate liquid or solid wastes generated and method of disposal.

Solid waste collected is reinjected and burned; liquid waste goes to primary and secondary treatment.

* Burning wood waste products save fossil fuel, so it is planned to burn maximum waste wood products consistent with plant requirements.

** Includes small quantity of used oil generated at the facility and burned as fuel. Oil does not contain PCB's.

No. 1 Bark Boiler/Common Stack

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: 225/225 ft. Stack Diameter: 13/13 ft.

Gas Flow Rate: 482,200/100,000 ACFM _____ DSCFM Gas Exit Temperature: 145/194 °F.

Water Vapor Content: 21.5/NA % Velocity: NA/61 FPS

No. 1 Common Stack

SECTION IV: INCINERATOR INFORMATION

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq.& Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diamter: _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity: _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: [ ] Cyclone [ ] Wet Scrubber [ ] Afterburner

[ ] Other (specify) _____

Brief description of operating characteristics of control devices:

Not Applicable

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

Not Applicable

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]

2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.

3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).

4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)

5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).

6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.

7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).

8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

NOT APPLICABLE

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

[ ] Yes [ ] No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

[ ] Yes [ ] No

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology?

Contaminant	Rate or Concentration

D. Describe the existing control and treatment technology (if any).

1. Control Device/System:
2. Operating Principles:
3. Efficiency:*
4. Capital Costs:

*Explain method of determining

NOT APPLICABLE

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant	Rate or Concentration

10. Stack Parameters

a. Height: ft.

b. Diameter: ft.

c. Flow Rate: ACFM

d. Temperature: °F.

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

[1]Explain method of determining efficiency.
[2]Energy to be reported in units of electrical power - KWH design rate.

NOT APPLICABLE

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device:

2. Efficiency:[1]

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:[2]

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

[1]Explain method of determining efficiency.
[2]Energy to be reported in units of electrical power - KWH design rate.

NOT APPLICABLE

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

b. (1) Company:

(2) Mailing Address:

(3) City: (4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

10. Reason for selection and description of systems:

[1]Applicant must provide this information when available. Should this information not b available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

NOT APPLICABLE

A. Company Monitored Data

1. _____no. sites _____. TSP _____( ) SO^2* _____ Wind spd/dir

Period of Monitoring ____/____/____ to ____/____/____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

*Specify bubbler (B) or continuous (C).

NOT APPLICABLE

2. Instrumentation, Field and Laboratory

a. Was instrumentation EPA referenced or its equivalent? [ ] Yes [ ] No

b. Was instrumentation calibrated in accordance with Department procedures?

[ ] Yes [ ] No [ ] Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from _____/_____/_____ to _____/_____/_____
month day year month day year

2. Surface data obtained from (location)_____

3. Upper air (mixing height) data obtained from (location)_____

4. Stability wind rose (STAR) data obtained from (location)_____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate	
TSP	_____	grams/sec
SO^2	_____	grams/sec

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description of point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

SECTION VII

AIR QUALITY IMPACTS ANALYSIS (SO2)

A. Introduction

A refined air dispersion modeling analysis was performed by Sirrine Environmental Consultants, Inc. (SEC) for the Buckeye Cellulose Corporation Foley Plant located at Perry, Florida. SEC studied the potential SO2 air quality impacts resulting from the incineration of noncondensible/TRS gases in the No. 1 Bark Boiler by performing an air dispersion modeling analysis. No other criteria or non-criteria pollutant impacts were addressed in this study.

The following modeling analysis was performed for predicting compliance with the various air quality standards and PSD increment. The study approach involving air quality modeling, and the analysis of ambient background, has been discussed with Florida DER personnel.

B. Summary

As shown in Tables VII-2 and VII-3, refined modeling analysis indicated that the SO2 emissions from the Buckeye Cellulose Foley Plant will be in compliance with both the SO2 PSD increment, and the Florida SO2 Ambient Air Quality Standards. This is the case for annual, 24-hour, and 3-hour averaging periods. Plume downwash impacts, as a result of building wake effects, were also included where appropriate. Even under worst-case operating conditions, the resulting potential SO2 air quality impacts will be within the ambient air standards for PSD and FAAQS. The applicable incremental additional SO2 emission PSD Class I increases at the Buckeye Cellulose Foley Plant will have an insignificant impact; i.e., will be less than the 2 ug/m3 (annual), 5 ug/m3 (24-hour), and 25 ug/m3 (3-hour) PSD Class I increments.

C. Existing Air Quality

The area near and around Perry, Florida is attainment for SO2. A conservative estimate of the long-term and short-term SO2 ambient background value was assumed to be 6 micrograms per cubic meter (ug/m3), per the Florida DER recommendations. Six ug/m3 is the average SO2 monitor reading from January 1, 1982 thru June 30, 1982 for SO2 Monitor Station No. 1 located in Taylor County. This value of 6 ug/m3 was used for the annual, 24-hour, and 3-hour SO2 ambient background value.

D. PSD Class I Areas

The PSD Class I area within 100 kilometers of the Buckeye Cellulose Foley Plant at Perry, Florida is located 44 kilometers due west at the Saint Marks National Wildlife Refuge, near Apalachee Bay off the Florida big bend (see Figure VII-1). The applicability of dispersion modeling is generally limited 100 kilometers. Therefore, the air quality dispersion modeling analysis addressed only the SO2 impact on the Saint Marks National Wildlife Refuge PSD Class I Area.

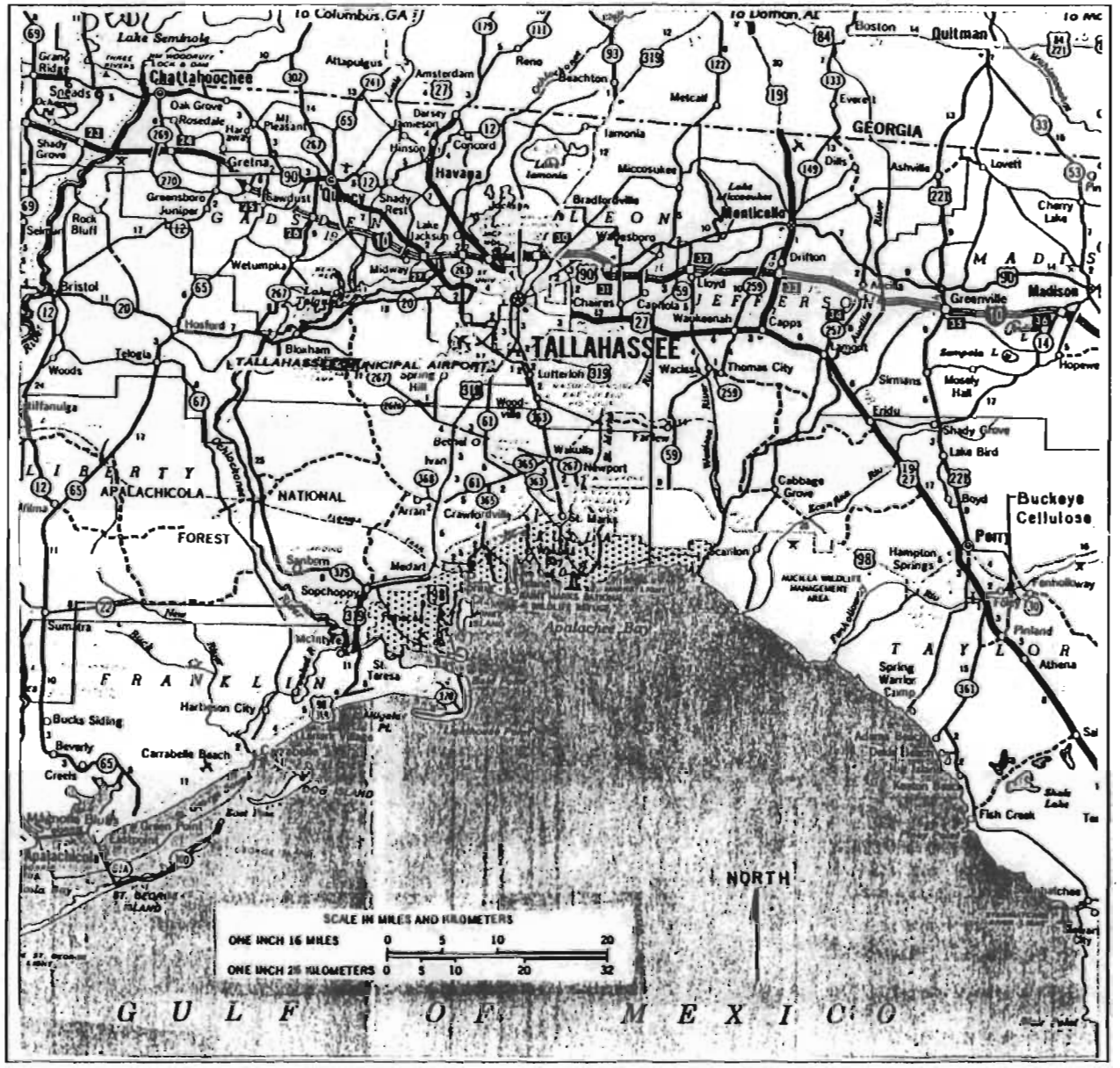
E. Emissions Inventory and Stack Parameters

1. Buckeye Cellulose Foley Plant Sources

Table VII-1 shows the SO2 emissions inventory (Part A) and stack parameters (Part B) for the existing and proposed SO2 at the Buckeye Cellulose plant. 1977 was used as the baseline, since Buckeye Cellulose has not performed a previous PSD SO2 increment analysis. The SO2 emission rate calculations are summarized in Appendix B. See Figure VII-2 for the location of all Buckeye Cellulose SO2 sources.

Figure VII-1

Location of St Marks Class I Area



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SEC JOB NO. F-1612

TABLE VII-1

ISCST MODEL INPUT DATA - BUCKEYE CELLULOSE SO2 SOURCES

A). EMISSIONS INVENTORY

POLLUTANT: SO2

INDIVIDUAL SOURCE NAME	STATUS OF SOURCE	MODEL SOURCE NUMBER	ANNUAL OPERATING HOURS	TOTAL EMISSION RATE lb/hr	ANNUAL EMISSION RATE ton/yr	ISCST EMISSION RATE gm/sec
No. 1 LIME KILN	PSD (-)	1001	8,760	(3.000)	(13.14)	(0.3780)
No. 2 LIME KILN	PSD (-)	1002	8,760	(4.100)	(17.96)	(0.5166)
No. 3 LIME KILN	PSD (-)	1003	8,760	(4.100)	(17.96)	(0.5166)
No. 4 LIME KILN	PSD (NEW)	2001	8,760	20.100	88.04	2.5326
No. 4 SMELT TANK	PSD (+)	2002	8,760	0.273	1.20	0.0344
No. 2 BARK BLR	PSD (+)	2003	8,760	0.800	3.50	0.1008
No. 1 BARK BLR	PSD (FUT)	2004	8,760	1,008.000	4,415.04	127.0080
No. 2 RECOVERY BLR	EXISTING	3001	8,760	439.344	1,924.33	55.3574
No. 3 RECOVERY BLR	EXISTING	3002	8,760	413.069	1,809.24	52.0467
No. 4 RECOVERY BLR	EXISTING	3003	8,760	1,413.169	6,189.68	178.0593
No. 2 SMELT TANK	EXISTING	3004	8,760	3.378	14.80	0.4256
No. 3 SMELT TANK	EXISTING	3005	8,760	2.850	12.48	0.3591
No. 4 SMELT TANK	PRE-PSD	3006	8,760	4.328	18.96	0.5453
COMMON STACK (a)	EXISTING/ PRE-PSD	3007	8,760	2,085.220	9,133.26	262.7377

(a) Includes SO2 emissions from Nos. 1 & 2 Power Boilers + Nos. 1 & 2 Bark Boilers + Turpentine Condenser NCG/TRS incineration in No. 1 Bark Boiler.

B). EMISSION PARAMETERS

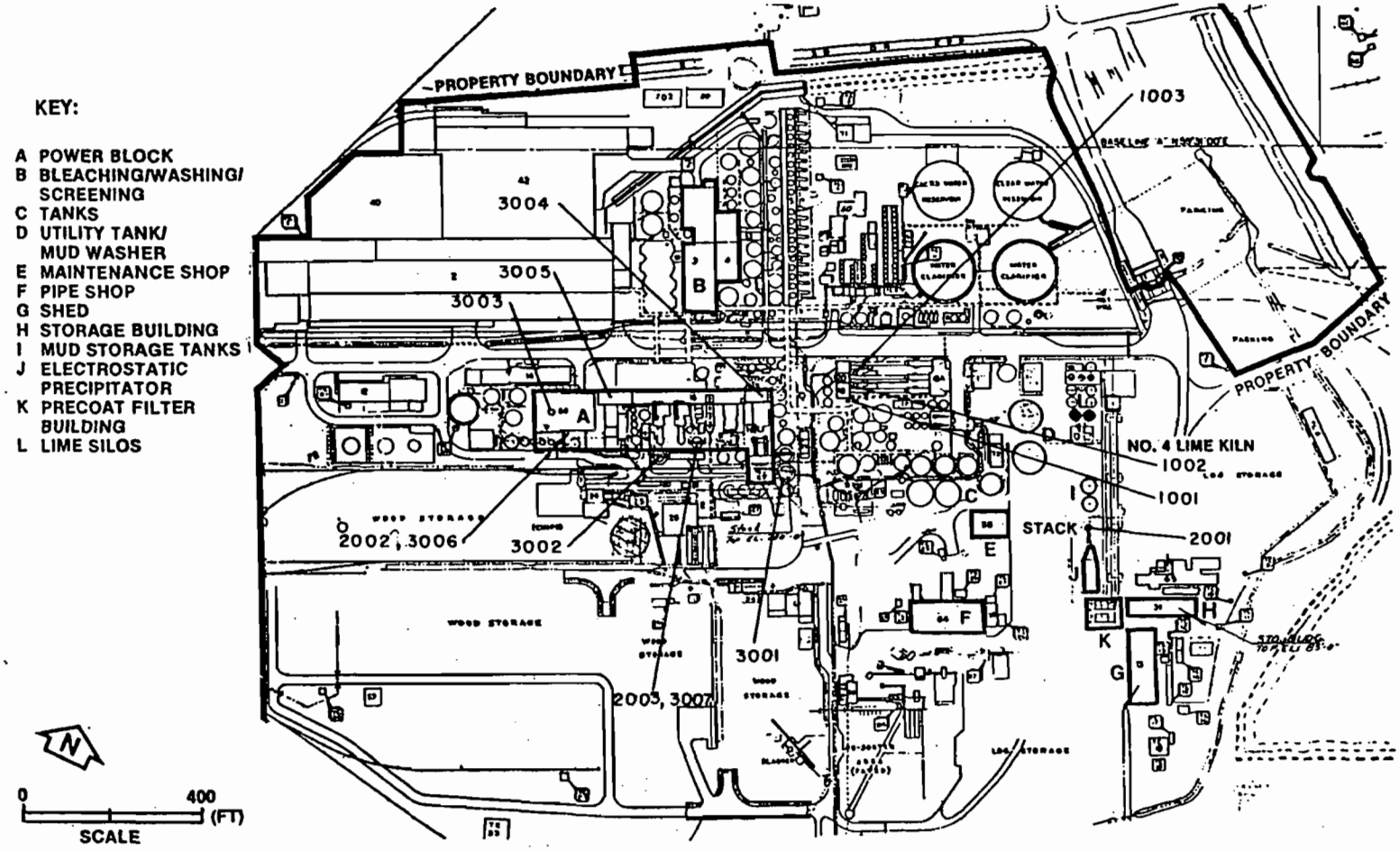
POINT SOURCES:

INDIVIDUAL SOURCE NAME	STATUS OF SOURCE	MODEL SOURCE NUMBER	STACK HEIGHT feet	STACK HEIGHT meters	STACK DIAM feet	STACK DIAM meters	EXHAUST TEMP F	EXHAUST TEMP C	EXHAUST TEMP K	FLOW RATE ACFM	FLOW VELOC ft/min	FLOW VELOC ft/sec	FLOW VELOC m/sec	COORD EAST meters	COORD NORTH meters	BUILDING HEIGHT feet	BUILDING WIDTH feet	ISCST HEIGHT meters	ISCST WIDTH meters
No. 1 LIME KILN	PSD (-)	1001	96.00	29.26	4.00	1.22	150	66	339	18,500	1472.18	24.54	7.48	84	80	150.5	125.4	45.87	33.88
No. 2 LIME KILN	PSD (-)	1002	96.00	29.26	4.00	1.22	164	73	346	27,500	2188.38	36.47	11.12	75	89	150.5	125.4	45.87	33.88
No. 3 LIME KILN	PSD (-)	1003	96.00	29.26	4.00	1.22	165	74	347	24,000	1909.86	31.83	9.70	70	98	150.5	125.4	45.87	33.88
No. 4 LIME KILN	PSD (NEW)	2001	125.00	38.10	7.25	2.21	400	204	477	66,500	1610.85	26.85	8.18	258	84	75.0	103.1	22.86	27.84
No. 4 SMELT TANK	PSD (+)	2002	162.00	49.38	4.00	1.22	161	72	345	24,250	1929.76	32.16	9.80	-75	-38	150.5	125.4	45.87	33.88
No. 2 BARK BLR	PSD (+)	2003	225.00	68.58	13.00	3.96	194	90	363	482,200	3632.88	60.55	18.46	0	0	150.5	125.4	45.87	33.88
No. 1 BARK BLR	PSD (FUT)	2004	225.00	68.58	13.00	3.96	194	90	363	482,200	3632.88	60.55	18.46	0	0	150.5	125.4	45.87	33.88
No. 2 RECOVERY BLR	EXISTING	3001	225.00	68.58	11.00	3.35	340	171	444	202,500	2130.84	35.51	10.82	61	14	150.5	125.4	45.87	33.88
No. 3 RECOVERY BLR	EXISTING	3002	225.00	68.58	9.00	2.74	280	138	411	161,000	2530.76	42.18	12.86	-14	-19	150.5	125.4	45.87	33.88
No. 4 RECOVERY BLR	EXISTING	3003	225.00	68.58	9.50	2.90	380	193	466	242,800	3425.41	57.09	17.40	-94	-28	150.5	125.4	45.87	33.88
No. 2 SMELT TANK	EXISTING	3004	142.00	43.28	3.00	0.91	171	77	350	16,500	2334.27	38.90	11.86	23	52	150.5	125.4	45.87	33.88
No. 3 SMELT TANK	EXISTING	3005	140.00	42.67	4.00	1.22	163	73	346	22,200	1766.62	29.44	8.97	-66	0	150.5	125.4	45.87	33.88
No. 4 SMELT TANK	PRE-PSD	3006	162.00	49.38	4.00	1.22	161	72	345	24,250	1929.76	32.16	9.80	-75	-38	150.5	125.4	45.87	33.88
COMMON STACK (a)	EXISTING/ PRE-PSD	3007	225.00	68.58	13.00	3.96	194	90	363	482,200	3632.88	60.55	18.46	0	0	150.5	125.4	45.87	33.88

(a) Includes flue gases from Nos. 1 & 2 Power Boilers + Nos. 1 & 2 Bark Boilers.
(FILENAME: FOLTAB1)

Figure VII-2

Site Plan



INDIVIDUAL SOURCE NAME	STATUS OF SOURCE	MODEL SOURCE NUMBER
No. 1 LIME KILN	PSD (-)	1001
No. 2 LIME KILN	PSD (-)	1002
No. 3 LIME KILN	PSD (-)	1003
No. 4 LIME KILN	PSD (NEW)	2001
No. 4 SMELT TANK	PSD (+)	2002
No. 2 BARK BLR	PSD (+)	2003
No. 1 BARK BLR	PSD (FUT)	2004
No. 2 RECOVERY BLR	EXISTING	3001
No. 3 RECOVERY BLR	EXISTING	3002
No. 4 RECOVERY BLR	EXISTING	3003
No. 2 SMELT TANK	EXISTING	3004
No. 3 SMELT TANK	EXISTING	3005
No. 4 SMELT TANK	PRE-PSD	3006
COMMON STACK (a)	EXISTING/ PRE-PSD	3007

(a) Includes SO2 emissions from Nos. 1 & 2 Power Boilers + Nos. 1 & 2 Bark Boilers + Turpentine Condenser

2. Building Wake Downwash Effects

(a) General

The presence of buildings and structures on the plant site, and in the area of emission sources, can affect the dispersion characteristics of the plumes emitted from each of the stacks. The ISCST model accounts for building wake downwash effects by using the dimensions of an adjacent or nearby building in dispersion computations. Additionally, building or structure dimensions usually define the good engineering practice (GEP) stack height, which is the maximum stack height allowed in dispersion modeling, regardless of a stack's actual height.

The building dimensions used in the model are those for the building with the greatest potential to affect a given plume. The GEP stack height analysis and building dimension determination described below follow the procedures outlined by EPA Region I and are used by SEC for all air dispersion modeling projects.

(b) GEP Stack Height Analysis

The proximity of an emission source to a structure determines whether the structure can affect the dispersion characteristics of the plume. Generally, if an emission is within an area defined as five times the height of a structure (or its projected width, whichever is smaller), the source is considered to be lying within that structure's area of influence. If this is the case, and the emission is discharged from a stack that may potentially be influenced by a structure's wake effect, then downwash of the plume needs to be considered in the modeling. The stack height needed to avoid plume downwash as a result of a structure's wake effect is called the GEP stack height. If a source emits a plume from a stack that is within a building's area of influence, and if its stack height

is less than GEP height, then plume downwash may occur (in some instances, however, the stack exit velocity is enough to "push" the plume above the GEP level). Below is a summary of the GEP stack height analysis of the Buckeye Cellulose Foley Plant structures's effect on the stacks modeled in this analysis.

Name of Structure	Bldg. Height (ft)	(m)	Bldg. Width (ft)	(m)	GEP Height (ft)	(m)
No. 4 Recovery Boiler Building	150.50	45.87	125.40	38.22	338.60	103.21
No. 4 Lime Kiln Building	75.00	22.86	103.10	31.42	187.50	57.15

The No. 4 Recovery Boiler is a "tall" structure. The GEP stack height equals the height plus 1.5 times the building height. This building exerts an influence of five times the building height downwind (627 feet or 191 meters). The actual stack heights of all SO2 sources are below this GEP level; therefore, these stacks, except for the No. 4 Lime Kiln, were modeled with potential plume downwash effects from the No. 4 Recovery Boiler. The No. 4 Lime Kiln is outside the area of influence of the No. 4 Recovery Boiler.

The No. 4 Lime Kiln building is a "squat" structure. The GEP stack height equals 2.5 times the building height. This building exerts an influence of five times the building height downwind (375 feet or 114 meters). The actual stack height of the No. 4 Lime Kiln is below this GEP level; therefore, this stack was modeled with potential plume downwash effects from the No. 4 Lime Kiln Precoat Filter Building.

The building dimensions input to the model are the width, length, and height. The model treats any building as a cylinder with a diameter calculated to make the circular cross-sectional area of the cylinder equal to that of the

input width and length. To get the model to use a specific width as the diameter of the cylinder, the width is converted to an equivalent square building whose equal length and width will result in the calculation of a diameter equal to the specific width. This length and width (called ISCST length and width) are input into the model. The EPA procedure provides that over-predicted impacts can be recalculated using corrected building dimensions when the model predicts a violation.

To model for worst-case, the maximum width is used for sigma y variations for the tall structure; and the minimum width is used for sigma y variations for the squat structure. To model for worst-case, the projected width must be set as follows in the ISCST model:

No. 4 Recovery Boiler Building:

W = L = 0.886*125.4 feet
= 111.10 feet (33.88 meters)

No. 4 Lime Kiln Building:

W = L = 0.886*103.1 feet
= 91.35 feet (27.84 meters)

where 0.886 = SQRT(Pi/4)

This is a conservative selection to assure that the greatest downwash potential is included in modeling regardless of stack location or wind direction.

3. Off-site Sources

Consultations with the Florida DER confirmed that modeling of SO2 emissions from off-site sources would not need to be considered in this air quality analysis.

F. Modeling Procedures and Assumptions

1. General

The ISCST model was used to simulate the annual, 24-hour, and 3-hour SO2 impacts from the existing and proposed Buckeye Cellulose SO2 sources. An air quality dispersion modeling analysis using five years of sequential meteorological data was used. The highest annual and the highest second-high 24-hour and 3-hour impacts were used to demonstrate attainment of the SO2 PSD increments and FAAQS. The ISCST model computer printouts are shown in Appendix C.

The following ISCST model options were used for all model executions:

- Concentrations calculated in micrograms/cubic meter (ug/m3)
- Emission rates are negative for sources no longer operating
- Emission rates are positive for existing and additional sources
- Discrete receptor system
- Flat terrain
- Input data listed
- Rural option
- Default wind profile
- Default vertical potential temperature rate
- Final plume rise
- Building wake downwash effects
- Stack tip downwash
- Regulatory mode
- SO2 as pollutant modeled

2. Long-term SO2 Impacts

The "N-day" average produced by the ISCST model was used as a conservative estimate of the annual SO2 impacts. The annual impacts were adjusted for calms per the current EPA UNAMAP 6 version of the ISCST model.

3. Meteorological Data

The Tallahassee, Florida weather station (Surface Station Number 93805) has an anemometer height of 25 feet (7.6 m). Information on sensor height and history is contained in the NOAA National Wind Data Index for 1978. A 7.6-meter wind-sensor height was used in the ISCST modeling. Upper air data at Waycross, Georgia (Upper Air Station Number 13861) were utilized for this analysis. Meteorological data from 1977 thru 1981 were used in the sequential modeling as obtained on 9-track magnetic tape from the Florida DER.

4. Dispersion Coefficients

The Foley Plant is in a predominatly rural setting. Therefore, rural dispersion coefficients were used for the dispersion modeling.

5. Terrain

USGS maps of the area were examined. The terrain near the Foley Plant and Perry, Florida is relatively flat. Therefore, rough terrain modeling was not appropriate.

G. Modeling Analysis Results

1. Foley Plant Impact Analysis

A uniform rectangular receptor grid of 1,800 x 1,800 meters

with a receptor spacing of 300 meters, and a receptor grid with a receptor spacing of 100 meters, were used with the ISCST model for all days in 1977 to show the variation of highest impacts just off the Foley Plant restricted access property line (see Figure VII-3). This is a conservate approach to the receptor system, consisting of 74 receptors, had the following features:

- Centered at No. 1 stack (Source 300 Common Stack)
- Receptors spaced at 300-meter intervals just beyond Buckeye Cellulose property in all directions
- Fence-line receptors spaced at 100-meter intervals around the western and northern property near the emission sources at Buckeye Cellulose

The highest annual and 24-hour impacts for 1977 at the 74 receptors were first established. The highest annual and 24-hour SO2 impact were found to lie at the north and west property line (see Figures VII-4 and VII-5). It can be seen that the impacts trail off quickly beyond the property line. Thus, additional receptors were not necessary for this modeling analysis near the Buckeye Cellulose Foley Plant.

Table VII-2 (parts 1 and 2) summarizes the worst-case SO2 impacts for the modeling with five years of meteorological data. The table shows the worst-case impact for the com-bination of all five years (Part 1) and for each individual year (Part 2).

The worst-case annual SO2 air quality impact is 32.49 ug/m3 at a location north of the Foley Plant. The highest second-high 24-hour SO2 impact plus ambient background is 258.9 ug/m3 at a location west of the Foley Plant. The high second-high 3-hour SO2 impact plus ambient background is 742.3 ug/m3 at a location west of Foley Plant. Therefore, the annual, 24-hour, and 3-hour allowable SO2 FAAQS increments are attained in the Perry, Florida area.

Figure VII-3

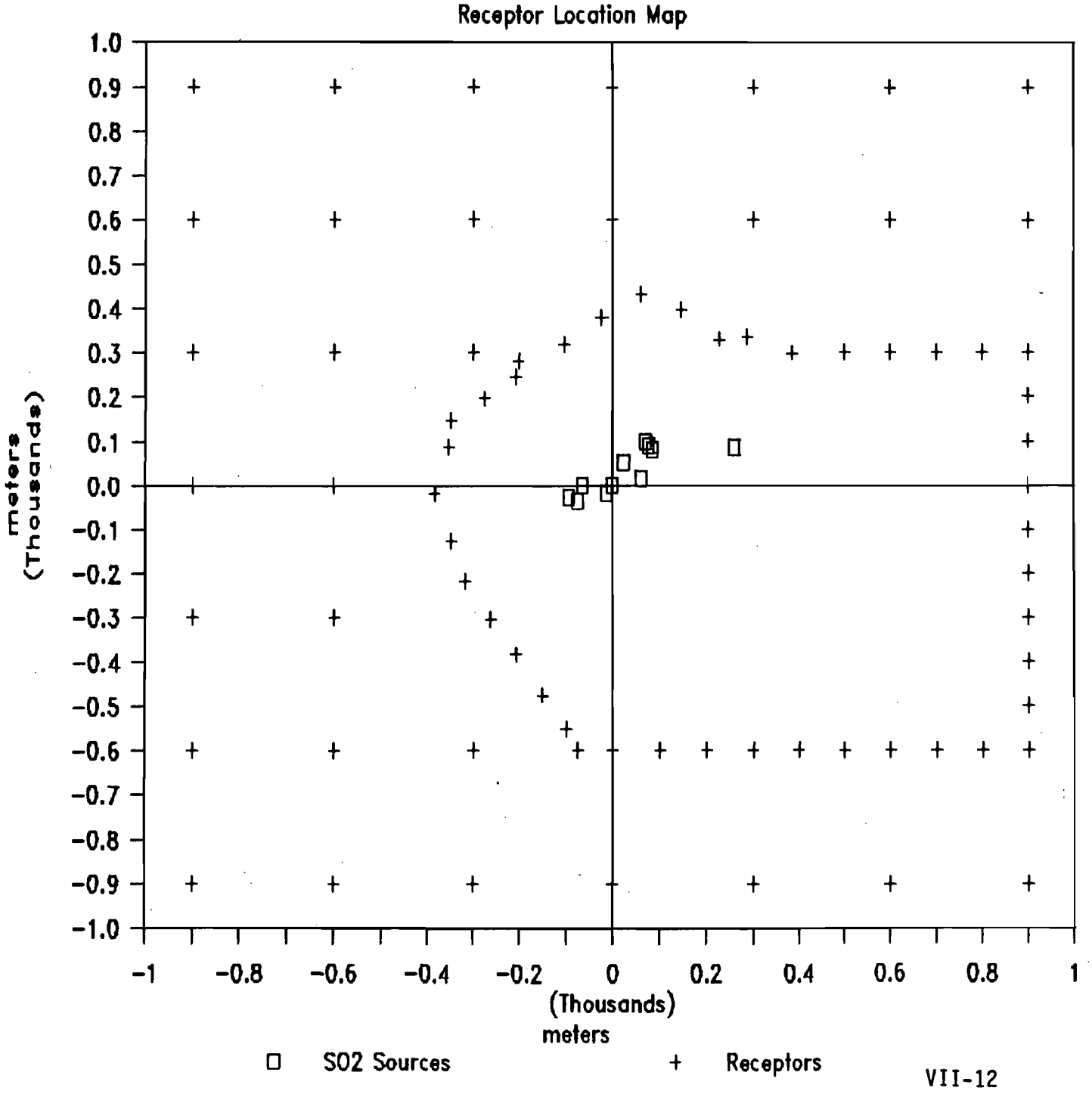

Receptor Location Map
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
-0.1
-0.2
-0.3
-0.4
-0.5
-0.6
-0.7
-0.8
-0.9
-1.0
meters
(Thousands)
-1
-0.8
-0.6
-0.4
-0.2
0
0.2
0.4
0.6
0.8
1
(Thousands)
meters
SO2 Sources
Receptors

Figure VII-4

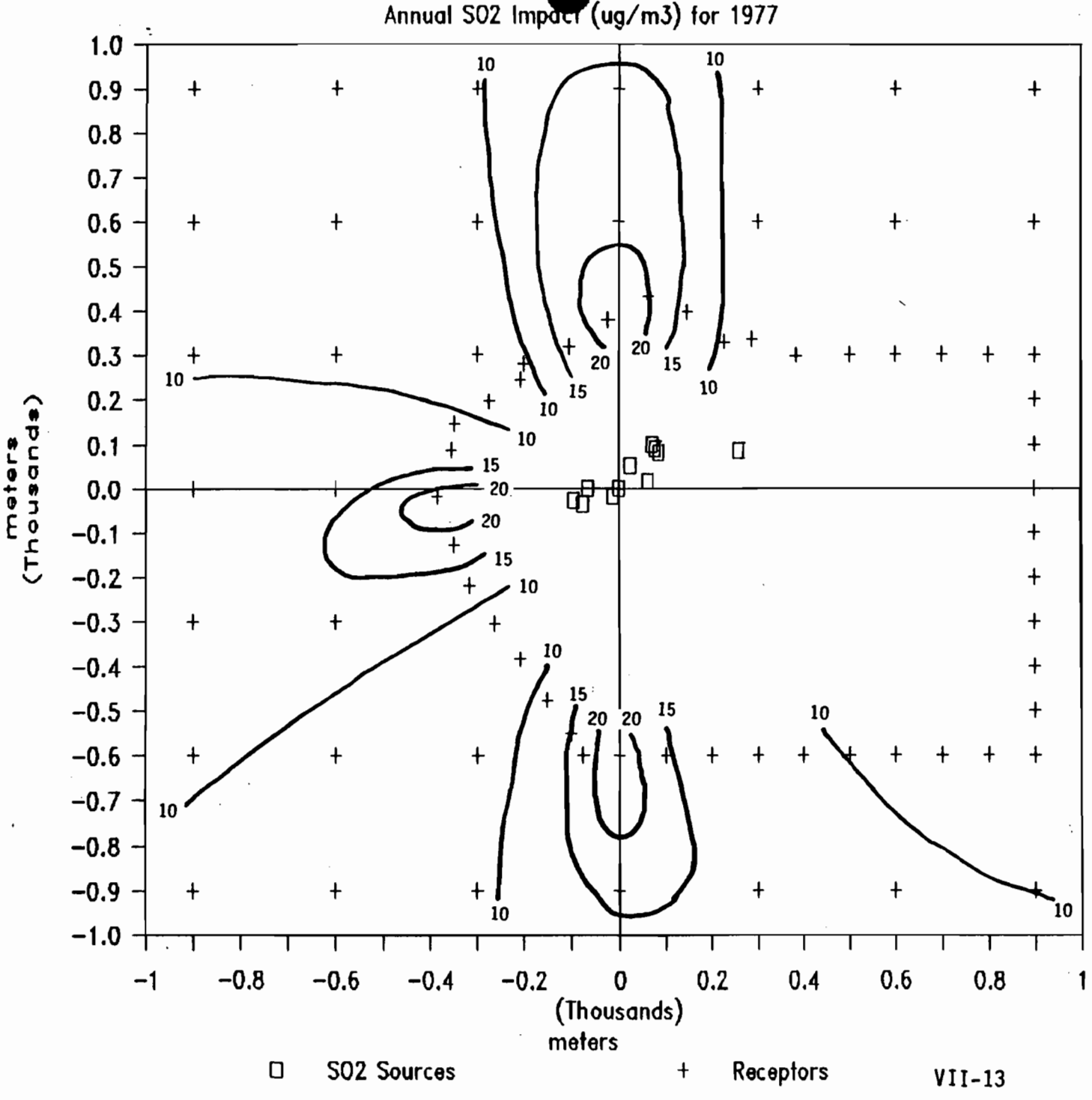
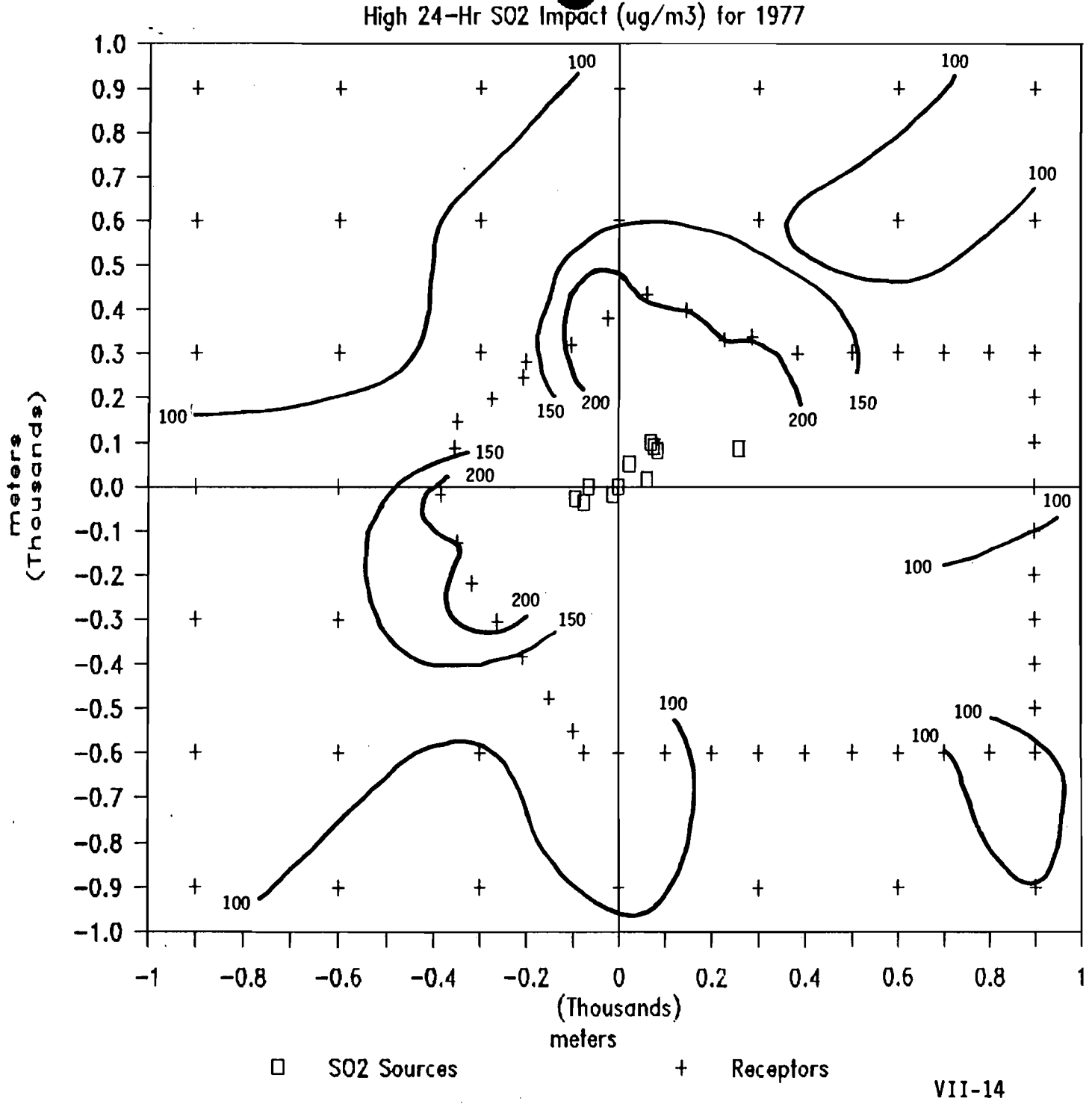

Annual SO2 Impact (ug/m3) for 1977
meters (Thousands)
(Thousands) meters
SO2 Sources
Receptors

Figure VII-5


High 24-Hr SO2 Impact (ug/m3) for 1977
meters (Thousands)
(Thousands) meters
100
150
200
SO2 Sources
Receptors

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SEC JOB NO. F-1612

TABLE VII-2 (PART 1)

SEC REFINED MODELING RESULTS SUMMARY SHEET - BUCKEYE CELLULOSE SOURC
PART 1 - MAXIMUM IMPACTS FOR ALL YEARS

SOURCE DESCRIPTION	TYPE OF IMPACT	(1) IMPACT (ug/m3)	JULIAN DAY		RECEPTOR LOCATION (m, m)	(2) BACKGROUND (ug/m3)	SUM OF (1)+(2) (ug/m3)	FDER AAQS (ug/m3)
A. AMBIENT AIR QUALITY STANDARDS ANALYSIS								
NAAQS SOURCES (2001-2010)	High Annual	26.49	-	-	(- 24, 378)	6	32.49	60
NAAQS SOURCES (2001-2010)	HSH 24-Hour	252.90	241	-	(-384,- 18)	6	258.9	260
NAAQS SOURCES (2001-2010)	HSH 3-Hour	736.30	317	4	(-384,-128)	6	742.3	1,300
B. PSD INCREMENT ANALYSIS								
PSD SOURCES (1001-2010)	High Annual	3.50	-	-	(- 24, 378)	-	3.50	20
PSD SOURCES (1001-2010)	HSH 24-Hour	46.50	241	-	(-384,- 18)	-	46.5	91
PSD SOURCES (1001-2010)	HSH 3-Hour	160.40	54	8	(- 24, 378)	-	160.4	512

**NOTE: Impacts are adjusted for calms.
HSH means High Second-High.

Years of modeling analysis : 1977 - 1981.

(FILENAME: FOLTAB2, parts 1)

BUCKEYE CELLULOSE CORP.
FOLEY, FLORIDA
TRS CONTROL PROJECT
SEC JOB NO. F-1612

TABLE VII-2 (PART 2)

SEC REFINED MODELING RESULTS SUMMARY SHEET - BUCKEYE CELLULOSE SOURC
PART 2 - SUMMARY OF IMPACTS FOR EACH INDIVIDUAL YEAR

SOURCE DESCRIPTION	YEAR	TYPE OF IMPACT	(1) IMPACT (ug/m3)	JULIAN DAY	PERIOD	RECEPTOR LOCATION (m, m)	(2) BACKGROUND (ug/m3)	SUM OF (1)+(2) (ug/m3)	FDER AAQS (ug/m3)
NAAQS SOURCES (2001-2010)	1977	High Annual	26.49	-	-	(- 24, 378)	6	32.49	60
NAAQS SOURCES (2001-2010)	1977	High 24-Hour	290.7	131	-	(-384,- 18)	6	296.7	
NAAQS SOURCES (2001-2010)	1977	HSH 24-Hour	252.9	241	-	(-384,- 18)	6	258.9	260
NAAQS SOURCES (2001-2010)	1977	High 3-Hour	734.7	241	4	(-384,- 18)	6	740.7	
NAAQS SOURCES (2001-2010)	1977	HSH 3-Hour	622.0	87	5	(- 24, 378)	6	628.0	1,300
PSD SOURCES (1001-2010)	1977	High Annual	3.50	-	-	(- 24, 378)	-	3.50	20
PSD SOURCES (1001-2010)	1977	High 24-Hour	58.3	131	-	(-384,- 18)	-	58.3	
PSD SOURCES (1001-2010)	1977	HSH 24-Hour	46.5	241	-	(-384,- 18)	-	46.5	91
PSD SOURCES (1001-2010)	1977	High 3-Hour	165.5	87	5	(- 24, 378)	-	165.5	
PSD SOURCES (1001-2010)	1977	HSH 3-Hour	160.4	54	8	(- 24, 378)	-	160.4	512
NAAQS SOURCES (2001-2010)	1978	High Annual	22.08	-	-	(- 24, 378)	6	28.08	60
NAAQS SOURCES (2001-2010)	1978	High 24-Hour	262.8	261	-	(-384,- 18)	6	268.8	
NAAQS SOURCES (2001-2010)	1978	HSH 24-Hour	203.5	303	-	(-317,-220)	6	209.5	260
NAAQS SOURCES (2001-2010)	1978	High 3-Hour	877.8	261	8	(-384,- 18)	6	883.8	
NAAQS SOURCES (2001-2010)	1978	HSH 3-Hour	643.5	269	1	(-384,- 18)	6	649.5	1,300
PSD SOURCES (1001-2010)	1978	High Annual	2.55	-	-	(- 24, 378)	-	2.55	20
PSD SOURCES (1001-2010)	1978	High 24-Hour	48.4	261	-	(-384,- 18)	-	48.4	
PSD SOURCES (1001-2010)	1978	HSH 24-Hour	41.6	342	-	(- 24, 378)	-	41.6	91
PSD SOURCES (1001-2010)	1978	High 3-Hour	194.3	261	8	(-384,- 18)	-	194.3	
PSD SOURCES (1001-2010)	1978	HSH 3-Hour	124.1	269	1	(-384,- 18)	-	124.1	512
NAAQS SOURCES (2001-2010)	1979	High Annual	22.21	-	-	(- 24, 378)	6	28.21	60
NAAQS SOURCES (2001-2010)	1979	High 24-Hour	254.0	253	-	(-317,-220)	6	260.0	
NAAQS SOURCES (2001-2010)	1979	HSH 24-Hour	242.0	254	-	(-317,-220)	6	248.0	260
NAAQS SOURCES (2001-2010)	1979	High 3-Hour	883.9	229	8	(-384,- 18)	6	889.9	
NAAQS SOURCES (2001-2010)	1979	HSH 3-Hour	732.1	329	1	(-384,- 18)	6	738.1	1,300
PSD SOURCES (1001-2010)	1979	High Annual	2.69	-	-	(- 24, 378)	-	2.69	20
PSD SOURCES (1001-2010)	1979	High 24-Hour	48.5	327	-	(-104, 317)	-	48.5	
PSD SOURCES (1001-2010)	1979	HSH 24-Hour	41.9	252	-	(-317,-220)	-	41.9	91
PSD SOURCES (1001-2010)	1979	High 3-Hour	177.4	229	8	(-384,- 18)	-	177.4	
PSD SOURCES (1001-2010)	1979	HSH 3-Hour	145.9	179	1	(-384,- 18)	-	145.9	512

**NOTE: Impacts are adjusted for calms.
HSH means High Second-High.

(FILENAME: FOLTAB2, part 2)

BUCKEYE CELLULOSE CORP.
FOLEY, FLORIDA
TRS CONTROL PROJECT
SEC JOB NO. F-1612

TABLE VII-2 (PART 2 CONTINUED)

SEC REFINED MODELING RESULTS SUMMARY SHEET - BUCKEYE CELLULOSE SOURC
PART 2 - SUMMARY OF IMPACTS FOR EACH INDIVIDUAL YEAR

SOURCE DESCRIPTION	YEAR	TYPE OF IMPACT	(1) IMPACT (ug/m3)	JULIAN DAY		RECEPTOR LOCATION (m, m)	(2) BACKGROUND (ug/m3)	SUM OF (1)+(2) (ug/m3)	FDER AAQS (ug/m3)
NAAQS SOURCES (2001-2010)	1980	High Annual	17.96	-	-	(0,-600)	6	23.96	60
NAAQS SOURCES (2001-2010)	1980	High 24-Hour	273.8	317	-	(-348,-128)	6	279.8	
NAAQS SOURCES (2001-2010)	1980	HSH 24-Hour	193.7	77	-	(- 24, 378)	6	199.7	260
NAAQS SOURCES (2001-2010)	1980	High 3-Hour	852.6	240	2	(-384,-128)	6	858.6	
NAAQS SOURCES (2001-2010)	1980	HSH 3-Hour	736.3	317	4	(-384,-128)	6	742.3	1,300
PSD SOURCES (1001-2010)	1980	High Annual	1.60	-	-	(- 24, 378)	-	1.60	20
PSD SOURCES (1001-2010)	1980	High 24-Hour	46.2	317	-	(-348,-128)	-	46.2	
PSD SOURCES (1001-2010)	1980	HSH 24-Hour	33.3	77	-	(- 24, 378)	-	33.3	91
PSD SOURCES (1001-2010)	1980	High 3-Hour	157.3	66	7	(61, 433)	-	157.3	
PSD SOURCES (1001-2010)	1980	HSH 3-Hour	133.4	317	4	(-384,-128)	-	133.4	512
NAAQS SOURCES (2001-2010)	1981	High Annual	21.60	-	-	(- 24, 378)	6	27.60	60
NAAQS SOURCES (2001-2010)	1981	High 24-Hour	247.6	89	-	(- 24, 378)	6	253.6	
NAAQS SOURCES (2001-2010)	1981	HSH 24-Hour	239.1	32	-	(- 24, 378)	6	245.1	260
NAAQS SOURCES (2001-2010)	1981	High 3-Hour	658.3	97	8	(-354, 85)	6	664.3	
NAAQS SOURCES (2001-2010)	1981	HSH 3-Hour	549.8	287	8	(-384,- 18)	6	555.8	1,300
PSD SOURCES (1001-2010)	1981	High Annual	1.67	-	-	(0,-600)	-	1.67	20
PSD SOURCES (1001-2010)	1981	High 24-Hour	52.1	32	-	(- 24, 378)	-	52.1	
PSD SOURCES (1001-2010)	1981	HSH 24-Hour	45.6	89	-	(- 24, 378)	-	45.6	91
PSD SOURCES (1001-2010)	1981	High 3-Hour	173.0	97	8	(-354, 85)	-	173.0	
PSD SOURCES (1001-2010)	1981	HSH 3-Hour	122.7	32	5	(- 24, 378)	-	122.7	512

**NOTE: Impacts are adjusted for calms.
HSH means High Second-High.

(FILENAME: FOLTAB2, part 2 contd)

The resultant worst-case annual SO2 PSD impact is 3.5 ug/m3 at a location north of the Foley Plant. The highest second-high 24-hour SO2 PSD impact is 46.5 ug/m3 at a location west of the Foley Plant. The high second-high 3-hour SO2 PSD impact is 160.4 ug/m3 at a location north of the Foley Plant. Therefore, the annual, 24-hour, and 3-hour allowable SO2 PSD increments are maintained in the Perry, Florida area.

2. PSD Class I Impact Analysis

A uniform rectangular receptor grid of 2,000 x 6,000 meters with a receptor spacing of 2,000 meters was used with the ISCST model for all days in 1977 thru 1981 to show the potential PSD Class I impacts of the Foley Plant on the Saint Marks National Wildlife Refuge PSD Class I Area (see Figure VII-6). The receptor grid, consisting of 8 receptors, had the following features:

. Receptors spaced at 2,000-meter intervals at eastern edge (and extending 2,000 meters inside) of the Saint Marks National Wildlife Refuge near Apalachee Bay off the Florida panhandle. This PSD Class I Area is located 44 kilometers due west of the Buckeye Cellulose plant.

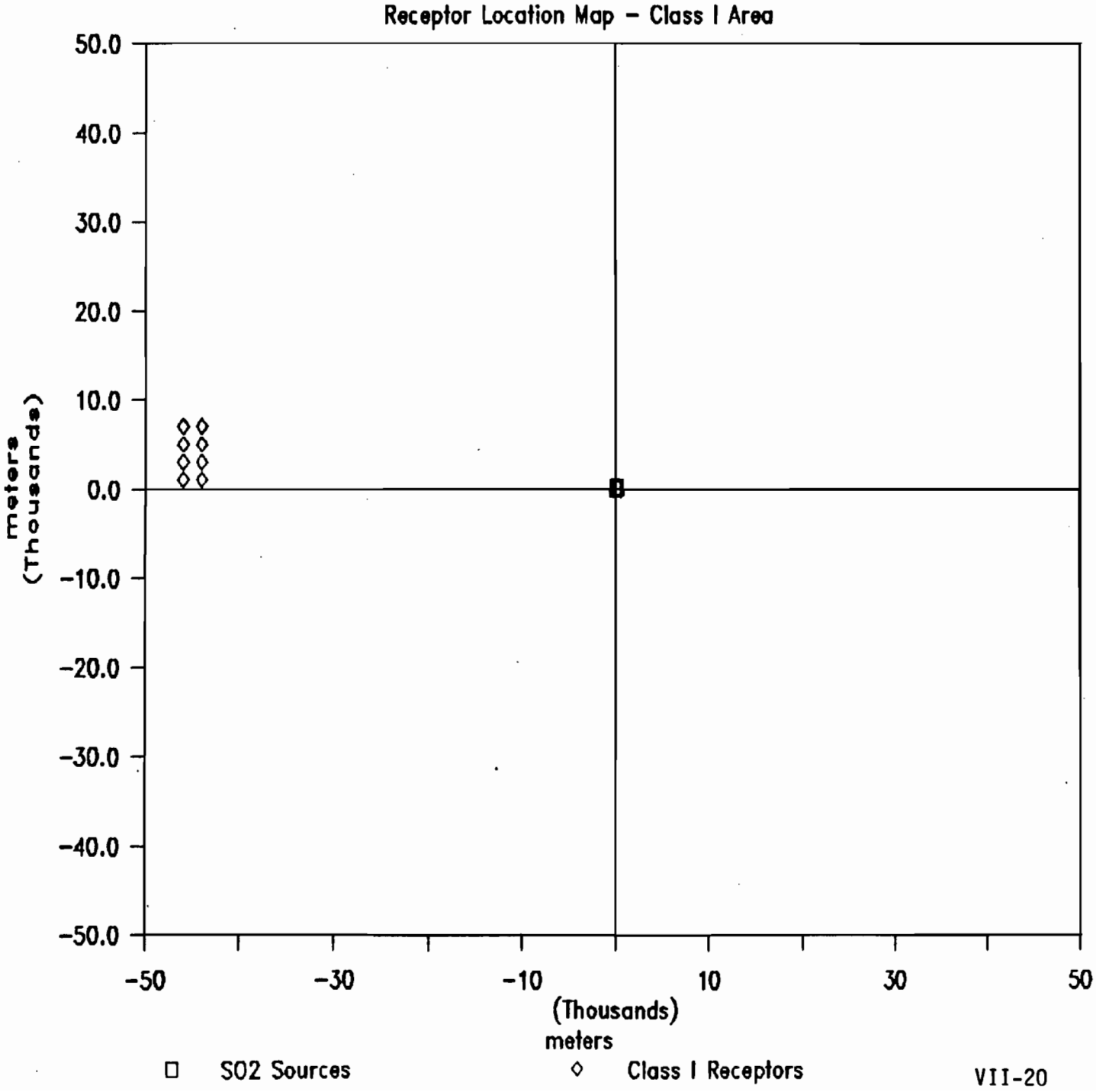
Results from the ISCST air quality model show that the potential SO2 PSD Class I impacts from the Foley Plant at the Saint Marks Wildlife Refuge will result in attainment of the SO2 PSD Class I increments.

Table VII-3 summarizes the worst-case SO2 impacts for the modeling with five years of meteorological data. The table shows the worst-case impacts for the combination of all five years (Part I) and for each individual year (Part 2).

The SO2 PSD sources have an annual SO2 PSD impact of 0.25 ug/m3. The SO2 PSD sources have a highest second-high 24-hour

SO2 PSD impact of 30 ug/m3, and a highest second-high 3-hour SO2 PSD impact of 11.6 ug/m3. Therefore, the annual, 24-hour, and 3-hour SO2 PSD impacts from the Foley Plant SO2 PSD sources do not exceed the SO2 PSD Class I increments values in the Saint Marks Wildlife Refuge PSD Class I Area.

Figure VII-6


Receptor Location Map - Class I Area
50.0
40.0
30.0
20.0
10.0
0.0
-10.0
-20.0
-30.0
-40.0
-50.0
meters
(Thousands)
-50
-30
-10
10
30
50
(Thousands)
meters
SO2 Sources
Class I Receptors

BUCKEYE CELLULOSE CORP.
FOLEY, FLORIDA
TRS CONTROL PROJECT
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TABLE VII-3 (PART 1)

SEC REFINED MODELING RESULTS SUMMARY SHEET AT PSD CLASS I AREA - BUCKEYE CELL
PART 1 - MAXIMUM IMPACTS FOR ALL YEARS

SOURCE DESCRIPTION	YEARS	TYPE OF IMPACT	(1) IMPACT (ug/m3)	JULIAN DAY		RECEPTOR LOCATION (m, m)	(2) BACKGROUND (ug/m3)	SUM OF (1)+(2) (ug/m3)	FDER AAQS (ug/m3)
PSD SOURCES (1001-2010)	77-81	High Annual	0.25	-	-	(-44000, 3000)	-	0.25	2
PSD SOURCES (1001-2010)	77-81	HSH 24-Hour	3.00	236	-	(-44000, 5000)	-	3.0	5
PSD SOURCES (1001-2010)	77-81	HSH 3-Hour	11.60	235	2	(-44000, 7000)	-	11.6	25

**NOTE: Impacts are adjusted for calms.
HSH means High Second-High.

Years of modeling analysis: 1977 - 1981.

(FILENAME: FOLTAB3, part 1)

BUCKEYE CELLULOSE CORP.
FOLEY, FLORIDA
TRS CONTROL PROJECT
SEC JOB NO. F-1612

TABLE VII-3 (PART 2)

SEC REFINED MODELING RESULTS SUMMARY SHEET AT PSD CLASS I AREA - BUCKEYE CELL
PART 2 - SUMMARY OF IMPACTS FOR EACH INDIVIDUAL YEAR

SOURCE DESCRIPTION	YEAR	TYPE OF IMPACT	(1) IMPACT (ug/m3)	JULIAN DAY	PERIOD	RECEPTOR LOCATION (m, m)	(2) BACKGROUND (ug/m3)	SUM OF (1)+(2) (ug/m3)	FDER AAQS (ug/m3)
PSD SOURCES (1001-2010)	1977	High Annual	0.24	-	-	(-44000, 1000)	-	0.24	2
PSD SOURCES (1001-2010)	1977	High 24-Hour	2.9	198	-	(-44000, 1000)	-	2.9	
PSD SOURCES (1001-2010)	1977	HSH 24-Hour	2.5	267	-	(-44000, 1000)	-	2.5	5
PSD SOURCES (1001-2010)	1977	High 3-Hour	10.7	267	1	(-44000, 1000)	-	10.7	
PSD SOURCES (1001-2010)	1977	HSH 3-Hour	10.6	198	7	(-44000, 1000)	-	10.6	25
PSD SOURCES (1001-2010)	1978	High Annual	0.20	-	-	(-44000, 1000)	-	0.20	2
PSD SOURCES (1001-2010)	1978	High 24-Hour	2.9	201	-	(-44000, 5000)	-	2.9	
PSD SOURCES (1001-2010)	1978	HSH 24-Hour	2.7	170	-	(-44000, 5000)	-	2.7	5
PSD SOURCES (1001-2010)	1978	High 3-Hour	12.3	171	1	(-44000, 1000)	-	12.3	
PSD SOURCES (1001-2010)	1978	HSH 3-Hour	10.2	201	7	(-44000, 3000)	-	10.2	25
PSD SOURCES (1001-2010)	1979	High Annual	0.19	-	-	(-44000, 1000)	-	0.19	2
PSD SOURCES (1001-2010)	1979	High 24-Hour	3.5	111	-	(-44000, 5000)	-	3.5	
PSD SOURCES (1001-2010)	1979	HSH 24-Hour	3.0	236	-	(-44000, 5000)	-	3.0	5
PSD SOURCES (1001-2010)	1979	High 3-Hour	13.0	220	3	(-44000, 7000)	-	13.0	
PSD SOURCES (1001-2010)	1979	HSH 3-Hour	11.6	235	2	(-44000, 7000)	-	11.6	25
PSD SOURCES (1001-2010)	1980	High Annual	0.25	-	-	(-44000, 3000)	-	0.25	2
PSD SOURCES (1001-2010)	1980	High 24-Hour	3.1	289	-	(-46000, 3000)	-	3.1	
PSD SOURCES (1001-2010)	1980	HSH 24-Hour	2.5	265	-	(-44000, 1000)	-	2.5	5
PSD SOURCES (1001-2010)	1980	High 3-Hour	11.2	248	1	(-44000, 3000)	-	11.2	
PSD SOURCES (1001-2010)	1980	HSH 3-Hour	9.5	172	2	(-44000, 3000)	-	9.5	25
PSD SOURCES (1001-2010)	1981	High Annual	0.20	-	-	(-44000, 1000)	-	0.20	2
PSD SOURCES (1001-2010)	1981	High 24-Hour	2.9	98	-	(-46000, 7000)	-	2.9	
PSD SOURCES (1001-2010)	1981	HSH 24-Hour	2.4	232	-	(-44000, 7000)	-	2.4	5
PSD SOURCES (1001-2010)	1981	High 3-Hour	17.0	98	1	(-46000, 7000)	-	17.0	
PSD SOURCES (1001-2010)	1981	HSH 3-Hour	9.5	232	7	(-44000, 7000)	-	9.5	25

**NOTE: Impacts are adjusted for calms.
HSH means High Second-High.

(FILENAME: FOLTAB3, part 2)

Buckeye Cellulose Corporation
Foley Plant

VENTING CONTINGENCY PLAN

I. INTRODUCTION

This plan has been developed in accordance with Section 17-2.600(4)(c)1.c., Florida Administrative Code (FAC), which requires each facility that will incinerate the TRS emissions from digesting and multiple effect evaporator systems to develop contingency plans that will evaluate means to control or mitigate the emissions from these systems during venting incidents.

In addition to the evaluation of possible contingency measures that is included in Section IV of this plan, it is important to consider, in the determination of appropriate TRS contingency requirements, the established record of excellent performance and long-standing leadership of The Buckeye Cellulose Foley Plant in control of TRS emissions.

First, our TRS control program began in 1975 with the installation of a black liquor oxidation system, which served the #2 and #3 recovery boilers, and the construction and start-up of a new modern, reduced odor design recovery boiler (#4 recovery boiler). Unlike the rest of the industry, however, our program went well beyond the regulatory requirements of the time and included:

-- The installation of TRS continuous emission monitors on all three recovery boiler units. As a result, Foley was the first pulp mill in Florida to utilize continuous emission monitors as an on-going TRS emission control mechanism.

-- The collection and scrubbing of TRS emissions from all multiple effect black liquor evaporators, smelt dissolving tanks, and the Tall Oil Plant.

-- The collection and incineration of noncondensible gases from the turpentine recovery system (digester relief condensing).

The excellent TRS emission performance of our recovery boiler system, combined with the voluntary measures which were undertaken 10 to 15 years ahead of current requirements, have contributed to the fact that we do not experience community odor complaints. We further believe that the additional basic control measures that are now required by the TRS rule will enhance our long-standing freedom from odor complaints, regardless of contingency measures that are proposed in this plan.

Our recovery boiler systems were modified and expanded with good odor control practices in mind before such practices were required by law. In fact, our three recovery boilers average about 5 ppm TRS, which is the New Source Performance Standard emission limit for a new mill. Our #4 boiler operates at around 2-3 ppm TRS emissions against 5 ppm required for new boilers. Our #2 and #3 recovery boilers average about 8-9 ppm versus the 17.5 ppm required by the Florida DER regulations.

Our new lime kiln, the largest and most modern in the Pulp & Paper Industry, has consistently achieved since the Spring of 1987 less than the New Source Performance Standards of 8 ppm TRS. This kiln replaced three old kilns which would have been required to meet 20 ppm in 1989.

In summary, when we complete our TRS retrofit project, our 30-year-old mill will compare favorably to a new mill meeting NSPS limits.

Secondly, it should be noted that our basic TRS rule compliance cost is already estimated to be over three times the cost that was expected when the rule was adopted. Any unrealistic contingency expectations will only worsen this factor.

Finally, our dissolving kraft process represents the most complex process in Florida's Pulp and Paper Industry. As a result, our digesting operation offers difficult TRS emissions collection and incineration challenges that deserve additional consideration.

Our experiences with additional TRS control measures at Foley and other locations have provided us with an extensive data base, which we have utilized to develop a sound and realistic contingency plan.

II. DEFINITIONS

Essential Maintenance:

Essential maintenance is defined as routine planned maintenance which is scheduled on a regular basis on the No. 1 bark boiler and its ancillary equipment while the TRS sources (digesting blow and relief [turpentine] gases and the multiple effect evaporator gases) are still operating. This planned maintenance is necessary to prevent the deterioration of the bark boiler and ancillary equipment and maintain equipment safety. Some examples of foreseen essential maintenance activities include:

-- Boiler pressure part inspection outages
-- Bark bin screw maintenance
-- ID fan maintenance
-- Flyash system maintenance
-- Scrubber tank clean-outs
-- Safeguard checks

Reportable Venting Incident:

Any incident of unmitigated TRS emissions which exceeds a two-hour continuous period will be verbally reported. During those instances when the No. 1 bark boiler is unable to incinerate the noncondensible/ TRS gases and the backup scrubber (as proposed) is being used to mitigate TRS emissions from the digester blow gases (does not include digesting relief [turpentine] gases) and multiple effect evaporator gases, the Department will not be notified.

III. STRATEGY FOR EMISSION MITIGATION

A thorough evaluation of feasible means of controlling or mitigating the impact of TRS emissions when a control device or piece of process equipment that is used to control TRS emissions is inoperative has been conducted and is summarized in Section IV. Although it is not mandated by the Rule, we plan to provide backup mitigation for the primary incineration unit at significant additional cost. The following are the detailed plans that we have established to mitigate the release of uncontrolled TRS emissions from the noncondensible gas collection, transport, and incineration processes:

1. Primary Incineration System

   a. An alkaline scrubber system for the noncondensible/TRS gases from the digester systems' blows and the multiple effect evaporator (does not include digester relief [turpentine] gases) will be utilized to mitigate TRS emissions when the No. 1 bark boiler is unable to incinerate the TRS noncondensible/TRS gases. (See evaluation of backup systems.) The scrubber will not control emissions to the same level as when TRS gases are being incinerated in No. 1 bark boiler.

   b. Whenever the primary incineration system is shut down for planned maintenance, the scrubber system will be activated prior to initiation of the incineration system shutdown.

   c. During unexpected outages, the scrubber system will be activated as soon as possible.

2. Noncondensible Gas (NCG)/TRS Collection and Transport Systems

   a. When practical, source equipment maintenance will be scheduled to coincide with source outages.

   b. All process and equipment malfunctions, which result in the uncontrolled venting of TRS emissions, will be addressed expeditiously.

Our proposal to use the backup scrubber is contingent on the Department's agreement that the system will constitute acceptable mitigation under FAC rule 17-2.600(4)(c)1.c., and best operating practices under FAC rule 17-2.250(1).

IV. EVALUATION OF BACKUP CONTROL

Our assessment dealt with the consideration of critical factors, such as backup system readiness and long-term reliability, as well as cost. As a result, our choice for a mitigation system to support the primary incineration unit, although such a system is not mandated by the rule, is the use of an alkaline scrubber. Our conclusion is based on the following factors:

a. Backup incineration options utilizing any of the remaining combustion devices, i.e., lime kiln, recovery boilers, No. 2 bark boiler, or power boilers, all have significant process safety and/or operating drawbacks that make them impractical for our facility to consider for use as a backup control device.

b. Dedicated standby incineration alternatives require elaborate combustion safeguard systems, which represents a significant personnel and equipment safety and reliability concern. This is particularly the case following long periods of non-use, which is supported by our experience with existing combustion safeguard systems. We have significant hardware reliability concerns that are raised as a result of sporadic use of these systems. Typically, these systems are intended for continuous use. In addition, these standby units create new emissions of their own which would need to be permitted. In addition, SO2 removal equipment would be needed to maintain the ambient air quality standard, with any dedicated standby incineration system.

c. The scrubber is a proven, cost-effective way to handle exhaust gases. In fact, we currently operate numerous scrubbers at our plant. When compared to other alternatives, the availability of the scrubber system is virtually immediate, since it does not include the ignition/warm-up steps required by the other incineration systems. In most cases, this warm-up period would exceed the typical process related interruptions currently experienced with the No. 1 bark boiler. As a result, emissions from digesting blow gases and multiple effect evaporator TRS sources are effectively minimized with a scrubber.

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11/12/87

APPENDIX A

The Buckeye Cellulose Corporation
Foley Plant
Taylor County, Perry, Florida

COMPLIANCE PLAN

I. INTRODUCTION

This plan has been developed in accordance with Section 17-2.960(1)(b) of the Florida Administrative Code (FAC) which requires each Kraft (Sulfate) Pulp Mill with regulated sources of Total Reduced Sulphur (TRS) emissions to develop a plan and schedule for achieving final compliance with the recently adopted Florida Air Pollution Regulations for the control of TRS emissions from Kraft (Sulfate) Pulp Mills. On approval of this plan, the applicable portions shall become a modification to the current operating permits for the affected sources at the Foley Plant.

In accordance with Section 17-2(1)(b), FAC, this plan includes a listing of regulated sources, the estimated cost and type of equipment to be installed and a schedule showing increments of progress for the affected sources.

In addition to the information required, it is important to consider, in the determination of appropriate TRS Rule compliance requirements, the established record of excellent performance and long-standing leadership of The Buckeye Cellulose Foley Plant in control of TRS emissions.

First, our TRS control program began in 1975 with the installation of a black liquor oxidation system, which served the #2 and #3 recovery boilers, and the construction and start-up of a new modern, reduced odor design recovery boiler (#4 recovery boiler). Unlike the rest of the industry, however, our program went well beyond the regulatory requirements of the time and included:

-- The installation of TRS continuous emission monitors on all three recovery boiler units. As a result, Foley was the first pulp mill in Florida to utilize continuous emission monitors as an on-going TRS emission control mechanism.

-- The collection and scrubbing of TRS emissions from all multiple effect black liquor evaporators, smelt dissolving tanks, and the Tall Oil Plant.

-- The collection and incineration of noncondensible/TRS gases from the turpentine recovery system (digester relief condensing).

Our recovery boiler systems were modified and expanded with good odor control practices in mind before such practices were required by law. In fact, our three recovery boilers average about 5 ppm TRS, which is the New Source Performance Standard emission limit for a new mill. Our #4 boiler operates at around 2-3 ppm TRS emissions versus 5 ppm required for new boilers. Our #2 and #3 recovery boilers average about 8-9 ppm against 17.5 ppm required by the Florida DER regulations.

The excellent TRS emission performance of our recovery boiler systems, combined with the voluntary measures which were undertaken 10 to 15 years ahead of current requirements, have contributed to the fact that we do not experience community odor complaints.

Second, our new lime kiln, the largest and most modern in the Pulp and Paper Industry, has consistently achieved since spring, 1987, less than the New Source Performance Standards of 8 ppm TRS. This kiln replaced three old kilns which would have been required to meet 20 ppm in 1989. The TRS emissions from the new kiln are significantly less than emission limit prescribed by the TRS Rule based on retrofit of the existing kilns.

Finally, our dissolving kraft process represents the most complex process in Florida's Pulp and Paper Industry. As a result, our digesting operation presents difficult TRS emissions collection and incineration challenges that deserve additional consideration. Our basic TRS rule compliance cost is already estimated to be at least twice the cost that was expected when the rule was adopted.

In summary, when we complete our proposed TRS Compliance Plan, our 30-year-old mill will compare favorably to a new mill meeting New Source performance Standards. Our experiences with additional TRS control measures at Foley and other locations have provided us with an extensive data base, which we have utilized to develop a sound and realistic compliance plan. We believe that the control measures proposed in this Compliance Plan will enhance our excellent long-standing freedom from odor complaints.

II. REGULATED SOURCES*

1. Digesting Systems**
   a. No. 1 Digesting System
   b. No. 2 Digesting System

2. Multiple Effect Evaporator Systems
   a. No. 1 Multiple Effect Evaporator System
   b. No. 2 Multiple Effect Evaporator System
   c. No. 3 Multiple Effect Evaporator System
   d. No. 4 Multiple Effect Evaporator System

3. Tall Oil Plant

4. Kraft Recovery Furnaces
   a. No. 2 Kraft Recovery Furnace (old design)
   b. No. 3 Kraft Recovery Furnace (old design)
   c. No. 4 Kraft Recovery Furnace (new design direct fired)

*See Table I for Source Description Information

**Digester Systems include a single turpentine recovery system, and proposed single blow heat recovery system.

5. Smelt Dissolving Tank Vents
   a. No. 2 Smelt Dissolving Tank Vent
   b. No. 3 Smelt Dissolving Tank Vent
   c. No. 4 Smelt Dissolving Tank Vent

6. Lime Kilns and Calciner
   a. No. 1 Lime Kiln
   b. No. 2 Lime Kiln
   c. No. 3 Lime Kiln

7. Combustion Device for Digester and Multiple Effect Evaporator Noncondensible/TRS Gases (No. 1 Bark Boiler)

III. TYPE OF EQUIPMENT TO BE INSTALLED

1. Digesting Systems
   a. Additional condensing equipment will be installed as required to condense the steam liberated by the blows from the No. 1 and No. 2 Digesting Systems. This will insure safe handling of the remaining noncondensible/TRS gases.

   b. Equipment will be installed to transport the remaining noncondensible/TRS gases to the No. 1 Bark Boiler for incineration.

2. Multiple Effect Evaporator Systems
   Noncondensible/TRS gases from the evaporator hotwells on Nos. 1, 2, 3, and 4 Multiple Effect Evaporators are currently directed to the smelt dissolving tank vent scrubbers. Equipment will be installed to transport these noncondensible/TRS gases to the No. 1 Bark Boiler for incineration.

3. Tall Oil Plant
   Equipment will be installed to scrub the gases liberated from the continuous tall oil acidulation process with an alkaline solution containing sodium hydroxide.

4. Kraft Recovery Furnaces
   The Kraft Recovery Furnaces are currently in compliance. No additional equipment installations are planned for the purpose of controlling TRS emissions from these furnaces.

5. Smelt Dissolving Tank Vents
   Equipment will be installed as required to monitor surrogate parameters for the existing alkaline scrubbers on Smelt Dissolving Tank vent Nos. 2, 3 and 4. While these sources will not require the installation of major capital equipment, compliance will be achieved concurrently with the redirection of the Multiple Effect Evaporator noncondensible/TRS gases to the No. 1 Bark Boiler for incineration, which does require the installation of major capital equipment (See III.2 above)

6. Lime Kilns
   a. The new No. 4 Lime Kiln constructed under permit No. AC 62-107858 is meeting less than New Source Performance Standards for Lime Kilns.

   b. The operating permits for the Lime Kiln Nos. 1, 2 and 3 and the Calciner will be surrendered and the units will be retired following receipt of the operating permit for the new No. 4 Lime Kiln. As these sources will be shut down prior to the final compliance deadline, no additional equipment will be installed on these units for TRS control.

7. No. 1 Bark Boiler
   a. Equipment will be installed to allow the incineration of noncondensible/TRS gases from the digester systems blow gases and from the multiple effect evaporator systems n the No. 1 Bark Boiler.

   b. Equipment will be installed to transport the noncondensible/ TRS gases from the digester systems blows and from the multiple effect evaporator systems to an alkaline scrubber when the No. 1 Bark Boiler is not available for gas incineration service. This is based on acceptance of our proposed Contingency Plan.

IV. ESTIMATED COST OF EQUIPMENT TO BE INSTALLED

The overall cost of equipment to be installed is $16,000,000.

V. PROGRESS SCHEDULE

The Kraft Recovery Furnaces are currently in compliance. We anticipate receiving a valid operating permit for the new No. 4 Lime Kiln by late Fall of 1987. Lime Kiln Nos. 1, 2, and 3 and the Calciner will be retired, bringing these sources into compliance well ahead of the required schedule.

The following progress schedule has been developed to accomplish design, purchase, construction, startup and verification of the overall TRS control project. The actual schedule for each particular source could vary somewhat. For all sources, the compliance deadlines specified in the rule will be adhered to.

- Submit Construction Permit Applications — November 12, 1987
- Submit Certification of Equipment Orders — May 1988
- Submit Certification of Initial Construction — October 1988
- Submit List of Surrogate Parameters to be Monitored — February 1989
- Submit Certification of Completion of Construction — April 1989
- Surrogate Parameters Monitored — May 12, 1989
- Submit Certification of Final Compliance for All Sources — May 12, 1989

JLWCOMP/11-10-87
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THE BUCKEYE CELLULOSE CORPORATION
TRS COMPLIANCE PLAN - TABLE 1
SOURCE DESCRIPTION INFORMATION

		1. DIGESTING		2. MULTIPLE EFFECT EVAPORATOR SYSTEMS			
A.	Source name	No. 1 Digesting System	No. 2 Digesting System	No. 1 MEE	No. 2 MEE	No. 3 MEE	No. 4 MEE
B.	Date initial construction commenced	1953	1957	1953	1957	1964	1975
C.	Issue date of federal or state constr. permits	N/A	N/A	N/A	N/A	N/A	AC62-2002, issued 3/14/73
D.	Current permit number	A062-113897	A062-113898	A062-113893	A062-113894	A062-113895	A062-113896
E.	Date of most recent operating permit	7/7/86 Rev. 4/7/87	7/7/86 Rev. 4/7/87	7/8/86 Rev. 4/7/87	7/8/86 Rev. 4/7/87	7/8/86 Rev. 4/7/87	7/8/86 Rev. 4/7/87
F.	Uncontrolled emission points						
	1. Number	1. One	1. One	1. None	1. None	1. None	1. None
	2. Type	2. No. 1 Dig. Blow Cond. Accumulator	2. No. 2 Dig. Blow Cond. Accumulator	2. --	2. --	2. --	2. --
G.	Controlled emission points						
	1. Number	1. One*	1. One*	1. One	1. One	1. One	1. One
	2. Type	2. Turpentine Recovery condenser vent	2. Turpentine Recovery condenser vent	2. #1 MEE Hotwell vent	2. #2 MEE Hotwell vent	2. #3 MEE Hotwell vent	2. #4 MEE Hotwell vent
H.	Control Technology Currently Installed						
	1. Type	1. Incineration of non-condensible gases from Turp. condenser vent.	1. Incineration of non-condensible gases from Turp. condenser vent.	1. Alkaline scrubbing	1. Alkaline scrubbing	1. Alkaline scrubbing	1. Alkaline scrubbing
	2. Is new TRS Rule emission limiting standard being met?	2. No	2. No	2. No	2. No	2. No	2. No
I.	Existing Permit Capacity	231,833 lbs (dry)/hr wood chips, plus 77,245 lbs (dry)/hr cooking liquor, maximum input rate 110,000 lbs (dry)/hr unbleached pulp product rate#	212,333 lbs (dry)/hr wood chips plus 70,748 lbs (dry)/hr cooking liquor, maximum input rate 100,000 lbs (dry)/hr unbleached pulp product rate#	156,000 lbs Black Liquor Solids (dry) per hour, maximum input rate	195,000 lbs Black Liquor Solids (dry) per hour, maximum input rate	195,000 lbs Black Liquor Solids (dry) per hour, maximum input rate	260,000 lbs Black Liquor Solids (dry) per hour, maximum input rate

**A single Turp. Recov. Sys. serves No.1 and No.2 Dig. Systems*
#Reflects requested correction to Interim Operating Permits (in progress)

THE BUCKEYE CELLULOSE CORPORATION
TRS COMPLIANCE PLAN
TABLE 1 (CONTINUED)

		3. TALL OIL PLANT	4. KRAFT RECOVERY FURNACES		
A.	Source name	Tall Oil Plant	No. 2 KRF	No. 3 KRF	No. 4 KRF
B.	Date initial construction commenced	1957	1957	1964	1973
C.	Issue date of federal or state const. permits	N/A	N/A	N/A	AC62-2000 issued March 14, 19873
D.	Current permit number	A062-113892	A062-116703	A062-110326	A062-130573
E.	Date of most recent operating permit	11/2/87	6/12/86 Rev. 4/24/87	1/17/86 Rev. 7/16/87	6/5/87
F.	Uncontrolled TRS Emission Points				
	1. Number	1. Misc. tank vents	1. None	1. None	1. None
	2. Type	2. (Negligible emissions)	2. --	2. --	2. --
G.	Controlled TRS Emission Points				
	1. Number	1. One	1. One	1. One	1. One
	2. Type	2. Tall Oil Plant Stack	2. No. 2 Recovery Boiler Stack	2. No. 3 Recovery Boiler Stack	2. No. 4 Recovery Boiler Stack
H.	Control Technology currently installed				
	1. Type	1. Alkaline scrubbing	1. Two-stage Black Liquor Oxidation	1. Two-stage Black Liquor Oxidation	1. Low Odor Design Liquor Oxidation
	2. Is emission limiting standard being met?	2. No	2. Yes	2. Yes	2. Yes
I.	Existing Permit Capacity	7.3 tons crude Tall Oil (dry)/hr, max. production rate	97,600 lbs. B.L. solids/hr, max. input rate	82,350 lbs. B.L. solids/hr, max. input rate	123,825 lbs. B.L. solids/hr, max. input rate

THE BUCKEYE CELLULOSE CORPORATION
TRS COMPLIANCE PLAN
TABLE 1 (CONTINUED)

		5. SMELT DISSOLVING TANK VENTS			6. LIME KILNS			7.COMBUSTION DEVICE
A.	Source name	#2 SDTV	#3 SDTV	#4 SDTV	#1 Lime Kiln	#2 Lime Kiln	#3 Lime Kiln	#1 Bark Boiler
B.	Date initial construction commenced	1954	1964	1973	1953	1957	1964	1953
C.	Issue date of federal or state permits	AC62-2199 issued 4/2/74	AC62-222 issued 5/15/74	AC62-2002 issued 3/14/73	N/A	N/A	N/A	N/A
D.	Current permit number	A062-116703	A062-110326	A062-130573	A062-124186	A062-113418	A062-124188	A062-126397
E.	Date of most recent operating permit	6/12/86 Rev. 4/27/86	1/17/86 Rev. 7/16/87	7/5/87	6/24/86 (no longer operating)	6/24/86 (no longer operating)	6/24/86 (no longer operating)	1/30/87 Rev. 4/7/87 (A062-48928)
F.	Uncontrolled TRS emission points							
	1. Number	1. None	1. None	1. None	1. One	1. One	1. One	1. None
	2. Type	2. ---	2. ---	2. ---	2. #1 kiln stack	2. #2 kiln stack	2. #3 kiln stack	2. --
G.	Controlled TRS emission points							
	1. Number	1. One	1. One	1. One	1. None	1. None	1. None	1. One
	2. Type	2. #2 SDTV stack	2. #3 SDTV stack	2. #4 SDTV stack	2. --	2. --	2. --	2. #1 Bark Boiler flue gas duct (joins common stack)
H.	Control technology currently							
	1. Type	1. Alkaline scrubbing	1. Alkaline scrubbing	1. Alkaline scrubbing	1. None	1. None	1. None	1. Incineration
	2. Is emission limiting standard being met?	2. No*	2. No*	2. No*	2. No	2. No	2. No	
I.	Existing Permit Capacity	41,187 lbs smelt/hr plus 9773 lbs weak wash solids/hr (dry)	34,752 lbs smelt/hr plus 8246 lbs weak wash solids/hr (dry)	52,254 lbs smelt/hr plus 12,399 lbs weak wash solids/hr (dry)	14.58 tons lime mud feed (dry)/ hr	16.33 tons lime mud feed (dry)/ hr	17.5 tons lime mud feed (dry)/ hr	200,000 lbs steam/ hr. 300 MMBtu/hr fuel input, max. rate

SWMCPT1

**Treatment of MEE emissions in the SDTV scrubbers prevents the SDTV's from meeting the emission limiting standard.*

APPENDIX B

TABLE B-1

SO2 EMISSIONS INVENTORY SUMMARY

AND CALCULATIONS DOCUMENTATION

EMISSIONS INVENTORY SUMMARY

POLLUTANT: SO2

INDIVIDUAL SOURCE NAME	STATUS OF SOURCE (b)	MODEL SOURCE NUMBER	ANNUAL OPERATING HOURS	MAXIMUM EMISSION RATE lb/hr	ANNUAL EMISSION RATE ton/yr	ISCST EMISSION RATE gm/sec	COMMENTS		
No. 1 LIME KILN	PSD(-)	1001	8,760	(3.000)	(13.14)	(0.3780)			
No. 2 LIME KILN	PSD(-)	1002	8,760	(4.100)	(17.96)	(0.5166)			
No. 3 LIME KILN	PSD(-)	1003	8,760	(4.100)	(17.96)	(0.5166)			
No. 4 LIME KILN	PSD(NEW)	2001	8,760	20.100	88.04	2.5326			
No. 4 SMELT TANK	PSD(+)	2002	8,760	0.273	1.20	0.0344			
No. 2 BARK BLR	PSD(+)	2003	8,760	0.800	3.50	0.1008			
No. 1 BARK BLR	PSD(FUT)	2004	8,760	1,008.0	4,415.04	127.0080	lb/hr = 105.56*7.9576*2*(1-0.4) =	1,008.0	lb/hr SO2
No. 2 RECOVERY BLR	EXISTING	3001	8,760	439.344	1,924.33	55.3574	lb/hr = [(2,881*157*2.5/1,000)*(1-0.65)] + [105.56*0.32*5*(146/566)] =	439.3	lb/hr SO2
No. 3 RECOVERY BLR	EXISTING	3002	8,760	413.069	1,809.24	52.0467	lb/hr = [(2,881*157*2.5/1,000)*(1-0.65)] + [105.56*0.27*5*(58/478)] =	413.1	lb/hr SO2
No. 4 RECOVERY BLR	EXISTING	3003	8,760	1,413.169	6,189.68	178.0593	lb/hr = [(3,484*157*2.5/1,000)] + [105.56*0.41*5*(136/644)] =	1,413.2	lb/hr SO2
No. 2 SMELT TANK	EXISTING	3004	8,760	3.378	14.80	0.4256	lb/hr = 105.56*0.32*0.1 =	3.4	lb/hr SO2
No. 3 SMELT TANK	EXISTING	3005	8,760	2.850	12.48	0.3591	lb/hr = 105.56*0.27*0.1 =	2.9	lb/hr SO2
No. 4 SMELT TANK	PRE-PSD	3006	8,760	4.328	18.96	0.5453	lb/hr = 105.56*0.41*0.1 =	4.3	lb/hr SO2
COMMON STACK (a)	EXISTING/ PRE-PSD	3007	8,760	2,085.220	9,133.26	262.7377	lb/hr = (673.1) + (673.1) + (647.4*(1-0.4)) + (493.7*(1-0.4)) + (87.4*(1-0.4)) =	2,083.3	lb/hr SO2

(a) Includes SO2 emissions from Nos. 1 & 2 Power Boilers + Nos. 1 & 2 Bark Boilers + Turpentine Condenser NCG/TRS incineration in No. 1 Bark Boiler

(b) Status of source:
EXISTING = an existing source(s) (baseline emissions)
PRE-PSD = an existing source which has been modified (baseline emissions)
PSD(+) = an existing source which has been modified and consumes PSD increment (incremental emissions)
PSD(-) = an existing source which has been shutdown and expands PSD increment
PSD(FUT) = an existing source to be modified and will consume PSD increment (incremental emissions)
PSD(NEW) = a new source which has been constructed and consumes PSD increment

CALCULATIONS

NO. 1 LIME KILN - PSD(-)

POTENTIAL LB/HR SO2 = 3.0 LB/HR SO2 (1985 SPECIAL ANNUAL OPERATING REPORT)
MAXIMUM ACTUAL LB/HR SO2 = POTENTIAL LB/HR SO2

NO. 2 LIME KILN - PSD(-)

POTENTIAL LB/HR SO2 = 4.1 LB/HR SO2 (1985 SPECIAL ANNUAL OPERATING REPORT)
MAXIMUM ACTUAL LB/HR SO2 = POTENTIAL LB/HR SO2

NO. 3 LIME KILN - PSD(-)

POTENTIAL LB/HR SO2 = 4.1 LB/HR SO2 (1985 SPECIAL ANNUAL OPERATING REPORT)
MAXIMUM ACTUAL LB/HR SO2 = POTENTIAL LB/HR SO2

NO. 4 LIME KILN - PSD(NEW)

POTENTIAL LB/HR SO2 = 20.1 LB/HR SO2 (GEP STACK HEIGHT EVALUATION FOR NO. 4 LIME KILN, P. 4-3, 1/9/86)
MAXIMUM ACTUAL LB/HR SO2 = POTENTIAL LB/HR SO2

NO. 4 SMELT DISSOLVING TANK - PSD(+)

POTENTIAL LB/HR SO2 = 0.273 LB/HR SO2 = 1.2 TON/YR SO2 (NO. 4 RECOVERY BOILER OP. PERMIT, P. 2 OF 3, ATTACHMENT I, 8/22/83)
MAXIMUM ACTUAL LB/HR SO2 = POTENTIAL LB/HR SO2

NO. 2 BARK BOILER - PSD(+)

POTENTIAL LB/HR SO2 = 0.800 LB/HR SO2 = 3.5 TON/YR SO2 (NO. 2 BARK BOILER OP. PERMIT, P. 2 OF 2, ATTACHMENT I, 9/2/83)
MAXIMUM ACTUAL LB/HR SO2 = POTENTIAL LB/HR SO2

NO. 1 BARK BOILER - PSD(FUT)

DIGESTER RELIEF AND BLOW TANK TRS EMISSION FACTOR = 1.6 LB TRS (AS S)/TON AIR-DRIED UNBLEACHED PULP (AP-42, TABLE 10.1.2-1, P. 10.1-5, 4/77)
MULTIPLE EFFECT EVAPORATORS TRS EMISSION FACTOR = 0.5 LB TRS (AS S)/TON AIR-DRIED UNBLEACHED PULP (AP-42, TABLE 10.1.2-1, P. 10.1-5, 4/77)
DIGESTERS + EVAPORATORS TRS EMISSION FACTOR = 2.1 LB TRS (AS S)/TON AIR-DRIED UNBLEACHED PULP (AP-42, TABLE 10.1.2-1, P. 10.1-5, 4/77)
DIGESTERS + EVAPORATORS TRS EMISSION FACTOR = APPROX. 8.0 LB TRS (AS S)/TON AIR-DRIED UNBLEACHED PULP (BEST ENGINEERING JUDGMENT)

POTENTIAL LB/HR TRS (AS S) FOR DIGESTERS + EVAPORATORS =	105.56*7.9576 =	840.0	LB/HR S
POTENTIAL LB/HR SO2 FOR DIGESTERS + EVAPORATORS =	105.56*7.9576*2 =	1,680.0	LB/HR SO2, NO SO2 CONTROL
MAXIMUM ACTUAL LB/HR SO2 FOR DIGESTERS + EVAPORATORS =	105.56*7.9576*2*(1-0.4) =	1,008.0	LB/HR SO2, 40% SO2 REMOVAL EFFICIENCY IN WET SCRUBBER

NO. 2 RECOVERY BOILER (DIRECT CONTACT EVAPORATION) - EXISTING

566 MM BTU/HR HEAT INPUT ON BLACK LIQUOR (OP. PERMIT)
566 MM BTU/HR HEAT INPUT ON BLACK LIQUOR AND NO. 6 FUEL OIL (OP. PERMIT)
420 MM BTU/HR HEAT INPUT ON NO. 6 FUEL OIL

48.8 TON/HR DRY BLACK LIQUOR SOLIDS (OP. PERMIT) =	48.8*2,000 =	97,600	LB/HR DRY BLACK LIQUOR SOLIDS

NO. 6 FUEL OIL - 2.5% S; 18,000 BTU/LB; 8.1 LB/GAL; 145,800 BTU/GAL

MAXIMUM GAL/HR NO. 6 FUEL OIL =	420,000,000/(18,000*8.1) =	2,881	GAL/HR NO. 6 FUEL OIL

NO. 6 FUEL OIL SO2 EMISSION FACTOR = 157S LB SO2/1,000 GAL (AP-42, TABLE 1.3-1., P. 1.3-2, 8/82, INDUSTRIAL BOILERS/RESIDUAL OIL)
ALLOWABLE SO2 EMISSION RATE FOR FOSSIL FUEL = 2.5% SULFUR (OP. PERMIT)

POTENTIAL LB/HR SO2 FOR FOSSIL FUEL =	2,881*157*2.5/1,000 =	1,130.8	LB/HR SO2, NO SO2 CONTROL

SO2 REMOVAL EFFICIENCY OF RECOVERY BOILER DIRECT CONTACT EVAPORATION = 50% - 80% (AP-42, P. 10.1-3, 4/77)

MAXIMUM ACTUAL LB/HR SO2 FOR FOSSIL FUEL =	(2,881*157*2.5/1,000)*(1-0.65) =	395.8	LB/HR SO2, 65% SO2 REMOVAL EFFICIENCY IN DIRECT CONTACT EVAPORATOR FOR FOSSIL FUEL

566 MM BTU/HR TOTAL HEAT INPUT ON BLACK LIQUOR AND NO. 6 FUEL OIL
420 MM BTU/HR HEAT INPUT ON NO. 6 FUEL OIL
146 MM BTU/HR HEAT INPUT ON BLACK LIQUOR
BLACK LIQUOR SO2 EMISSION FACTOR = 5 LB SO2/TON AIR-DRIED UNBLEACHED PULP (AP-42, TABLE 10.1.2-1, P. 10.1-5, 4/77, RECOVERY BOILER AND DIRECT CONTACT EVAPORATOR)
105.56 TOTAL TONS/HR AIR-DRIED UNBLEACHED PULP FOR NO. 1 & 2 MILLS

NO. 2 RECOVERY BOILER FRACTION OF TOTAL BLS CAPACITY =	97,600/(97,600 + 82,350 + 123,825) =	0.32	
POTENTIAL LB/HR SO2 FOR BLACK LIQUOR =	105.56*0.32*5*(146/566) =	43.6	LB/HR SO2 FOR BLACK LIQUOR

MAXIMUM ACTUAL LB/HR SO2 FOR BLACK LIQUOR = POTENTIAL LB/HR SO2 FOR BLACK LIQUOR

TOTAL POTENTIAL LB/HR SO2 FOR NO. 2 RECOVERY BOILER =	1,130.8 + 43.6 =	1,174.4	LB/HR SO2, NO SO2 CONTROL
TOTAL MAXIMUM ACTUAL LB/HR SO2 FOR NO. 2 RECOVERY BOILER =	395.8 + 43.6 =	439.4	LB/HR SO2, 65% SO2 REMOVAL EFFICIENCY IN DIRECT CONTACT EVAPORATOR FOR FOSSIL FUEL

NO. 3 RECOVERY BOILER (DIRECT CONTACT EVAPORATION) - EXISTING

478 MM BTU/HR HEAT INPUT ON BLACK LIQUOR (OP. PERMIT)			
478 MM BTU/HR HEAT INPUT ON BLACK LIQUOR AND NO. 6 FUEL OIL (OP. PERMIT)			
420 MM BTU/HR HEAT INPUT ON NO. 6 FUEL OIL			
41.2 TON/HR DRY BLACK LIQUOR SOLIDS (OP. PERMIT) =	41.175*2,000 =	82,350	LB/HR DRY BLACK LIQUOR SOLIDS
NO. 6 FUEL OIL - 2.5% S; 18,000 BTU/LB; 8.1 LB/GAL; 145,800 BTU/GAL			
MAXIMUM GAL/HR NO. 6 FUEL OIL =	420,000,000/(18,000*8.1) =	2,881	GAL/HR NO. 6 FUEL OIL
NO. 6 FUEL OIL SO2 EMISSION FACTOR = 157S LB SO2/1,000 GAL (AP-42, TABLE 1.3-1., P. 1.3-2, 8/82, INDUSTRIAL BOILERS/RESIDUAL OIL)			
ALLOWABLE SO2 EMISSION RATE FOR FOSSIL FUEL = 2.5% SULFUR (OP. PERMIT)			
POTENTIAL LB/HR SO2 FOR FOSSIL FUEL =	2,881*157*2.5/1,000 =	1,130.8	LB/HR SO2, NO SO2 CONTROL
SO2 REMOVAL EFFICIENCY OF RECOVERY BOILER DIRECT CONTACT EVAPORATION = 50% - 80% (AP-42, P. 10.1-3, 4/77)			
MAXIMUM ACTUAL LB/HR SO2 FOR FOSSIL FUEL =	(2,881*157*2.5/1,000)*(1-0.65) =	395.8	LB/HR SO2, 65% SO2 REMOVAL EFFICIENCY IN DIRECT CONTACT EVAPORATOR FOR FOSSIL FUEL
478 MM BTU/HR TOTAL HEAT INPUT ON BLACK LIQUOR AND NO. 6 FUEL OIL			
420 MM BTU/HR HEAT INPUT ON NO. 6 FUEL OIL			
58 MM BTU/HR HEAT INPUT ON BLACK LIQUOR			
BLACK LIQUOR SO2 EMISSION FACTOR = 5 LB SO2/TON AIR-DRIED UNBLEACHED PULP (AP-42, TABLE 10.1.2-1, P. 10.1-5, 4/77, RECOVERY BOILER AND DIRECT CONTACT EVAPORATOR)			
105.56 TOTAL TONS/HR AIR-DRIED UNBLEACHED PULP FOR NO. 1 & 2 MILLS			
NO. 3 RECOVERY BOILER FRACTION OF TOTAL BLS CAPACITY =	82,350/(97,600 + 82,350 + 123,825) =	0.27	
POTENTIAL LB/HR SO2 FOR BLACK LIQUOR =	105.56*0.27*5*(58/478) =	17.3	LB/HR SO2 FOR BLACK LIQUOR
MAXIMUM ACTUAL LB/HR SO2 FOR BLACK LIQUOR = POTENTIAL LB/HR SO2 FOR BLACK LIQUOR			
TOTAL POTENTIAL LB/HR SO2 FOR NO. 3 RECOVERY BOILER =	1,130.8 + 17.3 =	1,148.1	LB/HR SO2, NO SO2 CONTROL
TOTAL MAXIMUM ACTUAL LB/HR SO2 FOR NO. 3 RECOVERY BOILER =	395.8 + 17.3 =	413.1	LB/HR SO2, 65% SO2 REMOVAL EFFICIENCY IN DIRECT CONTACT EVAPORATOR FOR FOSSIL FUEL

NO. 4 RECOVERY BOILER (NON-CONTACT EVAPORATION) - EXISTING

644 MM BTU/HR HEAT INPUT ON BLACK LIQUOR (OP. PERMIT)			
644 MM BTU/HR HEAT INPUT ON BLACK LIQUOR AND NO. 6 FUEL OIL (OP. PERMIT)			
508 MM BTU/HR HEAT INPUT ON NO. 6 FUEL OIL			
61.9 TON/HR DRY BLACK LIQUOR SOLIDS (OP. PERMIT) =	61.9125*2,000 =	123,825	LB/HR DRY BLACK LIQUOR SOLIDS
NO. 6 FUEL OIL - 2.5% S; 18,000 BTU/LB; 8.1 LB/GAL; 145,800 BTU/GAL			
MAXIMUM GAL/HR NO. 6 FUEL OIL =	508,000,000/(18,000*8.1) =	3,484	GAL/HR NO. 6 FUEL OIL
NO. 6 FUEL OIL SO2 EMISSION FACTOR = 157S LB SO2/1,000 GAL (AP-42, TABLE 1.3-1., P. 1.3-2, 8/82, INDUSTRIAL BOILERS/RESIDUAL OIL)			
ALLOWABLE SO2 EMISSION RATE FOR FOSSIL FUEL = 2.5% SULFUR (OP. PERMIT)			
POTENTIAL LB/HR SO2 FOR FOSSIL FUEL =	3,484*157*2.5/1,000 =	1,367.5	LB/HR SO2, NO SO2 CONTROL
MAXIMUM ACTUAL LB/HR SO2 FOR FOSSIL FUEL = POTENTIAL LB/HR SO2 FOR FOSSIL FUEL			
644 MM BTU/HR TOTAL HEAT INPUT ON BLACK LIQUOR AND NO. 6 FUEL OIL			
508 MM BTU/HR HEAT INPUT ON NO. 6 FUEL OIL			
136 MM BTU/HR HEAT INPUT ON BLACK LIQUOR			
BLACK LIQUOR SO2 EMISSION FACTOR = 5 LB SO2/TON AIR-DRIED UNBLEACHED PULP (AP-42, TABLE 10.1.2-1, P. 10.1-5, 4/77, RECOVERY BOILER AND DIRECT CONTACT EVAPORATOR)			
105.56 TOTAL TONS/HR AIR-DRIED UNBLEACHED PULP FOR NO. 1 & 2 MILLS			
NO. 4 RECOVERY BOILER FRACTION OF TOTAL BLS CAPACITY =	123,825/(97,600 + 82,350 + 123,825) =	0.41	
POTENTIAL LB/HR SO2 FOR BLACK LIQUOR =	105.56*0.41*5*(136/644) =	45.7	LB/HR SO2
MAXIMUM ACTUAL LB/HR SO2 FOR BLACK LIQUOR = POTENTIAL LB/HR SO2 FOR BLACK LIQUOR			
TOTAL POTENTIAL LB/HR SO2 FOR NO. 4 RECOVERY BOILER =	1,367.5 + 45.7 =	1,413.2	LB/HR SO2, NO SO2 CONTROL
TOTAL MAXIMUM ACTUAL LB/HR SO2 FOR NO. 4 RECOVERY BOILER = TOTAL POTENTIAL LB/HR SO2 FOR NO. 4 RECOVERY BOILER			

NO. 2 SMELT DISSOLVING TANK - EXISTING

SMELT SO2 EMISSION FACTOR = 0.1 LB SO2/TON AIR-DRIED UNBLEACHED PULP (AP-42, TABLE 10.1.2-1, P. 10.1-5, 4/77, SMELT DISSOLVING TANK)
105.56 TOTAL TONS/HR AIR-DRIED UNBLEACHED PULP FOR NO. 1 & 2 MILLS
NO. 2 RECOVERY BOILER FRACTION OF TOTAL BLS CAPACITY = 97,600/(97,600 + 82,350 + 123,825) = 0.32
POTENTIAL LB/HR SO2 = 105.56*0.32*0.1 = 3.38 LB/HR SO2
MAXIMUM ACTUAL LB/HR SO2 = POTENTIAL LB/HR SO2

NO. 3 SMELT DISSOLVING TANK - EXISTING

SMELT SO2 EMISSION FACTOR = 0.1 LB SO2/TON AIR-DRIED UNBLEACHED PULP (AP-42, TABLE 10.1.2-1, P. 10.1-5, 4/77, SMELT DISSOLVING TANK)
105.56 TOTAL TONS/HR AIR-DRIED UNBLEACHED PULP FOR NO. 1 & 2 MILLS
NO. 3 RECOVERY BOILER FRACTION OF TOTAL BLS CAPACITY = 82,350/(97,600 + 82,350 + 123,825) 0.27
POTENTIAL LB/HR SO2 = 105.56*0.27*0.1 = 2.85 LB/HR SO2
MAXIMUM ACTUAL LB/HR SO2 = POTENTIAL LB/HR SO2

NO. 4 SMELT DISSOLVING TANK - PRE-PSD FOR PSD(+)

SMELT SO2 EMISSION FACTOR = 0.1 LB SO2/TON AIR-DRIED UNBLEACHED PULP (AP-42, TABLE 10.1.2-1, P. 10.1-5, 4/77, SMELT DISSOLVING TANK)
105.56 TOTAL TONS/HR AIR-DRIED UNBLEACHED PULP FOR NO. 1 & 2 MILLS
NO. 4 RECOVERY BOILER FRACTION OF TOTAL BLS CAPACITY = 123,825/(97,600 + 82,350 + 123,825) = 0.41
POTENTIAL LB/HR SO2 = 105.56*0.41*0.1 = 4.33 LB/HR SO2
MAXIMUM ACTUAL LB/HR SO2 = POTENTIAL LB/HR SO2

COMMON STACK - EXISTING/PRE-PSD

NO. 1 POWER BOILER - EXISTING

250 MM BTU/HR HEAT INPUT ON NO. 6 FUEL OIL
NO. 6 FUEL OIL - 2.5% S; 18,000 BTU/LB; 8.1 LB/GAL; 145,800 BTU/GAL
MAXIMUM GAL/HR NO. 6 FUEL OIL = 250,000,000/(18,000*8.1) = 1,715 GAL/HR NO. 6 FUEL OIL
NO. 6 FUEL OIL SO2 EMISSION FACTOR = 157S LB SO2/1,000 GAL (AP-42, TABLE 1.3-1., P. 1.3-2, 8/82, INDUSTRIAL BOILERS/RESIDUAL OIL)
ALLOWABLE SO2 EMISSION RATE FOR FOSSIL FUEL = 2.5% SULFUR (OP. PERMIT)
POTENTIAL LB/HR SO2 FOR FOSSIL FUEL = 1,715*157*2.5/1,000 = 673.1 LB/HR SO2, NO SO2 CONTROL
MAXIMUM ACTUAL LB/HR SO2 FOR FOSSIL FUEL = POTENTIAL LB/HR SO2 FOR FOSSIL FUEL

NO. 2 POWER BOILER - EXISTING

SAME AS NO. 1 POWER BOILER

NO. 1 BARK BOILER - PRE-PSD FOR PSD(FUT)

300 MM BTU/HR HEAT INPUT ON WASTE WOOD PRODUCTS (30% H20)			
300 MM BTU/HR HEAT INPUT ON WASTE WOOD PRODUCTS (30% H20) AND NONCONDENSIBLE/TRS GASES			
300 MM BTU/HR HEAT INPUT ON WASTE WOOD PRODUCTS (30% H20) AND NO. 6 FUEL OIL AND NONCONDENSIBLE/TRS GASES			
240 MM BTU/HR HEAT INPUT ON NO. 6 FUEL OIL			
NO. 6 FUEL OIL - 2.5% S; 18,000 BTU/LB; 8.1 LB/GAL; 145,800 BTU/GAL			
MAXIMUM GAL/HR NO. 6 FUEL OIL =	240,000,000/(18,000*8.1) =	1,646	GAL/HR NO. 6 FUEL OIL
NO. 6 FUEL OIL SO2 EMISSION FACTOR = 157S LB SO2/1,000 GAL (AP-42, TABLE 1.3-1., P. 1.3-2, 8/82, INDUSTRIAL BOILERS/RESIDUAL OIL)			
ALLOWABLE SO2 EMISSION RATE FOR FOSSIL FUEL = 2.5% SULFUR (OP. PERMIT)			
POTENTIAL LB/HR SO2 FOR FOSSIL FUEL =	1,646*157*2.5/1,000 =	646.1	LB/HR SO2, NO SO2 CONTROL
MAXIMUM ACTUAL LB/HR SO2 FOR FOSSIL FUEL =	(1,646*157*2.5/1,000)*(1-0.4) =	387.6	LB/HR SO2, 40% SO2 REMOVAL EFFICIENCY IN WET SCRUBBER
300 MM BTU/HR TOTAL HEAT INPUT ON WASTE WOOD PRODUCTS (30% H20) AND NO. 6 FUEL OIL			
240 MM BTU/HR HEAT INPUT ON NO. 6 FUEL OIL			
60 MM BTU/HR HEAT INPUT ON WASTE WOOD PRODUCTS (30% H20)			
WASTE WOOD PRODUCTS SO2 EMISSION FACTOR = 0.0214 LB SO2/MM BTU HEAT INPUT (NCASI BULLETIN NO. 96)			
POTENTIAL LB/HR SO2 FOR WASTE WOOD PRODUCTS =	60,000,000*0.0214/1,000,000 =	1.3	LB/HR SO2, NO SO2 CONTROL
MAXIMUM ACTUAL LB/HR SO2 FOR WASTE WOOD PRODUCTS =	(60,000,000*0.0214/1,000,000)*(1-0.4) =	0.8	LB/HR SO2, 40% SO2 REMOVAL EFFICIENCY IN WET SCRUBBER
TOTAL POTENTIAL LB/HR SO2 FOR BARK BOILER NO. 1 =	646.1 + 1.3 =	647.4	LB/HR SO2, NO SO2 CONTROL
TOTAL MAXIMUM ACTUAL LB/HR SO2 FOR BARK BLR NO. 1 =	387.6 + 0.8 =	388.4	LB/HR SO2, 40% SO2 REMOVAL EFFICIENCY IN WET SCRUBBER

NO. 2 BARK BOILER - PRE-PSD FOR PSD(+)

601 MM BTU/HR HEAT INPUT ON WASTE WOOD PRODUCTS (30% H20)			
601 MM BTU/HR HEAT INPUT ON WASTE WOOD PRODUCTS (30% H20) AND NO. 6 FUEL OIL			
180 MM BTU/HR HEAT INPUT ON NO. 6 FUEL OIL			
NO. 6 FUEL OIL - 2.5% S; 18,000 BTU/LB; 8.1 LB/GAL; 145,800 BTU/GAL			
MAXIMUM GAL/HR NO. 6 FUEL OIL =	180,000,000/(18,000*8.1) =	1,235	GAL/HR NO. 6 FUEL OIL
NO. 6 FUEL OIL SO2 EMISSION FACTOR = 157S LB SO2/1,000 GAL (AP-42, TABLE 1.3-1., P. 1.3-2, 8/82, INDUSTRIAL BOILERS/RESIDUAL OIL)			
ALLOWABLE SO2 EMISSION RATE FOR FOSSIL FUEL = 2.5% SULFUR (OP. PERMIT)			
POTENTIAL LB/HR SO2 FOR FOSSIL FUEL =	1,235*157*2.5/1,000 =	484.7	LB/HR SO2, NO SO2 CONTROL
MAXIMUM ACTUAL LB/HR SO2 FOR FOSSIL FUEL =	(1,235*157*2.5/1,000)*(1-0.4) =	290.8	LB/HR SO2, 40% SO2 REMOVAL EFFICIENCY IN WET SCRUBBER
601 MM BTU/HR TOTAL HEAT INPUT ON WASTE WOOD PRODUCTS (30% H20) AND NO. 6 FUEL OIL			
180 MM BTU/HR HEAT INPUT ON NO. 6 FUEL OIL			
421 MM BTU/HR HEAT INPUT ON WASTE WOOD PRODUCTS (30% H20)			
WASTE WOOD PRODUCTS SO2 EMISSION FACTOR = 0.0214 LB SO2/MM BTU HEAT INPUT (NCASI BULLETIN NO. 96)			
POTENTIAL LB/HR SO2 FOR WASTE WOOD PRODUCTS =	421,000,000*0.0214/1,000,000 =	9.0	LB/HR SO2, NO SO2 CONTROL
MAXIMUM ACTUAL LB/HR SO2 FOR WASTE WOOD PRODUCTS =	(421,000,000*0.0214/1,000,000)*(1-0.4) =	5.4	LB/HR SO2, 40% SO2 REMOVAL EFFICIENCY IN WET SCRUBBER
TOTAL POTENTIAL LB/HR SO2 FOR BARK BOILER NO. 2 =	484.7 + 9.0 =	493.7	LB/HR SO2, NO SO2 CONTROL
TOTAL MAXIMUM ACTUAL LB/HR SO2 FOR BARK BOILER NO. 2 =	290.8 + 5.4 =	296.2	LB/HR SO2, 40% SO2 REMOVAL EFFICIENCY IN WET SCRUBBER

TURPENTINE CONDENSER NCG/TRS INCINERATION IN NO. 1 BARK BOILER - PRE-PSD FOR PSD(FUT)

TURPENTINE CONDENSER TRS EMISSION FACTOR = 0.51 LB TRS (AS S)/TON AIR-DRIED UNBLEACHED PULP (AP-42, TABLE 10.1.2-1, P. 10.1-5, 4/77)			
TURPENTINE CONDENSER TRS EMISSION FACTOR = APPROX. 0.41 LB TRS (AS S)/TON AIR-DRIED UNBLEACHED PULP (BEST ENGINEERING JUDGMENT)			
POTENTIAL LB/HR TRS (AS S) FOR TURPENTINE CONDENSER =	105.56*0.414 =	43.7	LB/HR S
POTENTIAL LB/HR SO2 FOR TURPENTINE CONDENSER =	105.56*0.414*2 =	87.4	LB/HR SO2, NO SO2 CONTROL
MAXIMUM ACTUAL LB/HR SO2 FOR TURPENTINE CONDENSER =	105.56*0.414*2*(1-0.4) =	52.4	LB/HR SO2, 40% SO2 REMOVAL EFFICIENCY IN WET SCRUBBER

APPENDIX C

ISCST MODEL COMPUTER PRINTOUTS

ECHO PRINT OF INPUT DATA

```
                 1         2         3         4         5         6         7         8
CARD     12345678901234567890123456789012345678901234567890123456789012345678901234567890

   1     77:8-77TAL:ALL SCS PSDSNAAQS      82 REC.   ALL DAYS. F-1612   8*(BCA3//  )
   2      1 3 1 1 0 1 0 0 0 0 0 1+1 0+1 1 1 0 1 1 001020+1+1+1+1+2
   3           14    00    00   032    15      0    00    00
   4          -0900.     0900.     0000.
   5          -0600.     0900.     0000.
   6          -0300.     0900.     0000.
   7           0000.     0900.     0000.
   8          -0900.     0600.     0000.
   9          -0600.     0600.     0000.
  10          -0300.     0600.     0000.
  11           0000.     0600.     0000.
  12          -0900.     0300.     0000.
  13          -0600.     0300.     0000.
  14          -0300.     0300.     0000.
  15          -0900.     0000.     0000.
  16          -0600.     0000.     0000.
  17          -0900.    -0300.     0000.
  18          -0600.    -0300.     0000.
  19          -0900.    -0600.     0000.
  20          -0600.    -0600.     0000.
  21          -0300.    -0600.     0000.
  22          -0900.    -0900.     0000.
  23          -0600.    -0900.     0000.
  24          -0300.    -0900.     0000.
  25          -0207.    -0584.     0000.
  26          -0262.    -0503.     0000.
  27          -0317.    -0221.     0000.
  28          -0348.    -0128.     0000.
  29          -0364.    -0018.     0000.
  30          -0354.     0085.     0000.
  31          -0348.     0145.     0000.
  32          -0274.     0193.     0000.
  33          -0207.     0244.     0000.
  34          -0201.     0280.     0000.
  35          -0104.     0317.     0000.
  36          -0024.     0378.     0000.
  37           0061.     0433.     0000.
  38           0145.     0395.     0000.
  39           0226.     0329.     0000.
  40           0287.     0335.     0000.
  41           0364.     0299.     0000.
  42           0300.     0900.     0000.
  43           0600.     0900.     0000.
  44           0900.     0900.     0000.
  45           0300.     0600.     0000.
  46           0600.     0600.     0000.
  47           0900.     0600.     0000.
  48           0900.     0300.     0000.
  49           0900.     0000.     0000.
  50           0900.    -0300.     0000.

                 1         2         3         4         5         6         7         8
        12345678901234567890123456789012345678901234567890123456789012345678901234567890
```

ECHO PRINT OF INPUT DATA

```
                 1         2         3         4         5         6         7         8
CARD     12345678901234567890123456789012345678901234567890123456789012345678901234567890

  51          0000.     -0600.     0000.
  52          0500.     -0600.     0000.
  53          0600.     -0600.     0000.
  54          0700.     -0600.     0000.
  55          0800.     -0900.     0000.
  56          0300.     -0900.     0000.
  57          0600.     -0900.     0000.
  58          0900.     -0900.     0000.
  59          0500.      0300.     0000.
  60          0600.      0300.     0000.
  61          0700.      0300.     0000.
  62          0800.      0300.     0000.
  63          0900.      0200.     0000.
  64          0900.      0100.     0000.
  65          0900.     -0100.     0000.
  66          0900.     -0200.     0000.
  67          0900.     -0400.     0000.
  68          0900.     -0500.     0000.
  69          0800.     -0600.     0000.
  70          0700.     -0600.     0000.
  71          0500.     -0600.     0000.
  72          0400.     -0600.     0000.
  73          0200.     -0600.     0000.
  74          0100.     -0600.     0000.
  75         -0750.     -0600.     0000.
  76         -0100.     -0550.     0000.
  77         -0150.     -0475.     0000.
  78        -46000.      7000.     0000.
  79        -44000.      7000.     0000.
  80        -46000.      5000.     0000.
  81        -44000.      5000.     0000.
  82        -46000.      3000.     0000.
  83        -44000.      3000.     0000.
  84        -46000.      1000.     0000.
  85        -44000.      1000.     0000.
  86         1   1   1   1   1   1   1   1   1   1   1   2   2
  87       2001  2002  2003  2004  3001  3002  3003  3004  3005  3006  3007  1001 -2004
  88       2001 -3007
  89        7.6         1.0001     3.0000     3.0000     4.5000    10.5000
  90      1000000.
  91      11111111111111111111111111111111111111111111111111111111111111111111111111111111
  92      11111111111111111111111111111111111111111111111111111111111111111111111111111111
  93      11111111111111111111111111111111111111111111111111111111111111111111111111111111
  94      11111111111111111111111111111111111111111111111111111111111111111111111111111111
  95      11111111111111111111111111111111111111111110
  96       95805     77 13801     77
  97       100100  0 -0.3750  0034.  0020. 000.0 29.26 339.0  7.48  1.22 45.87 33.88 33.88
  98       100200  0 -0.5166  0075.  0039. 000.0 29.26 340.0 11.12  1.22 45.87 33.88 33.88
  99       100300  0 -0.5166  0070.  0093. 000.0 29.26 347.0  9.70  1.22 45.87 33.88 33.88
 100       200100  0  2.5326  0258.  0084. 000.0 53.10 477.0  8.18  2.21 22.86 27.84 27.84

                 1         2         3         4         5         6         7         8
          12345678901234567890123456789012345678901234567890123456789012345678901234567890
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ECHO PRINT OF INPUT DATA

```
                1         2         3         4         5         6         7         8
CARD    12345678901234567890123456789012345678901234567890123456789012345678901234567890

 101     200200  0  0.0344 -0075. -0033. 000.0 49.58 345.0  9.80  1.22 45.87 33.88 33.88
 102     200300  0  0.1008  0000.  0000. 000.0 66.58 363.0 18.46  3.96 45.87 33.88 33.88
 103     200400  0127.0080  0000.  0000. 000.0 66.58 363.0 18.46  3.96 45.87 33.88 33.88
 104     300100  0 55.3574,  0061.  0014. 000.0 63.58 444.0 10.82  3.35 45.87 33.88 33.88
 105     300200  0 52.0467 -0014. -0019. 000.0 65.58 411.0 14.66  2.74 45.87 33.88 33.88
 106     300300  0178.0593 -0094. -0026. 000.0 63.58 406.0 17.40  2.90 45.87 33.88 33.88
 107     300400  0  0.4256  0023.  0032. 000.0 43.28 350.0 11.86  0.91 45.87 33.88 33.88
 108     300500  0  0.3591 -0066.  0000. 000.0 42.67 346.0  8.97  1.22 45.87 33.88 33.88
 109     300600  0  0.5453 -0075. -0033. 000.0 49.58 345.0  9.80  1.22 45.87 33.88 33.88
 110     300700  0262.7377  0000.  0000. 000.0 63.58 363.0 18.46  3.96 45.87 33.88 33.88

                1         2         3         4         5         6         7         8
        12345678901234567890123456789012345678901234567890123456789012345678901234567890
```

CALCULATE (CONCENTRATION=1,DEPOSITION=2)	ISW(1) = 1
RECEPTOR GRID SYSTEM (RECTANGULAR=1 OR 3, POLAR=2 OR 4)	ISW(2) = 3
DISCRETE RECEPTOR SYSTEM (RECTANGULAR=1,POLAR=2)	ISW(3) = 1
TERRAIN ELEVATIONS ARE READ (YES=1,NO=0)	ISW(4) = 1
CALCULATIONS ARE WRITTEN TO TAPE (YES=1,NO=0)	ISW(5) = 0
LIST ALL INPUT DATA (NO=0,YES=1,MET DATA ALSO=2)	ISW(6) = 1
COMPUTE AVERAGE CONCENTRATION (OR TOTAL DEPOSITION)	
WITH THE FOLLOWING TIME PERIODS:	
HOURLY (YES=1,NO=0)	ISW(7) = 0
2-HOUR (YES=1,NO=0)	ISW(8) = 0
3-HOUR (YES=1,NO=0)	ISW(9) = 1
4-HOUR (YES=1,NO=0)	ISW(10) = 0
6-HOUR (YES=1,NO=0)	ISW(11) = 0
8-HOUR (YES=1,NO=0)	ISW(12) = 0
12-HOUR (YES=1,NO=0)	ISW(13) = 0
24-HOUR (YES=1,NO=0)	ISW(14) = 1
PRINT 'N'-DAY TABLE(S) (YES=1,NO=0)	ISW(15) = 1
PRINT THE FOLLOWING TYPES OF TABLES WHOSE TIME PERIODS ARE	
SPECIFIED BY ISW(7) THROUGH ISW(14):	
DAILY TABLES (YES=1,NO=0)	ISW(16) = 0
HIGHEST & SECOND HIGHEST TABLES (YES=1,NO=0)	ISW(17) = 1
MAXIMUM 50 TABLES (YES=1,NO=0)	ISW(18) = 1
METEOROLOGICAL DATA INPUT METHOD (PRE-PROCESSED=1,CARD=2)	ISW(19) = 1
RURAL-URBAN OPTION (RU.=0,UR. MODE 1=1,UR. MODE 2=2,UR. MODE 3=3)	ISW(20) = 0
WIND PROFILE EXPONENT VALUES (DEFAULTS=1,USER ENTERS=2,3)	ISW(21) = 1
VERTICAL POT. TEMP. GRADIENT VALUES (DEFAULTS=1,USER ENTERS=2,3)	ISW(22) = 1
SCALE EMISSION RATES FOR ALL SOURCES (NO=0,YES>0)	ISW(23) = 0
PROGRAM CALCULATES FINAL PLUME RISE ONLY (YES=1,NO=2)	ISW(24) = 1
PROGRAM ADJUSTS ALL STACK HEIGHTS FOR DOWNWASH (YES=2,NO=1)	ISW(25) = 2
PROGRAM USES BUOYANCY INDUCED DISPERSION (YES=1,NO=2)	ISW(26) = 1
CONCENTRATIONS DURING CALM PERIODS SET = 0 (YES=1,NO=2)	ISW(27) = 1
REG. DEFAULT OPTION CHOSEN (YES=1,NO=2)	ISW(28) = 1
TYPE OF POLLUTANT TO BE MODELLED (1=SO2,2=OTHER)	ISW(29) = 1
DEBUG OPTION CHOSEN (1=YES,2=NO)	ISW(30) = 2
NUMBER OF INPUT SOURCES	NSOURC = 14
NUMBER OF SOURCE GROUPS (=0,ALL SOURCES)	NGROUP = 13
TIME PERIOD INTERVAL TO BE PRINTED (=0,ALL INTERVALS)	IPERD = 0
NUMBER OF X (RANGE) GRID VALUES	NXPNTS = 0
NUMBER OF Y (THETA) GRID VALUES	NYPNTS = 0
NUMBER OF DISCRETE RECEPTORS	NXNYPT = 82
SOURCE EMISSION RATE UNITS CONVERSION FACTOR	TK=0.100000E 07
HEIGHT ABOVE GROUND AT WHICH WIND SPEED WAS MEASURED	ZR = 7.60 METERS
LOGICAL UNIT NUMBER OF METEOROLOGICAL DATA	IMET = 9
DECAY COEFFICIENT FOR PHYSICAL OR CHEMICAL DEPLETION	DECAY =0.
SURFACE STATION NO.	ISS = 93805
YEAR OF SURFACE DATA	ISY = 77
UPPER AIR STATION NO.	IUS = 13861
YEAR OF UPPER AIR DATA	IUY = 77
ALLOCATED DATA STORAGE	LIMIT = 43500 WORDS
REQUIRED DATA STORAGE FOR THIS PROBLEM RUN	MIMIT = 20372 WORDS

*** 77:B-77TAL:ALL SCS PSD/NAAQS 82 REC. ALL DAYS. F-1612 ***

*** METEOROLOGICAL DAYS TO BE PROCESSED ***
(IF=1)

```
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 0
```

*** NUMBER OF SOURCE NUMBERS REQUIRED TO DEFINE SOURCE GROUPS ***
(NSOGRP)

1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 2, 2,

*** SOURCE NUMBERS DEFINING SOURCE GROUPS ***
(ISSOR)

2001, 2002, 2003, 2004, 3001, 3002, 3003, 3004, 3005, 3006, 3007, 1001, -2004, 2001,
-3007,

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.00, 3.00, 5.00, 8.50, 10.50,

*** WIND PROFILE EXPONENTS ***

STABILITY CATEGORY	WIND SPEED CATEGORY 1	2	3	4	5	6
A	0.70000E-01	0.70000E-01	0.70000E-01	0.70000E-01	0.70000E-01	0.70000E-01
B	0.70000E-01	0.70000E-01	0.70000E-01	0.70000E-01	0.70000E-01	0.70000E-01
C	0.10000E 00	0.10000E 00	0.10000E 00	0.10000E 00	0.10000E 00	0.10000E 00
D	0.15000E 00	0.15000E 00	0.15000E 00	0.15000E 00	0.15000E 00	0.15000E 00
E	0.35000E 00	0.35000E 00	0.35000E 00	0.35000E 00	0.35000E 00	0.35000E 00
F	0.55000E 00	0.55000E 00	0.55000E 00	0.55000E 00	0.55000E 00	0.55000E 00

*** VERTICAL POTENTIAL TEMPERATURE GRADIENTS ***
(DEGREES KELVIN PER METER)

STABILITY CATEGORY	WIND SPEED CATEGORY 1	2	3	4	5	6
A	0.	0.	0.	0.	0.	0.
B	0.	0.	0.	0.	0.	0.
C	0.	0.	0.	0.	0.	0.
D	0.	0.	0.	0.	0.	0.
E	0.20000E-01	0.20000E-01	0.20000E-01	0.20000E-01	0.20000E-01	0.20000E-01
F	0.35000E-01	0.35000E-01	0.35000E-01	0.35000E-01	0.35000E-01	0.35000E-01

*** X,Y COORDINATES OF DISCRETE RECEPTORS ***
(METERS)

(-900.0,	900.0),	(-600.0,	900.0),	(-300.0,	900.0),	(0. ,	900.0),	(-900.0,	600.0),
(-600.0,	600.0),	(-300.0,	600.0),	(0. ,	600.0),	(-900.0,	300.0),	(-600.0,	300.0),
(-300.0,	300.0),	(-900.0,	0.),	(-300.0,	0.),	(-900.0,	-300.0),	(-600.0,	-300.0),
(-900.0,	-600.0),	(-600.0,	-600.0),	(-300.0,	-600.0),	(-900.0,	-900.0),	(-600.0,	-900.0),
(-300.0,	-900.0),	(-207.0,	-384.0),	(-262.0,	-335.0),	(-317.0,	-220.0),	(-348.0,	-128.0),
(-384.0,	-18.0),	(-334.0,	55.0),	(-348.0,	146.0),	(-274.0,	195.0),	(-207.0,	244.0),
(-231.0,	220.0),	(-104.0,	317.0),	(-24.0,	370.0),	(61.0,	433.0),	(146.0,	396.0),
(220.0,	329.0),	(287.0,	333.0),	(334.0,	299.0),	(300.0,	900.0),	(600.0,	900.0),
(900.0,	900.0),	(300.0,	600.0),	(600.0,	600.0),	(900.0,	600.0),	(900.0,	300.0),
(900.0,	0.),	(900.0,	-300.0),	(0. ,	-600.0),	(300.0,	-600.0),	(600.0,	-600.0),
(900.0,	-600.0),	(0. ,	-900.0),	(300.0,	-900.0),	(600.0,	-900.0),	(900.0,	-900.0),
(500.0,	500.0),	(200.0,	350.0),	(700.0,	500.0),	(800.0,	500.0),	(900.0,	200.0),
(900.0,	100.0),	(900.0,	-100.0),	(900.0,	-200.0),	(900.0,	-400.0),	(900.0,	-500.0),
(800.0,	-500.0),	(700.0,	-600.0),	(500.0,	-600.0),	(400.0,	-600.0),	(200.0,	-600.0),
(100.0,	-600.0),	(-750.0,	-650.0),	(-100.0,	-550.0),	(-150.0,	-475.0),	(-46000.0,	7000.0),
(-44000.0,	7000.0),	(-46000.0,	5000.0),	(-44000.0,	5000.0),	(-46000.0,	3000.0),	(-44000.0,	3000.0),
(-46000.0,	1000.0),	(-44000.0,	1000.0),	(					

* ELEVATION HEIGHTS IN METERS *
* FOR THE DISCRETE RECEPTOR POINTS *

- X -	- Y -	HGT.	- X -	- Y -	HGT.	- X -	- Y -	HGT.
-900.0	900.0	0.	-300.0	900.0	0.	-300.0	900.0	0.
0.	900.0	0.	-900.0	600.0	0.	-600.0	600.0	0.
-300.0	600.0	0.	0.	600.0	0.	-900.0	300.0	0.
-600.0	300.0	0.	-300.0	300.0	0.	-900.0	0.	0.
-600.0	0.	0.	-900.0	-300.0	0.	-600.0	-300.0	0.
-900.0	-600.0	0.	-300.0	-600.0	0.	-300.0	-600.0	0.
-900.0	-900.0	0.	-600.0	-900.0	0.	-300.0	-900.0	0.
-267.0	-34.0	0.	-262.0	-305.0	0.	-317.0	-220.0	0.
-348.0	-126.0	0.	-384.0	-16.0	0.	-354.0	85.0	0.
-348.0	146.0	0.	-274.0	193.0	0.	-207.0	244.0	0.
-201.0	260.0	0.	-104.0	317.0	0.	-24.0	378.0	0.
61.0	433.0	0.	146.0	376.0	0.	226.0	329.0	0.
267.0	335.0	0.	384.0	299.0	0.	300.0	900.0	0.
600.0	900.0	0.	900.0	900.0	0.	300.0	600.0	0.
600.0	600.0	0.	900.0	600.0	0.	900.0	300.0	0.
900.0	0.	0.	900.0	-300.0	0.	0.	-600.0	0.
300.0	-600.0	0.	300.0	-600.0	0.	900.0	-600.0	0.
0.	-900.0	0.	300.0	-900.0	0.	600.0	-900.0	0.
900.0	-900.0	0.	300.0	300.0	0.	600.0	300.0	0.
700.0	300.0	0.	600.0	300.0	0.	900.0	200.0	0.
900.0	100.0	0.	900.0	-100.0	0.	900.0	-200.0	0.
900.0	-400.0	0.	900.0	-500.0	0.	800.0	-800.0	0.
700.0	-600.0	0.	500.0	-600.0	0.	400.0	-600.0	0.
200.0	-600.0	0.	100.0	-600.0	0.	-750.0	-600.0	0.
-100.0	-550.0	0.	-150.0	-475.0	0.	-40000.0	7000.0	0.
-44000.0	7000.0	0.	-48000.0	5000.0	0.	-44000.0	5000.0	0.
-46000.0	5000.0	0.	-44000.0	3000.0	0.	-46000.0	1000.0	0.
-44000.0	1000.0	0.						

*** SOURCE DATA ***

SOURCE NUMBER	TYPE	WAKE	NUMBER PART. CATS.	EMISSION RATE TYPE=0,1 (GRAMS/SEC) TYPE=2 (GRAMS/SEC) *PER METER**	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	HEIGHT (METERS)	TEMP. TYPE=0 (DEG.K); VERT.DIM TYPE=1 (METERS)	EXIT VEL. TYPE=0 (M/SEC); HORZ.DIM TYPE=1,2 (METERS)	DIAMETER TYPE=0 (METERS)	BLDG. HEIGHT TYPE=0 (METERS)	BLDG. LENGTH TYPE=0 (METERS)	BLDG. WIDTH TYPE=0 (METERS)
1001	0	0	0	-.37800E 00	84.0	30.0	0.	29.26	339.00	7.48	1.22	45.37	33.88	33.88
1002	0	0	0	-.51650E 00	75.0	69.0	0.	29.26	346.00	11.12	1.22	45.37	33.88	33.88
1003	0	0	0	-.51650E 00	70.0	98.0	0.	26.26	347.00	9.70	1.22	45.87	33.88	33.88
2001	0	0	0	0.25326E 01	256.0	84.0	0.	38.10	477.00	8.18	2.21	22.86	27.84	27.84
2002	0	0	0	0.34400E-01	-75.0	-33.0	0.	49.38	345.00	9.80	1.22	45.37	33.88	33.88
2003	0	0	0	0.10080E 00	0.	0.	0.	63.58	365.00	18.46	5.96	45.37	33.88	33.88
2004	0	0	0	0.12701E 03	0.	0.	0.	64.58	365.00	18.46	5.96	45.87	33.88	33.88
3001	0	0	0	0.55357E 02	51.0	14.0	0.	66.58	444.00	10.82	5.35	45.87	33.88	33.88
3002	0	0	0	0.52047E 02	-14.0	-19.0	0.	58.58	411.00	12.86	2.74	45.87	33.88	33.88
3003	0	0	0	0.17806E 03	-94.0	-26.0	0.	56.58	466.00	17.40	2.90	45.87	33.88	33.88
3004	0	0	0	0.42560E 00	23.0	52.0	0.	43.28	350.00	11.86	0.91	45.87	33.88	33.88
3005	0	0	0	0.35910E 00	-56.0	0.	0.	42.67	346.00	8.97	1.22	45.87	33.88	33.88
3006	0	0	0	0.56530E 00	-75.0	-56.0	0.	49.53	345.00	9.80	1.22	45.87	33.88	33.88
3007	0	0	0	0.26274E 03	0.	0.	0.	66.58	365.00	18.46	5.96	45.87	33.88	33.88
* CALM HOURS (=1) FOR DAY 3 *	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
* CALM HOURS (=1) FOR DAY 4 *	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 5 *	0	0	0	0	0	1	0	0	0	1	0	0	0	0	1	0	1	1	1	0	1
* CALM HOURS (=1) FOR DAY 6 *	1	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 8 *	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0	1	1	1	0	0	0
* CALM HOURS (=1) FOR DAY 9 *	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 11 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
* CALM HOURS (=1) FOR DAY 12 *	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 13 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
* CALM HOURS (=1) FOR DAY 16 *	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 17 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
* CALM HOURS (=1) FOR DAY 18 *	1	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 19 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
* CALM HOURS (=1) FOR DAY 20 *	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
* CALM HOURS (=1) FOR DAY 21 *	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 22 *	1	1	1	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
* CALM HOURS (=1) FOR DAY 23 *	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1
* CALM HOURS (=1) FOR DAY 25 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
* CALM HOURS (=1) FOR DAY 26 *	1	1	1	1	0	1	1	1	0	1	0	0	0	0	0	0	0	0	1	0	1	1	0
* CALM HOURS (=1) FOR DAY 27 *	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
* CALM HOURS (=1) FOR DAY 28 *	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 29 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 30 *	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 31 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
* CALM HOURS (=1) FOR DAY 32 *	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 33 *	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0
* CALM HOURS (=1) FOR DAY 34 *	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
* CALM HOURS (=1) FOR DAY 35 *	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 37 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
* CALM HOURS (=1) FOR DAY 38 *	1	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
* CALM HOURS (=1) FOR DAY 39 *	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
* CALM HOURS (=1) FOR DAY 40 *	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 41 *	1	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 42 *	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 43 *	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 44 *	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1

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* CALM HOURS (=1) FOR DAY  45 *  1  1  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY  46 *  1  1  1  1  1  0  0  1  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  47 *  0  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY  48 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0
* CALM HOURS (=1) FOR DAY  50 *  0  0  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  51 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY  52 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY  53 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  54 *  1  1  1  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  55 *  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY  56 *  1  1  1  1  1  0  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY  57 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  59 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  1
* CALM HOURS (=1) FOR DAY  60 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1
* CALM HOURS (=1) FOR DAY  61 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  63 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  64 *  0  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0
* CALM HOURS (=1) FOR DAY  65 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0
* CALM HOURS (=1) FOR DAY  67 *  1  1  1  1  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  68 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0
* CALM HOURS (=1) FOR DAY  70 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0
* CALM HOURS (=1) FOR DAY  72 *  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1
* CALM HOURS (=1) FOR DAY  73 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY  74 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  75 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0
* CALM HOURS (=1) FOR DAY  76 *  1  1  0  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1
* CALM HOURS (=1) FOR DAY  78 *  0  0  0  0  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  79 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0
* CALM HOURS (=1) FOR DAY  80 *  0  0  0  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  81 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY  82 *  1  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  83 *  0  1  1  1  1  1  1  1  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY  84 *  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0
* CALM HOURS (=1) FOR DAY  85 *  1  0  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  86 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0
* CALM HOURS (=1) FOR DAY  88 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY  89 *  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  90 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY  91 *  1  0  1  1  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0
* CALM HOURS (=1) FOR DAY  93 *  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  96 *  0  1  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  97 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY  98 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  1
* CALM HOURS (=1) FOR DAY  99 *  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 100 *  0  0  1  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  1
* CALM HOURS (=1) FOR DAY 101 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 102 *  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 103 *  1  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 104 *  0  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  0
* CALM HOURS (=1) FOR DAY 105 *  0  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 106 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  1
* CALM HOURS (=1) FOR DAY 107 *  1  0  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  1
* CALM HOURS (=1) FOR DAY 108 *  1  1  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  1
* CALM HOURS (=1) FOR DAY 109 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 110 *  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 111 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0
* CALM HOURS (=1) FOR DAY 112 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0
* CALM HOURS (=1) FOR DAY 113 *  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 114 *  0  0  0  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 115 *  0  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 116 *  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 117 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  1
```

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* CALM HOURS (=1) FOR DAY 119 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY 120 *  1  1  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY 121 *  0  0  0  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  0
* CALM HOURS (=1) FOR DAY 122 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 123 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0
* CALM HOURS (=1) FOR DAY 124 *  1  1  1  1  1  1  0  0  0  0  0  1  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 125 *  1  1  1  1  1  0  1  1  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 126 *  1  1  1  1  1  0  1  1  0  0  0  0  0  0  0  0  0  1  0  1  1
* CALM HOURS (=1) FOR DAY 127 *  1  1  1  0  0  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 128 *  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 132 *  0  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 133 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 134 *  0  0  0  0  1  1  1  0  0  0  0  0  0  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 135 *  0  0  1  1  1  0  1  0  0  0  0  0  0  0  0  1  0  0  0  1  1
* CALM HOURS (=1) FOR DAY 136 *  1  0  0  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY 137 *  0  0  0  0  1  1  1  0  0  0  0  0  0  0  1  0  0  0  0  1  0
* CALM HOURS (=1) FOR DAY 138 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 139 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1
* CALM HOURS (=1) FOR DAY 140 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 141 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  0
* CALM HOURS (=1) FOR DAY 142 *  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 145 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 146 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  0  0
* CALM HOURS (=1) FOR DAY 147 *  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  0  1  0
* CALM HOURS (=1) FOR DAY 148 *  1  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  0  1  1
* CALM HOURS (=1) FOR DAY 149 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 150 *  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 151 *  0  1  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1
* CALM HOURS (=1) FOR DAY 152 *  0  1  1  0  0  1  1  0  0  0  0  0  0  0  0  1  0  1  1  1  0
* CALM HOURS (=1) FOR DAY 153 *  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 154 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1
* CALM HOURS (=1) FOR DAY 155 *  1  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  1  0  0  0  1
* CALM HOURS (=1) FOR DAY 156 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 158 *  0  0  0  1  0  1  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0
* CALM HOURS (=1) FOR DAY 159 *  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1
* CALM HOURS (=1) FOR DAY 160 *  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  1  1  1  0  1
* CALM HOURS (=1) FOR DAY 161 *  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0
* CALM HOURS (=1) FOR DAY 162 *  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 163 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  1
* CALM HOURS (=1) FOR DAY 164 *  1  0  0  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 165 *  1  1  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 166 *  1  1  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 167 *  0  0  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  0
* CALM HOURS (=1) FOR DAY 168 *  1  0  1  1  1  1  0  0  1  0  0  0  0  0  0  0  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 169 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 170 *  1  1  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0
* CALM HOURS (=1) FOR DAY 171 *  1  1  1  0  1  1  0  0  0  0  0  0  0  0  1  0  0  0  1  1  0
* CALM HOURS (=1) FOR DAY 172 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 173 *  1  0  0  0  1  1  1  0  0  0  0  0  0  0  0  1  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 174 *  1  0  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 175 *  1  1  0  1  0  1  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1
* CALM HOURS (=1) FOR DAY 176 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 177 *  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 178 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 179 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0
* CALM HOURS (=1) FOR DAY 180 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 181 *  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 132 *  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 133 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1
* CALM HOURS (=1) FOR DAY 134 *  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1
* CALM HOURS (=1) FOR DAY 185 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 136 *  1  0  1  1  0  1  1  0  0  0  0  0  0  0  0  0  0  1  0  0  1
* CALM HOURS (=1) FOR DAY 137 *  1  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1
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* CALM HOURS (=1) FOR DAY 138 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1
* CALM HOURS (=1) FOR DAY 139 *  0  1  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 140 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY 141 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1
* CALM HOURS (=1) FOR DAY 142 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 143 *  1  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 144 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 145 *  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 147 *  1  0  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0
* CALM HOURS (=1) FOR DAY 201 *  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 202 *  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 203 *  1  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 204 *  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 205 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  1
* CALM HOURS (=1) FOR DAY 206 *  0  1  0  0  1  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 207 *  1  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 208 *  1  1  1  1  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0
* CALM HOURS (=1) FOR DAY 209 *  0  0  0  0  1  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 210 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 211 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1
* CALM HOURS (=1) FOR DAY 212 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 213 *  1  1  1  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  0  1
* CALM HOURS (=1) FOR DAY 214 *  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  0
* CALM HOURS (=1) FOR DAY 215 *  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 216 *  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0
* CALM HOURS (=1) FOR DAY 217 *  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 218 *  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0
* CALM HOURS (=1) FOR DAY 219 *  0  0  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 220 *  0  0  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 221 *  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 222 *  0  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 223 *  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  0  0
* CALM HOURS (=1) FOR DAY 224 *  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1
* CALM HOURS (=1) FOR DAY 225 *  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 227 *  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 228 *  1  0  0  0  1  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 229 *  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 230 *  1  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 231 *  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  0  1
* CALM HOURS (=1) FOR DAY 232 *  1  0  0  0  0  0  1  0  0  0  0  0  0  1  0  0  0  0  0  1  1  0  1  1  0
* CALM HOURS (=1) FOR DAY 233 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  0
* CALM HOURS (=1) FOR DAY 234 *  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 235 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 236 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 237 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0
* CALM HOURS (=1) FOR DAY 247 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1
* CALM HOURS (=1) FOR DAY 248 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1
* CALM HOURS (=1) FOR DAY 249 *  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0
* CALM HOURS (=1) FOR DAY 250 *  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 251 *  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 252 *  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 253 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 254 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 255 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 256 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  1  1
* CALM HOURS (=1) FOR DAY 257 *  1  1  0  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  0  0  0  1  0
* CALM HOURS (=1) FOR DAY 258 *  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 259 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 260 *  0  0  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 261 *  0  0  1  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0  1
* CALM HOURS (=1) FOR DAY 262 *  1  1  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 263 *  1  1  1  1  1  1  1  1  0  0  1  0  0  0  0  0  0  0  0  1  1  1  0  1
* CALM HOURS (=1) FOR DAY 264 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
```

```
* CALM HOURS (=1) FOR DAY 255 *  1  0  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 256 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 257 *  0  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1
* CALM HOURS (=1) FOR DAY 258 *  1  1  1  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 259 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1
* CALM HOURS (=1) FOR DAY 270 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 271 *  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 272 *  1  1  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 273 *  1  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 274 *  0  0  0  0  0  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  1  0  0  0  1
* CALM HOURS (=1) FOR DAY 275 *  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0
* CALM HOURS (=1) FOR DAY 277 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 278 *  0  1  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 279 *  1  1  1  1  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 280 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 281 *  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0
* CALM HOURS (=1) FOR DAY 282 *  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 283 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0
* CALM HOURS (=1) FOR DAY 284 *  1  0  1  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 287 *  1  1  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  1
* CALM HOURS (=1) FOR DAY 288 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  1
* CALM HOURS (=1) FOR DAY 289 *  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0
* CALM HOURS (=1) FOR DAY 290 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 291 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  1
* CALM HOURS (=1) FOR DAY 292 *  0  0  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  1
* CALM HOURS (=1) FOR DAY 293 *  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  1
* CALM HOURS (=1) FOR DAY 294 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0
* CALM HOURS (=1) FOR DAY 295 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0
* CALM HOURS (=1) FOR DAY 296 *  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 298 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0
* CALM HOURS (=1) FOR DAY 299 *  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 300 *  1  0  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 301 *  1  0  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  1
* CALM HOURS (=1) FOR DAY 302 *  1  1  1  1  1  1  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 303 *  0  1  1  1  0  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 305 *  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 306 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 307 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1
* CALM HOURS (=1) FOR DAY 308 *  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 309 *  0  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 310 *  1  1  1  1  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 311 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  1
* CALM HOURS (=1) FOR DAY 312 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 313 *  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0
* CALM HOURS (=1) FOR DAY 315 *  0  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 316 *  0  1  1  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 317 *  0  0  0  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1
* CALM HOURS (=1) FOR DAY 318 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 319 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 320 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0
* CALM HOURS (=1) FOR DAY 321 *  0  0  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 323 *  0  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0
* CALM HOURS (=1) FOR DAY 325 *  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 326 *  1  1  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0
* CALM HOURS (=1) FOR DAY 327 *  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  1  0  1  1  0
* CALM HOURS (=1) FOR DAY 328 *  0  0  0  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0
* CALM HOURS (=1) FOR DAY 329 *  0  0  1  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 330 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  0  1
* CALM HOURS (=1) FOR DAY 331 *  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1
* CALM HOURS (=1) FOR DAY 332 *  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 333 *  1  1  1  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 334 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0
* CALM HOURS (=1) FOR DAY 335 *  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
```

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* CALM HOURS (=1) FOR DAY 356 *  0  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 357 *  1  1  0  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 358 *  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 361 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1
* CALM HOURS (=1) FOR DAY 362 *  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1
* CALM HOURS (=1) FOR DAY 363 *  1  0  0  0  0  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 364 *  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 365 *  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  0  0
* CALM HOURS (=1) FOR DAY 366 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  0
* CALM HOURS (=1) FOR DAY 367 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0
* CALM HOURS (=1) FOR DAY 368 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 369 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 370 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 371 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 372 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 373 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 374 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 375 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
```

*** 77:b-//TAL:ALL SCS P3D&NAAUS 82 REC. ALL DAYS. F-1612 ***

* 365-DAY AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM SOURCES: 1001, -2004,
* FOR THE DISCRETE RECEPTOR POINTS *

- X -	- Y -	CON.	- X -	- Y -	CON.	- X -	- Y -	CON.
-900.0	900.0	0.92672	-600.0	900.0	0.81096	-300.0	900.0	1.21519
0.	900.0	2.00297	-900.0	600.0	0.97151	-600.0	600.0	0.65125
-300.0	600.0	0.74438	0.	600.0	2.27347	-900.0	300.0	1.02107
-600.0	300.0	0.65639	-300.0	300.0	0.19693	-900.0	0.	1.29652
-600.0	0.	1.21106	-900.0	-300.0	1.57414	-600.0	-300.0	1.26057
-900.0	-600.0	1.56771	-600.0	-600.0	0.66912	-300.0	-600.0	0.64921
-900.0	-900.0	1.14936	-300.0	-900.0	0.94783	-300.0	-900.0	0.95044
-207.0	-364.0	0.66315	-262.0	-303.0	0.72491	-317.0	-220.0	1.44446
-348.0	-128.0	1.81466	-334.0	-18.0	2.36925	-354.0	65.0	0.84174
-346.0	146.0	0.52952	-274.0	195.0	-0.09489	-207.0	244.0	-0.32983
-201.0	250.0	-0.02906	-104.0	317.0	1.39456	-24.0	378.0	3.50214
61.0	433.0	1.29093	146.0	396.0	0.55595	226.0	329.0	0.70995
267.0	335.0	0.66745	384.0	299.0	0.25618	300.0	900.0	1.13868
600.0	900.0	0.85356	900.0	900.0	0.80875	300.0	600.0	0.77931
500.0	600.0	0.53756	900.0	600.0	0.80260	900.0	300.0	0.66946
900.0	0.	0.65536	900.0	-300.0	0.56816	0.	-600.0	2.38187
300.0	-600.0	1.17309	600.0	-600.0	0.85818	900.0	-600.0	1.01502
0.	-900.0	2.04673	300.0	-900.0	1.27994	600.0	-900.0	1.34903
900.0	-900.0	1.36704	500.0	300.0	0.42839	600.0	300.0	0.42717
700.0	300.0	0.53277	300.0	300.0	0.63940	900.0	200.0	0.51526
900.0	100.0	0.59930	900.0	-100.0	0.51946	900.0	-200.0	0.55552
900.0	-400.0	0.57396	900.0	-300.0	0.85291	800.0	-600.0	1.04476
700.0	-600.0	0.93063	500.0	-600.0	1.07674	400.0	-600.0	1.08637
200.0	-600.0	1.00653	100.0	-600.0	1.02544	-750.0	-600.0	1.23360
-100.0	-550.0	1.14577	-150.0	-475.0	0.77297	-46000.0	7000.0	0.21863
-44000.0	7000.0	0.22442	-46000.0	5000.0	0.20942	-44000.0	5000.0	0.22005
-46000.0	5000.0	0.22371	-44000.0	5000.0	0.23570	-46000.0	1000.0	0.22781
-44000.0	1000.0	0.23783						

*** 73:3-TOTAL:ALL SCS PERIODS 32 REC. ALL DAYS. F-1012 ***

* 50 MAXIMUM 3-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *

* FROM SOURCES: 1001, -2004,

RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)	RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)
1	165.49470	5	37	-24.0	378.0	26	104.88877	1	55	-24.0	378.0
2	160.42509	3	54	-24.0	378.0	27	104.17210	8	94	146.0	396.0
3	149.24536	4	241	-384.0	-18.0	28	103.13954	5	113	-24.0	378.0
4	147.53427	4	94	-24.0	378.0	29	102.98583	4	87	-104.0	317.0
5	138.15826	4	71	-104.0	317.0	30	102.82471	7	131	-384.0	-18.0
6	137.09491	1	137	-300.0	300.0	31	102.33448	6	80	61.0	433.0
7	131.24562	4	88	-24.0	378.0	32	101.12796	5	63	-24.0	378.0
8	130.63726	8	143	-282.0	-305.0	33	99.87056	5	86	-24.0	378.0
9	129.35117	1	131	-384.0	-18.0	34	99.53255	1	111	-354.0	85.0
10	125.92006	4	168	900.0	200.0	35	97.79599	6	71	-24.0	378.0
11	122.33607	2	244	-317.0	-220.0	36	96.96485	5	9	-104.0	317.0
12	120.95752	4	138	900.0	300.0	37	96.86850	6	86	-24.0	378.0
13	119.86433	1	198	-384.0	-18.0	38	96.19096	7	143	-317.0	-220.0
14	119.18359	5	38	-24.0	378.0	39	96.05927	5	92	-24.0	378.0
15	117.79392	1	259	-384.0	-18.0	40	95.10352	5	125	-900.0	900.0
16	117.32522	5	112	-24.0	378.0	41	94.69116	2	196	-384.0	-18.0
17	115.30206	7	71	-24.0	378.0	42	94.55067	6	216	-24.0	378.0
18	110.74308	6	56	-24.0	378.0	43	94.42390	5	62	-104.0	317.0
19	110.05377	4	138	900.0	100.0	44	93.25196	8	142	-384.0	-18.0
20	110.43151	8	218	-384.0	-18.0	45	92.87067	1	221	-384.0	-18.0
21	109.55936	4	112	-104.0	317.0	46	92.15067	6	87	61.0	433.0
22	107.51557	4	138	300.0	300.0	47	91.87031	6	88	-104.0	317.0
23	105.74420C	2	215	-348.0	146.0	48	91.76521	5	244	-900.0	-900.0
24	105.68632	6	353	-24.0	378.0	49	90.93039	2	266	-317.0	-220.0
25	105.53552	7	87	61.0	433.0	50	90.52267	1	226	-384.0	-18.0

*** 77:0-77TAL:ALL SCS P3D&NAAAS 32 REC. ALL DAYS. F-1612 ***

* SC MAXIMUM 24-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *

* FROM SOURCES: 1001, -2004,

RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)	RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)
1	58.35413	1	151	-384.0	-18.0	26	27.63285	1	62	-104.0	317.0
2	47.55201	1	87	-24.0	378.0	27	27.16279C	1	45	-24.0	378.0
3	46.51952	1	241	-384.0	-18.0	28	26.96863	1	246	-348.0	-128.0
4	43.06139C	1	38	-24.0	378.0	29	26.58427	1	87	61.0	433.0
5	42.93760C	1	58	-24.0	378.0	30	26.08400	1	245	-343.0	-128.0
6	40.42516	1	143	-264.0	-305.0	31	26.04210C	1	111	-354.0	85.0
7	39.41854	1	244	-317.0	-220.0	32	26.01568	1	92	-24.0	378.0
8	39.17499C	1	113	-24.0	378.0	33	25.77810C	1	112	-24.0	378.0
9	38.33935C	1	65	-24.0	378.0	34	25.13023C	1	218	-384.0	-18.0
10	38.31264C	1	54	-104.0	317.0	35	25.05898	1	77	500.0	300.0
11	37.44460	1	94	146.0	596.0	36	24.95547C	1	188	900.0	300.0
12	36.53743C	1	56	-24.0	378.0	37	24.55578C	1	142	-384.0	-18.0
13	36.37956C	1	54	-24.0	378.0	38	24.12791C	1	157	-300.0	300.0
14	36.12329	1	198	-364.0	-18.0	39	24.01689C	1	355	-24.0	378.0
15	35.19299C	1	354	-104.0	317.0	40	23.70818C	1	63	0.	600.0
16	34.09855	1	94	-24.0	378.0	41	23.63997C	1	110	-348.0	146.0
17	33.33851C	1	6	-24.0	378.0	42	23.55068	1	94	61.0	433.0
18	31.21701	1	71	-24.0	378.0	43	23.24106	1	66	0.	-600.0
19	30.21663	1	240	-364.0	-18.0	44	23.05255C	1	188	900.0	200.0
20	30.46021C	1	111	-24.0	378.0	45	22.79298C	1	99	-207.0	-384.0
21	29.55511	1	243	-364.0	-18.0	46	22.75188	1	242	-384.0	-18.0
22	28.59346C	1	50	207.0	555.0	47	22.65265C	1	153	0.	-900.0
23	28.56812C	1	86	0.	600.0	48	22.45351	1	244	-750.0	-600.0
24	28.05597C	1	100	-343.0	-128.0	49	22.41193C	1	216	-24.0	378.0
25	28.05400	1	71	-104.0	317.0	50	22.38455	1	259	-384.0	-18.0

*** 77:[illegible]/TAL:ALL SCS PERENNIALS 62 REC. ALL DAYS. F-1612 ***

* 365-DAY AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM SOURCES: 2001, -3007,
* FOR THE DISCRETE RECEPTOR POINTS *

- X -	- Y -	CON.	- X -	- Y -	CON.	- X -	- Y -	CON.	
-900.0	900.0	8.62051	-600.0	900.0	8.67847	-300.0	900.0	9.68236	3
0.	900.0	10.35656	-900.0	600.0	7.90572	-600.0	600.0	6.10831	
-300.0	600.0	8.08661	0.	600.0	18.66268	-900.0	300.0	9.32159	
-600.0	300.0	8.45527	-300.0	300.0	8.52189	-900.0	0.	11.53246	12
-600.0	0.	13.52545	-900.0	-300.0	12.17426	-600.0	-300.0	10.97901	
-900.0	-600.0	10.90796	-300.0	-600.0	6.89175	-300.0	-600.0	6.52545	
-900.0	-900.0	7.60643	-600.0	-900.0	7.03426	-300.0	-900.0	7.72654	21
-207.0	-334.0	8.52077	-262.0	-305.0	8.02534	-317.0	-220.0	12.09157	
-348.0	-128.0	10.62021	-564.0	-10.0	20.04019	-354.0	55.0	14.09816	
-348.0	146.0	11.85130	-274.0	195.0	8.73371	-207.0	244.0	8.52784	30
-201.0	260.0	9.31176	-104.0	317.0	18.37174	-24.0	378.0	26.49211	
61.0	433.0	19.86687	146.0	390.0	13.19494	220.0	329.0	10.48299	
207.0	335.0	9.10391	354.0	279.0	8.15925	300.0	900.0	9.21312	39
600.0	900.0	7.04208	900.0	900.0	6.32847	300.0	600.0	8.31202	
600.0	600.0	6.01030	700.0	600.0	7.41658	900.0	300.0	6.29092	
900.0	0.	5.79426	900.0	-300.0	5.03037	0.	-600.0	19.99990	
300.0	-600.0	11.34155	500.0	-600.0	9.25708	900.0	-600.0	8.28642	51
0.	-900.0	17.52909	300.0	-900.0	10.73652	600.0	-900.0	10.93421	
700.0	-900.0	10.21054	300.0	300.0	8.07077	600.0	300.0	7.00324	
700.0	300.0	6.74066	300.0	300.0	6.53043	900.0	200.0	5.36097	60
900.0	100.0	5.63818	700.0	-100.0	4.73742	900.0	-200.0	4.82421	
900.0	-400.0	5.52975	900.0	-300.0	7.10077	800.0	-600.0	8.72109	
700.0	-600.0	8.87835	500.0	-600.0	10.10707	400.0	-600.0	10.76819	
200.0	-600.0	12.15112	100.0	-600.0	15.42741	-750.0	-600.0	8.78289	72
-100.0	-550.0	14.53494	-150.0	-475.0	10.92506	-46000.0	7000.0	1.18692	75
-44000.0	7000.0	1.21844	-46000.0	5000.0	1.13804	-44000.0	5000.0	1.19663	
-46000.0	5000.0	1.21951	-44000.0	5000.0	1.27355	-46000.0	1000.0	1.23495	
-44000.0	1000.0	1.29013							

*** 77:6-//TAL:ALL SCS PSD&NAAQS 82 REC. ALL DAYS. F-1612 ***

* 50 MAXIMUM 3-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *

* FROM SOURCES: 2001, -3007,

RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)
1	734.67450	4	241	-384.0	-18.0
2	623.48020	8	34	-24.0	378.0
3	622.16145	5	87	-24.0	378.0
4	611.82156	4	94	-24.0	378.0
5	594.17593	8	218	-384.0	-18.0
6	586.94730	1	259	-384.0	-18.0
7	581.89655	1	131	-384.0	-18.0
8	577.47188	4	138	900.0	300.0
9	576.60178	8	143	-282.0	-303.0
10	570.60019	4	136	700.0	200.0
11	565.69701	2	244	-317.0	-220.0
12	550.73434	1	245	-384.0	-128.0
13	522.24010	4	168	300.0	300.0
14	521.89501	4	71	-104.0	317.0
15	514.29247	1	178	-384.0	-18.0
16	512.91338	7	143	-317.0	-220.0
17	504.27964	5	123	-900.0	900.0
18	503.66066	5	112	-24.0	378.0
19	499.74012	2	304	-317.0	-220.0
20	499.69317	7	71	-24.0	378.0
21	495.39426	5	201	-900.0	900.0
22	493.09200	4	38	-24.0	378.0
23	492.54258	8	74	140.0	396.0
24	492.11745C	8	121	-384.0	-18.0
25	490.50434	5	244	-900.0	-900.0
26	486.83446	5	113	-24.0	378.0
27	486.32555	5	88	-24.0	378.0
28	483.09992	2	198	-384.0	-18.0
29	475.00344	4	188	900.0	100.0
30	469.15536	5	86	-24.0	378.0
31	466.18118	7	87	61.0	433.0
32	465.45831	5	92	-24.0	378.0
33	465.26551	1	111	-354.0	85.0
34	464.41075	7	131	-384.0	-18.0
35	463.98223	6	56	-24.0	378.0
36	463.54347	1	55	-24.0	378.0
37	460.44297	4	241	-600.0	0.
38	460.01772	1	240	-384.0	-18.0
39	457.71922	5	178	500.0	-600.0
40	454.29870	4	87	-104.0	317.0
41	450.10518	1	137	-300.0	300.0
42	446.63368	5	180	900.0	-600.0
43	444.59064	6	86	-24.0	378.0
44	443.88795	6	353	-24.0	378.0
45	443.70525	5	83	-24.0	378.0
46	443.57774	4	242	-384.0	-18.0
47	441.01120	4	112	-104.0	317.0
48	438.26870	5	178	600.0	-600.0
49	437.13155	6	71	-24.0	378.0
50	430.76711	4	155	-900.0	300.0

*** 77:0-//TAL:ALL SCS FSD&NAAQS 32 REC. ALL DAYS. F-1612 ***

* HIGHEST 24-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM SOURCES: 2001, -3007,
* FOR THE DISCRETE RECEPTOR POINTS *

- X -	- Y -	CON.	(DAY,PER.)	- X -	- Y -	CON.	(DAY,PER.)
-900.0	900.0	91.19364C	(152, 1)	-600.0	900.0	77.44563C	(184, 1)
-300.0	900.0	85.79394C	(54, 1)	0.	900.0	107.65807C	(86, 1)
-900.0	600.0	118.66057C	(201, 1)	-300.0	600.0	70.92443C	(184, 1)
-300.0	600.0	117.77725C	(54, 1)	0.	600.0	138.89287C	(86, 1)
-900.0	300.0	81.12573C	(110, 1)	-600.0	300.0	84.02005C	(201, 1)
-300.0	300.0	108.52208C	(137, 1)	-900.0	0.	117.89087	(241, 1)
-600.0	0.	140.75555	(241, 1)	-900.0	-300.0	120.79055C	(219, 1)
-300.0	-300.0	123.67640C	(100, 1)	-900.0	-600.0	125.72826	(244, 1)
-300.0	-600.0	107.34300	(143, 1)	-300.0	-600.0	90.30390C	(99, 1)
-900.0	-900.0	114.19363	(143, 1)	-600.0	-900.0	93.68900C	(149, 1)
-300.0	-900.0	80.53722C	(153, 1)	-207.0	-384.0	121.49507C	(99, 1)
-262.0	-305.0	212.63091	(143, 1)	-317.0	-220.0	221.65097	(244, 1)
-348.0	-128.0	188.07972C	(100, 1)	-384.0	-18.0	290.73463	(131, 1)
-354.0	85.0	142.50749C	(111, 1)	-348.0	146.0	129.62135C	(110, 1)
-274.0	195.0	104.21354	(71, 1)	-207.0	244.0	103.64983C	(54, 1)
-201.0	230.0	98.41005C	(54, 1)	-104.0	317.0	221.35298C	(54, 1)
-24.0	378.0	243.80944	(87, 1)	61.0	433.0	186.91072	(94, 1)
149.0	396.0	225.56352	(94, 1)	226.0	329.0	185.70395C	(189, 1)
287.0	355.0	203.68390C	(58, 1)	354.0	299.0	165.01593C	(49, 1)
300.0	900.0	97.66156	(94, 1)	600.0	900.0	128.04275C	(189, 1)
900.0	900.0	87.33562C	(189, 1)	300.0	600.0	104.25762C	(207, 1)
600.0	600.0	73.64869C	(189, 1)	900.0	600.0	115.53741C	(173, 1)
900.0	300.0	135.16574C	(188, 1)	900.0	0.	125.21469C	(203, 1)
900.0	-300.0	88.56142C	(161, 1)	0.	-600.0	151.13292	(276, 1)
300.0	-600.0	98.35519C	(51, 1)	600.0	-600.0	79.59306C	(178, 1)
900.0	-600.0	115.19705C	(189, 1)	0.	-900.0	127.94564C	(153, 1)
300.0	-900.0	81.35236C	(254, 1)	600.0	-900.0	75.25453C	(288, 1)
900.0	-900.0	115.42858C	(179, 1)	300.0	300.0	157.64380	(77, 1)
300.0	300.0	132.41556C	(177, 1)	700.0	300.0	101.25343C	(188, 1)
300.0	300.0	125.88445C	(188, 1)	900.0	200.0	119.79504C	(188, 1)
900.0	100.0	105.46149C	(251, 1)	900.0	-100.0	83.20293C	(160, 1)
900.0	-200.0	73.45923C	(174, 1)	900.0	-400.0	86.51345C	(115, 1)
900.0	-500.0	92.85390C	(180, 1)	800.0	-600.0	101.51709C	(179, 1)
700.0	-600.0	96.33359C	(179, 1)	500.0	-600.0	79.66982C	(178, 1)
400.0	-600.0	73.01025	(340, 1)	200.0	-600.0	92.93371C	(51, 1)
100.0	-600.0	112.83594C	(16, 1)	-750.0	-600.0	132.57315	(244, 1)
-100.0	-550.0	145.37901C	(29, 1)	-150.0	-475.0	115.33505C	(29, 1)
-46000.0	7000.0	11.93559	(324, 1)	-44000.0	7000.0	12.49879	(324, 1)

*** 77:2-77TAL:ALL SCS PSD&NA[illegible] 32 REC. ALL DAYS. F-1612 ***

* HIGHEST 24-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM SOURCES: 2001, -3007,
* FOR THE DISCRETE RECEPTOR POINTS *

- X -	- Y -	CON.	(DAY,PER.)	- X -	- Y -	CON.	(DAY,PER.)
-46000.0	5000.0	10.186440	(63, 1)	-44000.0	5000.0	10.90528	(324, 1)
-46000.0	3000.0	13.26015	(198, 1)	-44000.0	3000.0	13.32227	(198, 1)
-46000.0	1000.0	14.97825	(198, 1)	-44000.0	1000.0	15.58644	(198, 1)

*** 77:0-77TAL:ALL SCS PSDSNAAQS 32 REC. ALL DAYS. F-1612 ***

* 50 MAXIMUM 24-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *

* FROM SOURCES: 2001, -3007,

RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)
1	290.73463	1	151	-384.0	-18.0
2	252.89162	1	241	-384.0	-18.0
3	243.00944	1	87	-24.0	378.0
4	227.69670C	1	38	-24.0	378.0
5	225.56332	1	94	144.0	390.0
6	221.65097	1	244	-317.0	-220.0
7	221.38298C	1	54	-104.0	317.0
8	212.63091	1	143	-262.0	-305.0
9	205.21743	1	240	-384.0	-18.0
10	200.63390C	1	50	267.0	335.0
11	195.94655C	1	115	-24.0	378.0
12	193.11133C	1	63	-24.0	378.0
13	193.11121	1	176	-384.0	-18.0
14	192.57874C	1	36	-24.0	378.0
15	192.57000C	1	34	-24.0	378.0
16	188.07972C	1	100	-348.0	-128.0
17	187.42058	1	94	-24.0	378.0
18	186.91072	1	94	61.0	433.0
19	185.70895C	1	169	226.0	329.0
20	176.00524C	1	169	267.0	335.0
21	175.41050C	1	6	-24.0	378.0
22	175.06309	1	243	-384.0	-18.0
23	172.11620	1	71	-24.0	378.0
24	172.07932	1	71	-104.0	317.0
25	171.74236	1	246	-348.0	-128.0
26	171.41745C	1	68	-104.0	317.0
27	170.49061C	1	364	-104.0	317.0
28	170.05873C	1	213	-384.0	-18.0
29	169.90607C	1	56	-24.0	378.0
30	169.26412	1	297	-348.0	-128.0
31	167.22758	1	242	-384.0	-18.0
32	165.01593C	1	49	384.0	299.0
33	161.40726	1	245	-348.0	-128.0
34	157.64380	1	77	500.0	300.0
35	155.29863	1	62	-104.0	317.0
36	155.23079C	1	43	-24.0	378.0
37	152.78661C	1	306	-384.0	-18.0
38	152.10543	1	92	-24.0	378.0
39	151.18292	1	276	0.	-600.0
40	148.93917C	1	50	226.0	329.0
41	145.41798	1	143	-317.0	-220.0
42	145.37901C	1	29	-100.0	-550.0
43	145.10616C	1	101	-348.0	-128.0
44	144.35089	1	87	61.0	433.0
45	143.80235	1	239	-384.0	-18.0
46	143.40680	1	77	384.0	299.0
47	142.30749C	1	111	-354.0	85.0
48	140.75355	1	241	-600.0	0.
49	140.28183	1	87	-104.0	317.0
50	139.82195	1	346	-317.0	-220.0

ECHO PRINT OF INPUT DATA

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Year: 1979

ECHO PRINT OF INPUT DATA

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  67          0900.     -0400.     0000.
  68          0900.     -0500.     0000.
  69          0600.     -0600.     0000.
  70          0700.     -0600.     0000.
  71          0500.     -0600.     0000.
  72          0400.     -0600.     0000.
  73          0200.     -0600.     0000.
  74          0100.     -0600.     0000.
  75         -0750.     -0600.     0000.
  76         -0100.     -0550.     0000.
  77         -0150.     -0475.     0000.
  78        -46000.      7000.     0000.
  79        -44000.      7000.     0000.
  80        -46000.      5000.     0000.
  81        -44000.      5000.     0000.
  82        -46000.      3000.     0000.
  83        -44000.      3000.     0000.
  84        -46000.      1000.     0000.
  85        -44000.      1000.     0000.
  86         1   1   1   1   1   1   1   1   1   1   1   2   2
  87       2001  2002  2003  2004  3001  3002  3003  3004  3005  3006  3007  1001 -2004
  88       2001 -3007
  89         7.6         1.0001     5.0000     5.0000     5.5000    10.5000
  90     10000000.
  91     11111111111111111111111111111111111111111111111111111111111111111111111111111111
  92     11111111111111111111111111111111111111111111111111111111111111111111111111111111
  93     11111111111111111111111111111111111111111111111111111111111111111111111111111111
  94     11111111111111111111111111111111111111111111111111111111111111111111111111111111
  95     1111111111111111111111111111111111111111110
  96      93805     78 13861     78
  97      100100  0 -0.3780  0034.  0060. 000.0 29.26 339.0  7.48  1.22 45.87 33.88 33.38
  98      100200  0 -0.3166  0075.  0097. 000.0 29.26 346.0 11.12  1.22 45.87 33.88 33.38
  99      100300  0 -0.3166  0070.  0096. 000.0 29.26 347.0  9.70  1.22 45.87 33.88 33.38
 100      200100  0  2.5526  0258.  0084. 000.0 30.10 477.0  8.18  2.21 22.86 27.84 27.84

                1         2         3         4         5         6         7         8
        12345678901234567890123456789012345678901234567890123456789012345678901234567890
```

ECHO PRINT OF INPUT DATA

```
                1         2         3         4         5         6         7         8
CARD    12345678901234567890123456789012345678901234567890123456789012345678901234567890

101      200200  0  0.0344 -0075. -0056. 0000.0 49.38 345.0  9.80  1.22 45.87 33.88 33.88
102      200300  0  0.1006  0000.  0000. 0000.0 63.58 363.0 18.46  3.76 45.87 33.88 33.88
103      200400 0127.0080- 0000.  0000. 0000.0 63.58 363.0 18.46  3.76 45.87 33.88 33.88
104      300100  0 55.3574  0061.  0014. 0000.0 63.58 444.0 10.82  3.35 45.87 33.88 33.88
105      300200  0 52.0467 -0014. -0017. 0000.0 66.58 411.0 14.36  2.74 45.87 33.88 33.88
106      300300 0178.0573 -0094. -0026. 0000.0 63.58 466.0 17.40  2.90 45.87 33.88 33.88
107      300400  0  0.4256  0025.  0052. 0000.0 43.28 350.0 11.36  0.91 45.87 33.88 33.88
108      300500  0  0.3591 -0000.  0000. 0000.0 42.07 340.0  8.97  1.22 45.87 33.88 33.88
109      300600  0  0.3453 -0075. -0056. 0000.0 49.38 345.0  9.80  1.22 45.87 33.88 33.88
110      300700 0262.7377  0000.  0000. 0000.0 63.59 363.0 18.46  3.76 45.87 33.88 33.88

                1         2         3         4         5         6         7         8
        12345678901234567890123456789012345678901234567890123456789012345678901234567890
```

*** SOURCE DATA ***

SOURCE NUMBER	TYPE	AK	NUMBER PART. CATS.	EMISSION RATE TYPE=0,1 (GRAMS/SEC) TYPE=2 (GRAMS/SEC) *PER METER**2	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	HEIGHT (METERS)	TEMP. TYPE=0 (DEG.K); VERT.DIM TYPE=1 (METERS)	EXIT VEL. TYPE=0 (M/SEC); HORZ.DIM TYPE=1,2 (METERS)	DIAMETER TYPE=0 (METERS)	BLDG. HEIGHT TYPE=0 (METERS)	BLDG. LENGTH TYPE=0 (METERS)	BLDG. WIDTH TYPE=0 (METERS)
1001	0	0	0	-.378002E 00	64.0	80.0	0.	29.26	339.00	7.46	1.22	45.87	33.88	33.88
1002	0	0	0	-.516602E 00	75.0	89.0	0.	29.26	346.00	11.12	1.22	45.87	33.88	33.88
1003	0	0	0	-.516602E 00	70.0	95.0	0.	26.26	347.00	9.70	1.22	45.87	33.88	33.88
2001	0	0	0	0.255262E 01	258.0	34.0	0.	36.10	477.00	8.18	2.21	22.36	27.84	27.84
2002	0	0	0	0.344305E-01	-75.0	-36.0	0.	49.38	345.00	9.80	1.22	45.87	33.88	33.88
2003	0	0	0	0.100805E 00	0.	0.	0.	36.58	363.00	10.46	3.96	45.87	33.88	33.88
2004	0	0	0	0.127016E 03	0.	0.	0.	66.58	363.00	10.46	3.96	45.87	33.88	33.88
3001	0	0	0	0.553576E 02	61.0	14.0	0.	66.53	444.00	10.82	3.35	45.87	33.88	33.88
3002	0	0	0	0.520476E 02	-14.0	-19.0	0.	66.58	411.00	12.86	2.74	45.87	33.88	33.88
3003	0	0	0	0.178066E 03	-94.0	-28.0	0.	66.58	466.00	17.40	2.90	45.87	33.88	33.88
3004	0	0	0	0.425606E 00	23.0	52.0	0.	43.26	350.00	11.36	0.91	45.87	33.88	33.88
3005	0	0	0	0.359106E 00	-66.0	0.	0.	42.67	346.00	8.97	1.22	45.87	33.88	33.88
3006	0	0	0	0.545306E 00	-75.0	-36.0	0.	49.38	345.00	9.80	1.22	45.87	33.88	33.88
3007	0	0	0	0.252746E 03	0.	0.	0.	66.58	363.00	10.46	3.96	45.87	33.88	33.88
* CALM HOURS (=1) FOR DAY 1 *	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 5 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 4 *	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
* CALM HOURS (=1) FOR DAY 5 *	1	1	1	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 6 *	0	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1
* CALM HOURS (=1) FOR DAY 7 *	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 10 *	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 11 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
* CALM HOURS (=1) FOR DAY 12 *	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 13 *	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 15 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0
* CALM HOURS (=1) FOR DAY 16 *	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
* CALM HOURS (=1) FOR DAY 18 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 21 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0
* CALM HOURS (=1) FOR DAY 22 *	1	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
* CALM HOURS (=1) FOR DAY 27 *	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
* CALM HOURS (=1) FOR DAY 29 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
* CALM HOURS (=1) FOR DAY 30 *	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 31 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 33 *	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 36 *	0	0	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 40 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
* CALM HOURS (=1) FOR DAY 41 *	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
* CALM HOURS (=1) FOR DAY 42 *	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 43 *	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1
* CALM HOURS (=1) FOR DAY 44 *	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 45 *	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 46 *	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	0
* CALM HOURS (=1) FOR DAY 47 *	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 49 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
* CALM HOURS (=1) FOR DAY 50 *	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0
* CALM HOURS (=1) FOR DAY 51 *	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 52 *	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 53 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
* CALM HOURS (=1) FOR DAY 54 *	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 55 *	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1

```
* CALM HOURS (=1) FOR DAY  56 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  57 *  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  1
* CALM HOURS (=1) FOR DAY  58 *  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY  59 *  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY  60 *  0  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  61 *  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0
* CALM HOURS (=1) FOR DAY  62 *  1  0  0  0  1  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY  64 *  1  1  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY  65 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  66 *  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  67 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  68 *  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  69 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY  70 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY  71 *  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  74 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY  77 *  1  1  1  1  1  1  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  78 *  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  79 *  1  1  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0  1
* CALM HOURS (=1) FOR DAY  80 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  81 *  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY  82 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  83 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  84 *  0  0  0  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY  85 *  1  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  86 *  0  0  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  87 *  0  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  88 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  89 *  1  1  0  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  90 *  0  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  91 *  1  1  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  92 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  93 *  1  1  1  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  94 *  1  0  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  95 *  1  0  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  96 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  97 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY  98 *  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY  99 *  1  0  1  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 100 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 101 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 104 *  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1
* CALM HOURS (=1) FOR DAY 105 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 106 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  0  1
* CALM HOURS (=1) FOR DAY 107 *  0  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1
* CALM HOURS (=1) FOR DAY 108 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 110 *  0  0  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 111 *  0  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 112 *  1  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 113 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 114 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 115 *  0  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 117 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 118 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 119 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 120 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 121 *  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 122 *  1  1  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  1  0
* CALM HOURS (=1) FOR DAY 125 *  0  0  1  1  0  1  1  1  0  0  0  0  0  0  0  0  1  0  1  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 126 *  1  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 127 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0  0
* CALM HOURS (=1) FOR DAY 129 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0
* CALM HOURS (=1) FOR DAY 130 *  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0
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* CALM HOURS (=1) FOR DAY 151 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 152 *  1  0  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 153 *  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 154 *  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 155 *  1  1  1  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 156 *  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 157 *  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0  1  0
* CALM HOURS (=1) FOR DAY 158 *  0  0  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 159 *  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 160 *  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 161 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1
* CALM HOURS (=1) FOR DAY 162 *  1  1  1  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 163 *  0  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 164 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 165 *  1  1  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 166 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 167 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 168 *  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 169 *  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 170 *  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 171 *  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 172 *  1  1  1  1  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 173 *  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 174 *  1  1  1  1  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 175 *  0  1  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 176 *  0  1  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 177 *  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 178 *  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 179 *  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 180 *  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 181 *  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0
* CALM HOURS (=1) FOR DAY 182 *  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  0  0
* CALM HOURS (=1) FOR DAY 183 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0
* CALM HOURS (=1) FOR DAY 184 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 185 *  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1
* CALM HOURS (=1) FOR DAY 186 *  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  1
* CALM HOURS (=1) FOR DAY 187 *  0  1  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  1
* CALM HOURS (=1) FOR DAY 188 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 189 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 190 *  1  1  0  1  1  1  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 191 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 192 *  0  1  1  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1
* CALM HOURS (=1) FOR DAY 193 *  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 194 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  0  1  0
* CALM HOURS (=1) FOR DAY 195 *  0  1  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0
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* CALM HOURS (=1) FOR DAY 195 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 197 *  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0
* CALM HOURS (=1) FOR DAY 198 *  1  1  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 199 *  1  0  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY 200 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 201 *  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0
* CALM HOURS (=1) FOR DAY 202 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0
* CALM HOURS (=1) FOR DAY 203 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0
* CALM HOURS (=1) FOR DAY 204 *  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1
* CALM HOURS (=1) FOR DAY 205 *  0  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 206 *  1  1  1  1  1  1  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 207 *  1  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 208 *  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 209 *  1  1  1  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY 210 *  1  1  0  1  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 211 *  1  1  1  0  1  1  1  0  0  0  0  0  1  0  0  0  0  0  0  0  1  0  1  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 212 *  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  0  1  1
* CALM HOURS (=1) FOR DAY 213 *  0  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  0  1  1
* CALM HOURS (=1) FOR DAY 214 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY 217 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 218 *  1  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 219 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0
* CALM HOURS (=1) FOR DAY 220 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 221 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 222 *  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  1  0  0  1  1  0
* CALM HOURS (=1) FOR DAY 223 *  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  1  1  0
* CALM HOURS (=1) FOR DAY 224 *  1  1  1  1  1  1  0  1  1  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 225 *  1  1  1  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0
* CALM HOURS (=1) FOR DAY 226 *  0  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 227 *  1  1  1  1  1  1  1  0  0  0  0  0  1  0  0  0  0  0  1  0  0  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 228 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  0  0  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 229 *  1  1  1  1  1  1  1  1  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0
* CALM HOURS (=1) FOR DAY 230 *  1  1  0  1  0  1  1  1  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 231 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 232 *  0  1  1  0  0  0  0  0  0  0  0  0  1  0  0  0  1  0  0  0  0  0  0  0  1  1  1  0
* CALM HOURS (=1) FOR DAY 233 *  1  1  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1
* CALM HOURS (=1) FOR DAY 234 *  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 236 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY 237 *  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY 238 *  0  0  1  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 239 *  1  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  0  0
* CALM HOURS (=1) FOR DAY 240 *  1  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 241 *  1  1  1  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 242 *  1  1  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 243 *  1  1  1  1  1  1  1  0  0  0  0  0  0  1  1  0  0  0  0  0  1  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 244 *  0  1  1  1  1  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0  1  1
* CALM HOURS (=1) FOR DAY 245 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 246 *  0  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 247 *  1  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 248 *  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 249 *  0  0  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 250 *  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 251 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  1  1  0  1  1
* CALM HOURS (=1) FOR DAY 252 *  1  1  1  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0
* CALM HOURS (=1) FOR DAY 253 *  1  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  0  1  1  1
* CALM HOURS (=1) FOR DAY 254 *  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 255 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 256 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1  0
* CALM HOURS (=1) FOR DAY 257 *  0  0  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 258 *  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 259 *  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 260 *  1  1  1  1  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 261 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0
```

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* CALM HOURS (=1) FOR DAY 262 *  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 263 *  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0
* CALM HOURS (=1) FOR DAY 264 *  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 265 *  1  1  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 266 *  1  1  1  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 268 *  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 271 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY 273 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  0  0
* CALM HOURS (=1) FOR DAY 274 *  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 275 *  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 276 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1
* CALM HOURS (=1) FOR DAY 277 *  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 278 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 279 *  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 281 *  1  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 282 *  0  1  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 284 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 285 *  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 286 *  1  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 287 *  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 288 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  1
* CALM HOURS (=1) FOR DAY 289 *  1  1  1  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 291 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 292 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 293 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 294 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 295 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 296 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 297 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 298 *  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 299 *  0  0  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  1  1
* CALM HOURS (=1) FOR DAY 300 *  0  0  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  0  1
* CALM HOURS (=1) FOR DAY 301 *  1  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 302 *  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 304 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY 305 *  1  1  1  1  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  1  0
* CALM HOURS (=1) FOR DAY 306 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 307 *  1  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 308 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 309 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 310 *  1  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 311 *  1  1  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0  0
* CALM HOURS (=1) FOR DAY 313 *  1  0  0  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 314 *  1  1  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 315 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 316 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 317 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0  0
* CALM HOURS (=1) FOR DAY 318 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  1  0
* CALM HOURS (=1) FOR DAY 319 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1  0
* CALM HOURS (=1) FOR DAY 320 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 321 *  1  1  1  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  0  1  0
* CALM HOURS (=1) FOR DAY 322 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 323 *  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 325 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 326 *  0  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0  1
* CALM HOURS (=1) FOR DAY 327 *  1  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 328 *  1  1  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  1  1
* CALM HOURS (=1) FOR DAY 329 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 330 *  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 331 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  1  1
* CALM HOURS (=1) FOR DAY 332 *  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 334 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 335 *  0  0  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  1  1
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* CALM [illegible] (=1) FOR DAY 336 *  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  1  1
* CALM [illegible] (=1) FOR DAY 337 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  1  1
* CALM HOURS (=1) FOR DAY 340 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  1  0
* CALM HOURS (=1) FOR DAY 341 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 342 *  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 344 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY 345 *  1  1  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 346 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 347 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0  1  1
* CALM HOURS (=1) FOR DAY 348 *  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY 349 *  1  0  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 350 *  1  0  1  1  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 351 *  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 352 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  0  1  1  1
* CALM HOURS (=1) FOR DAY 353 *  0  1  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  1  0  0  1  0  0
* CALM HOURS (=1) FOR DAY 354 *  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 356 *  0  0  0  0  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 357 *  1  1  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0
* CALM HOURS (=1) FOR DAY 359 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  1  1
* CALM HOURS (=1) FOR DAY 360 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  0
* CALM HOURS (=1) FOR DAY 365 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
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*** 78:B-TOTAL:ALL SCS PSDSNAAQS 82 REC. ALL DAYS. F-1612 ***

* 365-DAY AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM SOURCES: 1001, -2004,
* FOR THE DISCRETE RECEPTOR POINTS *

- X -	- Y -	CON.	- X -	- Y -	CON.	- X -	- Y -	CON.
-900.0	900.0	0.67632	-600.0	900.0	0.59047	-300.0	900.0	0.70394
0.	900.0	1.57507	-900.0	600.0	0.67951	-600.0	600.0	0.34090
-300.0	600.0	0.35549	0.	600.0	1.71533	-900.0	300.0	0.73414
-600.0	300.0	0.27642	-300.0	300.0	0.02324	-900.0	0.	1.20885
-300.0	0.	0.81209	-900.0	-300.0	1.46193	-600.0	-300.0	1.19491
-900.0	-600.0	1.87817	-600.0	-600.0	1.25369	-300.0	-600.0	0.88467
-900.0	-900.0	1.54250	-600.0	-900.0	1.44532	-300.0	-900.0	1.31651
-207.0	-384.0	0.92677	-262.0	-305.0	1.11428	-317.0	-220.0	1.71764
-348.0	-128.0	1.24409	-384.0	-18.0	1.18967	-354.0	85.0	0.08281
-348.0	146.0	0.14851	-274.0	195.0	-0.02858	-207.0	244.0	-0.34215
-201.0	260.0	-0.09508	-104.0	317.0	0.62138	-24.0	378.0	2.55061
61.0	435.0	1.41263	146.0	396.0	0.60200	226.0	329.0	0.77339
287.0	335.0	0.66110	384.0	299.0	0.29572	300.0	900.0	1.05144
600.0	900.0	0.73013	900.0	900.0	0.75746	300.0	600.0	0.59343
600.0	600.0	0.45259	900.0	600.0	0.62605	900.0	300.0	0.51299
900.0	0.	0.51771	900.0	-300.0	0.38171	0.	-600.0	2.18405
300.0	-600.0	0.72326	600.0	-600.0	0.76532	900.0	-600.0	0.68022
0.	-900.0	2.09426	300.0	-900.0	1.03442	600.0	-900.0	1.17755
900.0	-900.0	1.23179	300.0	300.0	0.34414	600.0	300.0	0.39112
700.0	300.0	0.43579	800.0	300.0	0.48802	900.0	200.0	0.42798
900.0	100.0	0.41507	900.0	-100.0	0.36001	900.0	-200.0	0.30949
900.0	-400.0	0.45771	900.0	-500.0	0.63859	800.0	-600.0	0.74448
700.0	-600.0	0.75740	500.0	-600.0	0.83693	400.0	-600.0	0.88341
200.0	-600.0	0.63529	100.0	-600.0	0.96964	-750.0	-600.0	1.67432
-100.0	-550.0	1.39970	-150.0	-475.0	0.94804	-46000.0	7000.0	0.14491
-44000.0	7000.0	0.14659	-46000.0	5000.0	0.15849	-44000.0	5000.0	0.16378
-46000.0	5000.0	0.17046	-44000.0	3000.0	0.17795	-46000.0	1000.0	0.18820
-44000.0	1000.0	0.19536						

*** 7815-TOTAL:ALL SCS PSD&NAAQS 82 REC. ALL DAYS. F-1612 ***

* 50 MAXIMUM 3-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *

* FROM SOURCES: 1001, -2004,

RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)	RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)
1	174.31586	8	261	-384.0	-18.0	26	89.95578	4	113	-300.0	300.0
2	155.20095	8	123	-274.0	175.0	27	88.75212	8	303	-348.0	-128.0
3	136.00278	5	72	-24.0	378.0	28	88.62592	1	109	61.0	433.0
4	136.59449	7	334	146.0	390.0	29	88.21835	2	17	-104.0	317.0
5	134.65066	4	113	-207.0	244.0	30	87.94958	6	83	-24.0	378.0
6	134.25391C	1	266	-348.0	-128.0	31	87.62859	6	124	287.0	335.0
7	130.46187	2	291	-262.0	-305.0	32	87.47813	1	219	-262.0	-305.0
8	124.09541	1	269	-384.0	-18.0	33	87.42532	7	58	61.0	433.0
9	116.91714	5	126	-24.0	378.0	34	86.66882	5	124	287.0	335.0
10	114.45029	3	106	61.0	433.0	35	85.93573	4	194	0.	900.0
11	113.91178	5	341	-24.0	378.0	36	85.60930	1	299	-384.0	-18.0
12	113.83263	1	202	-384.0	-18.0	37	85.55758	8	168	-348.0	-128.0
13	112.69370	1	25	-24.0	378.0	38	85.40314C	2	249	-207.0	-384.0
14	112.40150	5	331	-207.0	-384.0	39	85.36630	5	101	61.0	433.0
15	108.00134	5	342	-24.0	378.0	40	85.34690	4	113	-201.0	280.0
16	107.89419	1	335	-343.0	146.0	41	85.31862	1	231	-201.0	280.0
17	102.90670	7	54	61.0	433.0	42	84.97545	7	363	-348.0	-128.0
18	102.89567	7	123	-24.0	378.0	43	84.55779	5	25	-24.0	378.0
19	102.43720	2	261	-384.0	-18.0	44	84.50775	5	156	-24.0	378.0
20	95.36144	7	267	-317.0	-220.0	45	84.03039	5	59	-24.0	378.0
21	93.22292	5	72	0.	600.0	46	83.70624C	8	203	-300.0	300.0
22	91.85721	1	203	-384.0	-18.0	47	83.53411	5	229	0.	-900.0
23	91.39903	2	330	61.0	433.0	48	83.11039	6	102	-201.0	280.0
24	90.97279	2	202	-348.0	146.0	49	83.11294	5	100	61.0	433.0
25	90.25349	4	342	-24.0	378.0	50	82.92180C	8	297	-348.0	146.0

*** 7S:E-/6TAL:ALL SCS P5D&NAAQS 62 REC. ALL DAYS. F-1612 ***

* 50 MAXIMUM 24-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *

* FROM SOURCES: 1001, -2004,

RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)	RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)
1	46.40644C	1	261	-364.0	-18.0	25	25.36354C	1	341	-24.0	378.0
2	46.36685	1	25	-24.0	378.0	27	25.46472	1	25	61.0	433.0
3	41.83276	1	338	61.0	433.0	28	25.45278	1	345	226.0	329.0
4	41.61775C	1	342	-24.0	378.0	29	25.11053	1	25	0.	600.0
5	36.19059C	1	30	-24.0	378.0	30	24.75390C	1	365	-354.0	85.0
6	35.93501	1	353	-317.0	-220.0	31	24.61519C	1	107	-104.0	317.0
7	35.15914C	1	156	-24.0	378.0	32	24.51209C	1	91	61.0	433.0
8	31.77395	1	124	287.0	335.0	33	24.37735C	1	351	-207.0	-384.0
9	31.37464	1	126	-24.0	378.0	34	24.35517	1	303	-343.0	-128.0
10	30.52362	1	303	-317.0	-220.0	35	24.34910	1	6	-104.0	317.0
11	29.86527C	1	268	-343.0	-128.0	36	24.29647C	1	365	-348.0	146.0
12	29.45393C	1	106	61.0	433.0	37	24.26108	1	72	-24.0	378.0
13	29.00665C	1	34	-24.0	378.0	38	24.13108C	1	84	61.0	433.0
14	28.64959C	1	101	61.0	433.0	39	24.08299	1	124	226.0	329.0
15	27.79327	1	338	146.0	396.0	40	23.98011C	1	291	-262.0	-305.0
16	27.72354	1	168	-364.0	-18.0	41	23.63891C	1	59	-24.0	378.0
17	27.41153C	1	89	0.	-600.0	42	23.42618C	1	152	-24.0	378.0
18	27.27190C	1	346	0.	-600.0	43	23.15115C	1	213	900.0	-500.0
19	27.06274C	1	302	-348.0	-128.0	44	22.89767C	1	89	0.	-900.0
20	27.00069C	1	321	61.0	433.0	45	22.32089	1	269	-317.0	-220.0
21	26.90116C	1	127	-24.0	378.0	46	21.81897	1	168	-348.0	-128.0
22	26.72903	1	167	-348.0	-128.0	47	21.70322C	1	288	-150.0	-475.0
23	26.13615C	1	206	0.	900.0	48	21.66222C	1	304	-317.0	-220.0
24	25.89565C	1	302	-317.0	-220.0	49	21.64646	1	302	-317.0	-220.0
25	25.68551	1	267	-317.0	-220.0	50	21.48069C	1	321	-300.0	300.0

*** TOTAL:ALL SCS PSD&NAAQS 32 REC. ALL DAYS. F-1612 ***

* 365-DAY AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM SOURCES: 2001, -3007,
* FOR THE DISCRETE RECEPTOR POINTS *

- X -	- Y -	CON.	- X -	- Y -	CON.	- X -	- Y -	CON.
-900.0	900.0	5.31547	-600.0	900.0	5.09767	-300.0	900.0	6.82533
0.	900.0	13.73495	-900.0	600.0	6.13711	-600.0	600.0	4.52045
-300.0	600.0	5.47825	0.	600.0	15.71553	-900.0	300.0	6.65545
-600.0	300.0	5.63977	-300.0	300.0	7.00011	-900.0	0.	10.50393
-600.0	0.	10.50660	-900.0	-300.0	12.21149	-600.0	-300.0	12.21465
-900.0	-600.0	13.41727	-600.0	-600.0	10.57318	-300.0	-600.0	9.39796
-900.0	-900.0	12.99594	-300.0	-900.0	11.06753	-300.0	-900.0	10.76580
-207.0	-384.0	12.23118	-262.0	-393.0	12.99438	-317.0	-220.0	15.97976
-348.0	-126.0	16.03404	-384.0	-15.0	14.50225	-354.0	85.0	8.81605
-348.0	140.0	8.19362	-274.0	175.0	7.00890	-207.0	244.0	6.69171
-201.0	260.0	7.50005	-104.0	317.0	13.19852	-24.0	378.0	22.08049
81.0	433.0	19.24635	146.0	396.0	14.35518	226.0	329.0	11.48965
287.0	335.0	9.66826	384.0	299.0	7.56076	303.0	900.0	9.17424
600.0	900.0	6.63036	900.0	900.0	6.29634	300.0	600.0	8.03383
600.0	600.0	5.82055	900.0	600.0	6.11191	900.0	300.0	4.73767
900.0	0.	4.55253	900.0	-300.0	5.75404	0.	-600.0	19.70933
300.0	-600.0	9.92134	300.0	-600.0	8.81387	900.0	-600.0	6.42027
0.	-900.0	17.77175	300.0	-900.0	10.35539	300.0	-900.0	10.04542
900.0	-900.0	9.75751	300.0	300.0	6.38183	600.0	300.0	5.56213
700.0	300.0	5.15251	300.0	300.0	4.93761	900.0	200.0	4.31976
900.0	100.0	4.27603	900.0	-100.0	3.60105	900.0	-200.0	3.33061
900.0	-400.0	4.46057	900.0	-300.0	5.67258	800.0	-600.0	7.21737
700.0	-600.0	6.06290	500.0	-600.0	9.31659	400.0	-600.0	9.81809
200.0	-600.0	11.01397	100.0	-600.0	14.99737	-750.0	-600.0	12.23792
-100.0	-550.0	16.29192	-150.0	-475.0	13.56128	-46000.0	7000.0	0.78535
-44000.0	7000.0	0.80345	-46000.0	5000.0	0.86129	-44000.0	5000.0	0.89029
-46000.0	5000.0	0.92070	-44000.0	5000.0	0.96938	-46000.0	1000.0	1.02301
-44000.0	1000.0	1.06528						

*** 1980-TOTAL:ALL SCS PERIODS 82 REC. ALL DAYS. F-1612 ***

* 50 MAXIMUM 3-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *

* FROM SOURCES: 2001, -3007,

RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)
1	677.62655	3	261	-384.0	-18.0
2	690.49363C	1	266	-348.0	-126.0
3	643.51654	1	259	-384.0	-18.0
4	621.45699	1	202	-364.0	-18.0
5	609.96590	7	354	148.0	396.0
6	601.78532	3	123	-274.0	195.0
7	601.51573	2	291	-262.0	-305.0
8	571.87226	5	72	-24.0	378.0
9	553.42360	5	351	-207.0	-384.0
10	544.90018	6	124	267.0	335.0
11	543.31436	7	303	-348.0	-126.0
12	535.01439	1	303	-317.0	-220.0
13	512.44047	2	251	-384.0	-18.0
14	506.64508	8	303	-348.0	-126.0
15	504.39391	5	124	267.0	335.0
16	491.06721	4	113	-207.0	244.0
17	488.95020	5	362	-317.0	-220.0
18	488.49479	5	341	-24.0	378.0
19	476.62181	1	25	-24.0	378.0
20	475.32614	3	108	61.0	433.0
21	473.63633	7	257	-317.0	-220.0
22	465.31765	5	342	-24.0	378.0
23	455.33870	4	174	0.	900.0
24	452.65952	5	213	900.0	-300.0
25	451.25391	5	225	0.	-900.0
26	449.89285	1	365	-348.0	146.0
27	448.18196	6	128	-24.0	378.0
28	445.86710	8	168	-348.0	-128.0
29	442.96617	5	179	-300.0	-600.0
30	437.31682	4	194	0.	600.0
31	436.51048	1	219	-262.0	-305.0
32	435.14450	1	299	-384.0	-18.0
33	435.03112	7	84	61.0	433.0
34	434.23459	2	333	61.0	433.0
35	432.61584	5	336	226.0	329.0
36	431.99518	5	107	0.	900.0
37	431.98370	4	204	-900.0	0.
38	430.90024	5	72	0.	600.0
39	425.39496	1	203	-384.0	-18.0
40	424.30181	1	324	-262.0	-305.0
41	424.15671	2	343	287.0	335.0
42	423.96677	5	334	-317.0	-220.0
43	423.21470	5	179	-300.0	-900.0
44	422.40282	4	113	-300.0	300.0
45	422.07729	4	201	-348.0	-128.0
46	417.22658C	5	125	900.0	-100.0
47	416.47428	8	290	-348.0	-128.0
48	415.91006	4	108	61.0	433.0
49	413.04123	4	144	0.	-900.0
50	412.95835	5	303	-348.0	-128.0

*** 7050-TOTAL:ALL SCS PSD4NAAQS 62 REC. ALL DAYS, F-1612 ***

* SG MAXIMUM 24-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *

* FROM SOURCES: 2001, -3007,

RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)	RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)
1	252.814290	1	251	-364.0	-18.0	26	154.73870	1	25	0.	600.0
2	240.15043	1	25	-24.0	578.0	27	153.80544C	1	282	-348.0	-128.0
3	235.62920	1	336	61.0	433.0	28	153.36908C	1	321	61.0	433.0
4	231.40017	1	333	-317.0	-220.0	29	150.80121	1	267	-317.0	-220.0
5	208.05336	1	336	146.0	396.0	30	150.17165C	1	351	-207.0	-334.0
6	203.54137	1	303	-317.0	-220.0	31	149.01105	1	272	-348.0	-128.0
7	199.75785C	1	342	-24.0	578.0	32	147.20027C	1	91	61.0	433.0
8	196.03620	1	124	-24.0	578.0	33	146.75353C	1	127	-24.0	578.0
9	195.02724	1	167	-348.0	-128.0	34	146.02396C	1	354	146.0	396.0
10	185.94871C	1	302	-348.0	-128.0	35	141.36369C	1	213	900.0	-500.0
11	183.49614C	1	84	-24.0	578.0	36	141.21391C	1	355	-354.0	85.0
12	182.71160	1	128	-24.0	578.0	37	141.12930C	1	302	-317.0	-220.0
13	178.87570C	1	268	-348.0	-128.0	38	140.45899C	1	341	-24.0	578.0
14	176.35501	1	343	226.0	329.0	39	139.35075C	1	304	-317.0	-220.0
15	174.72555C	1	138	-24.0	578.0	40	139.11507	1	72	-24.0	578.0
16	174.55886C	1	131	61.0	433.0	41	139.02210C	1	101	146.0	396.0
17	173.07892	1	25	61.0	433.0	42	136.32433C	1	346	0.	-600.0
18	169.99277	1	302	-317.0	-220.0	43	138.25106	1	269	-317.0	-220.0
19	165.70175	1	303	-348.0	-128.0	44	138.09045	1	108	-348.0	-128.0
20	162.24944C	1	136	61.0	433.0	45	137.63764C	1	89	0.	-600.0
21	161.04132	1	100	-364.0	-18.0	46	136.13428C	1	107	-104.0	317.0
22	156.83637C	1	80	-24.0	578.0	47	136.11034C	1	261	-600.0	0.
23	157.94602C	1	64	61.0	433.0	48	135.91258	1	107	-900.0	-300.0
24	155.43998	1	124	226.0	329.0	49	134.20800C	1	206	0.	900.0
25	154.96306	1	333	-348.0	-128.0	50	132.81214C	1	183	384.0	299.0

ECHO PRINT OF INPUT DATA

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   5        -0600.      0900.      0000.
   6        -0300.      0900.      0000.
   7         0000.      0900.      0000.
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  34        -0201.      0280.      0000.
  35        -0104.      0317.      0000.
  36        -0024.      0373.      0000.
  37         0061.      0433.      0000.
  38         0146.      0396.      0000.
  39         0220.      0329.      0000.
  40         0287.      0335.      0000.
  41         0384.      0299.      0000.
  42         0300.      0900.      0000.
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  49         0900.      0300.      0000.
  50         0900.     -0300.      0000.

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Year: 1979

ECHO PRINT OF INPUT DATA

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  85       -44000.      1000.     0000.
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  87       2001  2002  2003  2004  3001  3002  3003  3004  3005  3006  3007  1001 -2004
  88       2001 -3007
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  90    1000000.
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  94    11111111111111111111111111111111111111111111111111111111111111111111111111111111
  95    1111111111111111111111111111111111111111110
  96     95005     79 13661     79
  97     100100  0 -0.3750  0054.  0080. 000.0 29.26 339.0  7.48  1.22 45.87 33.88 33.88
  98     100200  0 -0.5156  0075.  0059. 000.0 29.26 346.0 11.12  1.22 45.87 33.88 33.88
  99     100300  0 -0.5156  0070.  0093. 000.0 28.26 347.0  9.70  1.22 45.87 33.88 33.88
 100     200100  0  2.3526  0258.  0064. 000.0 33.10 477.0  0.18  2.21 22.80 27.84 27.84

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ECHO PRINT OF INPUT DATA

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 102     200300  0  0.1003  0000.  0000. 000.0 68.58 363.0 18.46  3.96 45.87 33.88 33.88
 103     200400  0127.0080  0000.  0000. 000.0 68.58 363.0 18.46  3.96 45.87 33.88 33.88
 104     300100  0 55.3574  0051.  0014. 000.0 68.58 444.0 10.82  3.35 45.87 33.88 33.88
 105     300200  0 52.0467 -0014. -0019. 000.0 68.58 411.0 12.46  2.74 45.87 33.88 33.88
 106     300300  0178.0593 -0074. -0023. 000.0 68.58 466.0 17.40  2.90 45.87 33.88 33.88
 107     300400  0  0.4256  0023.  0052. 000.0 45.28 350.0 11.86  0.91 45.87 33.88 33.88
 108     300500  0  0.3591 -0056.  0000. 000.0 42.67 340.0  8.97  1.22 45.87 33.88 33.88
 109     300600  0  0.5453 -0075. -0038. 000.0 49.38 345.0  9.80  1.22 45.87 33.88 33.88
 110     300700  0262.7377  0000.  0000. 000.0 68.58 363.0 18.46  3.96 45.87 33.88 33.88

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*** SOURCE DATA ***

SOURCE NUMBER	EMISSION RATE TYPE=0,1 (GRAMS/SEC) TYPE=2 (GRAMS/SEC) *PER METER**2	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	HEIGHT (METERS)	TEMP. TYPE=0 (DEG.K); VERT.DIM TYPE=1 (METERS)	EXIT VEL. TYPE=0 (M/SEC); HORZ.DIM TYPE=1,2 (METERS)	DIAMETER TYPE=0 (METERS)	BLDG. HEIGHT TYPE=0 (METERS)	BLDG. LENGTH TYPE=0 (METERS)	BLDG. WIDTH TYPE=0 (METERS)
1001	-.37300E 00	34.0	30.0	0.	29.26	339.00	7.48	1.22	45.87	33.88	33.88
1002	-.51660E 00	75.0	89.0	0.	29.26	340.00	11.12	1.22	45.87	33.88	33.88
1003	-.51660E 00	70.0	98.0	0.	29.26	347.00	9.70	1.22	45.87	33.88	33.88
2001	0.25326E 01	253.0	64.0	0.	36.10	477.00	8.18	2.21	22.86	27.84	27.84
2002	0.34400E-01	-75.0	-38.0	0.	49.36	345.30	9.60	1.22	45.87	33.88	33.88
2003	0.10030E 00	0.	0.	0.	60.58	363.00	16.46	3.96	45.87	33.88	33.88
2004	0.12701E 03	0.	0.	0.	68.53	363.00	18.46	3.96	45.87	33.88	33.88
3001	0.55357E 02	51.0	14.0	0.	68.58	444.00	10.32	3.35	45.87	33.88	33.88
3002	0.52047E 02	-14.0	-19.0	0.	68.58	411.00	12.36	2.74	45.87	33.88	33.88
3003	0.17606E 03	-94.0	-28.0	0.	68.58	400.00	17.40	2.90	45.87	33.88	33.88
3004	0.42560E 00	23.0	52.0	0.	43.28	350.30	11.96	0.91	45.87	33.88	33.88
3005	0.55910E 00	-66.0	0.	0.	42.67	340.00	6.97	1.22	45.87	33.88	33.88
3006	0.54530E 00	-75.0	-55.0	0.	49.38	345.00	9.80	1.22	45.87	33.88	33.88
3007	0.26274E 03	0.	0.	0.	68.58	363.00	18.46	3.96	45.87	33.88	33.88

* CALM HOURS (=1) FOR DAY 1 *	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 4 *	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 5 *	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 6 *	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 7 *	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 9 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1
* CALM HOURS (=1) FOR DAY 10 *	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 15 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 16 *	1	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 17 *	1	1	0	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 18 *	0	1	1	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 19 *	1	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
* CALM HOURS (=1) FOR DAY 20 *	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 22 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 23 *	1	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 24 *	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 26 *	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	1	0	0
* CALM HOURS (=1) FOR DAY 27 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	0	0	0
* CALM HOURS (=1) FOR DAY 28 *	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 29 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 30 *	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
* CALM HOURS (=1) FOR DAY 33 *	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	1	0	1	0
* CALM HOURS (=1) FOR DAY 34 *	1	0	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 35 *	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 37 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
* CALM HOURS (=1) FOR DAY 38 *	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 39 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0
* CALM HOURS (=1) FOR DAY 41 *	0	0	0	1	0	0	1	1	0	0	0	0	0	1	0	0	0	0	1	1	1	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 42 *	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	0	0	1	0	1	1	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 43 *	1	1	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 44 *	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 45 *	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
* CALM HOURS (=1) FOR DAY 46 *	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
* CALM HOURS (=1) FOR DAY 47 *	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 50 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 51 *	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

* CALM H[illegible] (=1) FOR DAY 52 *	0	0	0	0	0	0	0	0	0	0	[illegible]	0	0	0	0	0	0	0	0	1	0	0	1	0
* CALM HOURS (=1) FOR DAY 53 *	0	1	1	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
* CALM HOURS (=1) FOR DAY 57 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
* CALM HOURS (=1) FOR DAY 58 *	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1	0	1	1	1	1
* CALM HOURS (=1) FOR DAY 59 *	1	1	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 60 *	1	1	1	1	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 61 *	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 63 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
* CALM HOURS (=1) FOR DAY 64 *	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 65 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 66 *	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
* CALM HOURS (=1) FOR DAY 67 *	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 68 *	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 69 *	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 70 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
* CALM HOURS (=1) FOR DAY 71 *	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 72 *	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
* CALM HOURS (=1) FOR DAY 73 *	1	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 74 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 75 *	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
* CALM HOURS (=1) FOR DAY 76 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0
* CALM HOURS (=1) FOR DAY 77 *	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 78 *	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
* CALM HOURS (=1) FOR DAY 79 *	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
* CALM HOURS (=1) FOR DAY 80 *	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
* CALM HOURS (=1) FOR DAY 81 *	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 83 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
* CALM HOURS (=1) FOR DAY 84 *	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
* CALM HOURS (=1) FOR DAY 85 *	0	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1
* CALM HOURS (=1) FOR DAY 86 *	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
* CALM HOURS (=1) FOR DAY 87 *	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0
* CALM HOURS (=1) FOR DAY 88 *	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0
* CALM HOURS (=1) FOR DAY 89 *	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 90 *	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
* CALM HOURS (=1) FOR DAY 91 *	1	1	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
* CALM HOURS (=1) FOR DAY 92 *	1	1	1	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
* CALM HOURS (=1) FOR DAY 93 *	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 94 *	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 95 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
* CALM HOURS (=1) FOR DAY 96 *	1	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
* CALM HOURS (=1) FOR DAY 97 *	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0	1	0	0	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 98 *	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 99 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
* CALM HOURS (=1) FOR DAY 100 *	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 101 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
* CALM HOURS (=1) FOR DAY 102 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
* CALM HOURS (=1) FOR DAY 103 *	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 104 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0
* CALM HOURS (=1) FOR DAY 105 *	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1
* CALM HOURS (=1) FOR DAY 106 *	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 107 *	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0
* CALM HOURS (=1) FOR DAY 108 *	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
* CALM HOURS (=1) FOR DAY 109 *	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
* CALM HOURS (=1) FOR DAY 110 *	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0
* CALM HOURS (=1) FOR DAY 111 *	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0
* CALM HOURS (=1) FOR DAY 112 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
* CALM HOURS (=1) FOR DAY 117 *	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 118 *	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
* CALM HOURS (=1) FOR DAY 119 *	0	1	1	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	1
* CALM HOURS (=1) FOR DAY 120 *	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
* CALM HOURS (=1) FOR DAY 121 *	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 123 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1

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* CALM HOURS (=1) FOR DAY 125 *  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1
* CALM HOURS (=1) FOR DAY 126 *  0  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0
* CALM HOURS (=1) FOR DAY 127 *  0  1  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 129 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0
* CALM HOURS (=1) FOR DAY 130 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0
* CALM HOURS (=1) FOR DAY 131 *  1  1  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  1
* CALM HOURS (=1) FOR DAY 132 *  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  1
* CALM HOURS (=1) FOR DAY 133 *  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 134 *  0  0  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 135 *  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY 136 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0
* CALM HOURS (=1) FOR DAY 137 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY 138 *  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 139 *  1  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 140 *  1  1  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 141 *  1  1  1  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 142 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 143 *  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY 144 *  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 145 *  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 146 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY 147 *  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 148 *  1  1  1  1  1  1  1  1  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 149 *  1  1  1  1  1  1  0  1  0  0  0  0  0  0  1  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 150 *  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0  1  1  0
* CALM HOURS (=1) FOR DAY 151 *  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 152 *  1  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0
* CALM HOURS (=1) FOR DAY 153 *  1  1  1  1  1  1  1  0  0  0  0  1  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 154 *  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 155 *  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 156 *  0  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 157 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 158 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 159 *  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 161 *  0  0  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 162 *  0  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 164 *  0  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 167 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  0  0
* CALM HOURS (=1) FOR DAY 168 *  0  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  0  0  0  1  1  0  0
* CALM HOURS (=1) FOR DAY 169 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 170 *  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 171 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0
* CALM HOURS (=1) FOR DAY 172 *  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  1  0  0  0
* CALM HOURS (=1) FOR DAY 173 *  0  0  0  1  1  1  1  1  0  1  0  0  1  1  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY 174 *  1  1  1  1  1  1  1  1  1  0  0  0  1  1  0  0  1  0  0  0  1  0  1  1  1
* CALM HOURS (=1) FOR DAY 175 *  1  1  1  1  1  1  1  1  1  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 176 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 179 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 180 *  1  0  1  1  1  1  0  0  0  0  0  0  0  1  0  0  1  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 181 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0  1  1
* CALM HOURS (=1) FOR DAY 182 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 183 *  1  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 184 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 185 *  1  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 186 *  1  0  0  1  1  1  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 187 *  0  0  1  1  1  1  0  0  0  0  0  0  0  1  0  0  1  0  0  0  0  1  1  1  0
* CALM HOURS (=1) FOR DAY 188 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0
* CALM HOURS (=1) FOR DAY 189 *  0  0  0  1  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 190 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0
* CALM HOURS (=1) FOR DAY 191 *  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  0
* CALM HOURS (=1) FOR DAY 192 *  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 193 *  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 194 *  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  0
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* CALM [illegible] (=1) FOR DAY 175 *  1  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 176 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 177 *  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 178 *  0  0  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  0  1  1
* CALM HOURS (=1) FOR DAY 179 *  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  0  0  0
* CALM HOURS (=1) FOR DAY 201 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0
* CALM HOURS (=1) FOR DAY 207 *  0  0  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 208 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 209 *  1  1  1  1  1  1  1  0  0  0  1  0  0  0  0  0  0  0  0  0  1  1  1  0  1  1  1
* CALM HOURS (=1) FOR DAY 210 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 211 *  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0
* CALM HOURS (=1) FOR DAY 212 *  1  1  1  1  0  1  1  1  0  0  0  0  0  0  1  0  0  0  0  0  0  1  1  0  1  1  0
* CALM HOURS (=1) FOR DAY 213 *  0  0  1  1  1  1  1  0  0  0  0  0  0  1  0  0  0  0  0  0  1  1  1  1  1  0  0
* CALM HOURS (=1) FOR DAY 214 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 215 *  1  1  1  1  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 216 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 217 *  1  1  1  0  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 218 *  0  1  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 219 *  1  1  1  1  0  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 220 *  1  1  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 221 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 222 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 223 *  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0
* CALM HOURS (=1) FOR DAY 224 *  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0  0
* CALM HOURS (=1) FOR DAY 225 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 226 *  1  1  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 227 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 228 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 230 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 231 *  1  1  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 232 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  1  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 233 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  0  1  0  1  1  1
* CALM HOURS (=1) FOR DAY 234 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 235 *  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 236 *  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 237 *  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 238 *  0  1  1  1  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  1  0  0
* CALM HOURS (=1) FOR DAY 239 *  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 240 *  0  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  0  0  0  1
* CALM HOURS (=1) FOR DAY 241 *  1  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0  0  1  1
* CALM HOURS (=1) FOR DAY 242 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 243 *  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 244 *  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  0
* CALM HOURS (=1) FOR DAY 245 *  0  0  0  0  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 248 *  0  0  0  0  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1
* CALM HOURS (=1) FOR DAY 249 *  1  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 250 *  1  1  1  1  1  1  1  1  0  0  1  1  0  0  0  1  0  0  0  0  0  1  1  1  1  0  0
* CALM HOURS (=1) FOR DAY 251 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  0  0
* CALM HOURS (=1) FOR DAY 257 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 262 *  0  0  0  0  0  1  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 263 *  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 264 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 265 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0
* CALM HOURS (=1) FOR DAY 266 *  0  0  0  0  0  1  1  1  1  0  0  0  0  1  0  0  0  0  0  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 270 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 271 *  1  0  1  1  1  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  1  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 272 *  1  0  1  1  0  0  1  0  0  1  1  0  0  0  0  0  0  0  1  0  1  0  1  1  1  0  1
* CALM HOURS (=1) FOR DAY 273 *  1  1  1  0  0  1  0  1  0  1  0  0  0  0  0  1  0  1  0  0  0  1  0  0  0  1  0
* CALM HOURS (=1) FOR DAY 274 *  1  1  0  1  1  1  1  1  1  0  0  0  0  0  0  0  1  1  0  0  1  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 275 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 276 *  0  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 277 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
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* CALM HOURS (=1) FOR DAY 279 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 280 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 281 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 282 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 283 *  1  1  1  1  1  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0
* CALM HOURS (=1) FOR DAY 284 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 285 *  0  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 286 *  1  1  1  1  1  1  1  0  1  1  0  0  0  0  0  0  1  1  0  1  1  0  1  0
* CALM HOURS (=1) FOR DAY 290 *  0  0  0  0  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 291 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 292 *  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 293 *  1  1  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  1  0
* CALM HOURS (=1) FOR DAY 294 *  0  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 295 *  0  1  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 296 *  1  0  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 297 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 298 *  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 299 *  0  0  1  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 300 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 301 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 302 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 303 *  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 305 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 306 *  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 309 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 310 *  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 311 *  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 312 *  1  1  1  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 313 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 314 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 315 *  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 318 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 319 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  1  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 320 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  1  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 321 *  1  1  1  1  1  1  1  1  0  0  1  0  1  0  0  0  0  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 322 *  1  1  1  1  1  1  1  1  1  0  1  1  0  0  0  1  1  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 323 *  1  1  1  1  1  1  1  1  1  0  0  0  1  0  0  0  0  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 324 *  0  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 325 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 326 *  1  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 327 *  1  0  0  1  1  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 328 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 329 *  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 330 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 331 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  0  1  1  0  1  1
* CALM HOURS (=1) FOR DAY 332 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 333 *  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 334 *  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 335 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 336 *  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 337 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 338 *  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 339 *  1  1  1  0  1  1  1  1  0  1  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 340 *  1  1  1  0  1  0  0  0  1  0  1  0  0  0  0  0  1  0  1  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 341 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  1  0  1  0  1
* CALM HOURS (=1) FOR DAY 342 *  1  1  1  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0  0
* CALM HOURS (=1) FOR DAY 343 *  1  0  1  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 344 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 345 *  1  1  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 346 *  1  1  1  1  1  1  1  0  1  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 347 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 348 *  1  1  0  1  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 352 *  1  1  1  0  0  0  0  1  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
```

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* CALM HOURS (=1) FOR DAY 353 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 354 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  1  1  1  1  1  1  0  1
* CALM HOURS (=1) FOR DAY 355 *  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 356 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY 357 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 358 *  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  1  1
* CALM HOURS (=1) FOR DAY 359 *  1  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 360 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 361 *  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 362 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 363 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 364 *  0  0  0  0  1  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 365 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
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*** 79:6-/YTAL:ALL SCS P3D&NAAQS 32 REC. ALL DAYS. F-1612 ***

* 365-DAY AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM SOURCES: 1001, -2004,
* FOR THE DISCRETE RECEPTOR POINTS *

- X -	- Y -	CON.	- X -	- Y -	CON.	- X -	- Y -	CON.
-900.0	900.0	0.96838	-300.0	900.0	0.71751	-300.0	900.0	0.92063
0.	900.0	1.34989	-900.0	600.0	0.75224	-600.0	600.0	0.47090
-300.0	600.0	0.39935	0.	600.0	1.42236	-900.0	300.0	0.67774
-600.0	300.0	0.53535	-300.0	300.0	0.35603	-900.0	0.	0.70496
-600.0	0.	0.56220	-900.0	-300.0	1.06344	-600.0	-300.0	1.08933
-900.0	-600.0	1.67735	-600.0	-600.0	1.01699	-300.0	-600.0	0.82762
-900.0	-900.0	1.46304	-600.0	-900.0	1.27664	-300.0	-900.0	1.17517
-207.0	-364.0	1.04011	-262.0	-505.0	1.25258	-317.0	-220.0	2.08180
-346.0	-126.0	1.33950	-384.0	-13.0	1.58716	-354.0	85.0	0.69745
-348.0	146.0	0.89445	-274.0	195.0	0.16630	-207.0	244.0	-0.14564
-201.0	230.0	-0.03590	-104.0	317.0	0.96926	-24.0	378.0	2.69506
61.0	435.0	0.82652	145.0	376.0	0.33022	226.0	329.0	0.33824
267.0	335.0	0.20389	384.0	297.0	-0.03726	300.0	900.0	0.81703
600.0	900.0	0.39274	900.0	900.0	0.51535	300.0	600.0	0.29316
600.0	600.0	0.21329	900.0	600.0	0.39698	900.0	300.0	0.42402
900.0	0.	0.28600	700.0	-300.0	0.30992	0.	-600.0	1.70041
300.0	-600.0	0.58023	600.0	-600.0	0.61529	900.0	-600.0	0.75859
0.	-900.0	1.71404	300.0	-900.0	1.11321	600.0	-900.0	0.86389
900.0	-900.0	0.95318	500.0	300.0	0.06202	600.0	300.0	0.13109
700.0	300.0	0.19871	300.0	300.0	0.30571	900.0	200.0	0.38804
900.0	100.0	0.30600	900.0	-100.0	0.39815	900.0	-200.0	0.27539
900.0	-400.0	0.37355	900.0	-500.0	0.59146	800.0	-600.0	0.72088
700.0	-600.0	0.58404	500.0	-600.0	0.65405	400.0	-600.0	0.50119
200.0	-600.0	0.73493	100.0	-600.0	0.83408	-750.0	-600.0	1.31131
-100.0	-550.0	1.30106	-150.0	-475.0	1.03101	-46000.0	7000.0	0.19294
-44000.0	7000.0	0.20133	-46000.0	5000.0	0.19351	-44000.0	5000.0	0.20272
-46000.0	3000.0	0.17509	-44000.0	3000.0	0.18471	-46000.0	1000.0	0.18672
-44000.0	1000.0	0.19442						

*** TYPE=TOTAL:ALL SCS PSDSNAAQS 32 REC. ALL DAYS. F-1612 ***

* 50 MAXIMUM 3-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *

* FROM SOURCES: 1001, -2004,

RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)	RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)
1	177.41045	3	229	-384.0	-18.0	26	99.82764	7	124	61.0	433.0
2	175.10338	5	82	146.0	396.0	27	99.57011	7	255	-348.0	146.0
3	146.13090	5	327	-104.0	317.0	28	99.18442	7	256	61.0	433.0
4	145.86221	1	179	-364.0	-18.0	29	98.13973	8	255	-348.0	146.0
5	143.22599	1	230	-364.0	-18.0	30	97.49859	4	63	-207.0	244.0
6	143.00360	2	94	-24.0	378.0	31	96.89437	8	362	-343.0	-128.0
7	140.53278	8	159	-384.0	-18.0	32	96.39496	6	153	146.0	396.0
8	140.20998	8	274	-364.0	-18.0	33	94.78015	5	255	-348.0	146.0
9	139.43453C	1	329	-384.0	-18.0	34	94.74699	2	305	-348.0	146.0
10	134.84729	5	20	-24.0	378.0	35	93.84381	1	202	-354.0	85.0
11	133.34999	6	62	-104.0	317.0	36	93.45393	4	82	-24.0	378.0
12	130.24915	8	59	61.0	433.0	37	92.66127	4	102	-24.0	378.0
13	125.94220	5	126	0.	900.0	38	92.47192	6	327	-104.0	317.0
14	123.74368	5	143	-24.0	378.0	39	92.20722	6	103	146.0	396.0
15	119.85445	3	180	-384.0	-18.0	40	91.82295	7	304	-384.0	-18.0
16	118.42989	7	1	-24.0	378.0	41	91.50834	5	329	-104.0	317.0
17	114.51688	4	356	-24.0	378.0	42	89.52567	7	159	-384.0	-18.0
18	113.25762	2	82	-24.0	378.0	43	89.42396	7	20	61.0	433.0
19	110.54280	4	294	-274.0	195.0	44	89.42312	1	55	-104.0	317.0
20	108.10403	4	20	-104.0	317.0	45	88.98502	4	254	-384.0	-18.0
21	107.66179	4	113	-104.0	317.0	46	88.19167	6	155	-207.0	-384.0
22	107.29556	1	203	-354.0	85.0	47	88.14315	7	253	-317.0	-220.0
23	104.10361	7	291	-262.0	-305.0	48	87.41049	1	105	-348.0	-128.0
24	103.91948	1	53	-104.0	317.0	49	87.06116	5	20	0.	600.0
25	100.92745	4	329	-300.0	300.0	50	86.70251C	8	110	-317.0	-220.0

*** 79:E-/YTAL:ALL SCS PSD&NAAQS 32 REC. ALL DAYS. F-1612 ***

* 50 MAXIMUM 24-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *

* FROM SOURCES: 1001, -2004,

RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)	RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)
1	46.51792C	1	327	-104.0	317.0	26	27.65199C	1	305	-384.0	-18.0
2	46.39151	1	255	-345.0	146.0	27	27.42416	1	255	-354.0	85.0
3	47.37333	1	234	-317.0	-220.0	28	25.81855C	1	91	-24.0	378.0
4	41.92208	1	252	-317.0	-220.0	29	25.81854C	1	124	-24.0	378.0
5	41.57193	1	253	-317.0	-220.0	30	25.77855C	1	123	-104.0	317.0
6	41.50477	1	32	146.0	396.0	31	25.35430	1	255	-346.0	-128.0
7	36.63669C	1	90	-150.0	-475.0	32	25.20051C	1	179	-384.0	-18.0
8	35.30392C	1	69	61.0	433.0	33	25.10493	1	229	-384.0	-18.0
9	33.72346C	1	159	-304.0	-18.0	34	25.00142C	1	329	-384.0	-18.0
10	31.51396C	1	1	-24.0	378.0	35	24.66478C	1	20	61.0	433.0
11	31.49573C	1	32	-207.0	244.0	36	23.60789	1	165	-317.0	-220.0
12	30.99430	1	307	100.0	-600.0	37	23.59805	1	165	-348.0	-128.0
13	30.70019C	1	132	-24.0	378.0	38	23.43411C	1	155	-500.0	-900.0
14	30.05269C	1	20	-24.0	378.0	39	23.25023C	1	90	-24.0	378.0
15	29.96230C	1	93	-24.0	378.0	40	23.23824C	1	145	-24.0	378.0
16	29.72240	1	338	-262.0	-305.0	41	22.87055C	1	126	0.	900.0
17	29.11065	1	254	-348.0	-128.0	42	22.85034C	1	305	-384.0	-18.0
18	28.69437	1	160	-384.0	-18.0	43	22.81562C	1	145	900.0	-900.0
19	28.75172	1	257	-317.0	-220.0	44	22.78747C	1	142	-24.0	378.0
20	28.65409C	1	124	61.0	433.0	45	22.72224	1	165	-317.0	-220.0
21	28.63006	1	32	-24.0	378.0	46	22.45880C	1	171	-384.0	-18.0
22	28.35977C	1	294	-384.0	-18.0	47	22.35396C	1	20	0.	600.0
23	27.95826C	1	155	-207.0	-354.0	48	22.33241C	1	162	300.0	-900.0
24	27.94485	1	254	-300.0	-300.0	49	22.32162C	1	329	-104.0	317.0
25	27.70043	1	32	-104.0	317.0	50	22.15525	1	304	-354.0	85.0

*** 79:0-79TAL:ALL SCS PSD:NAAQS 62 REC. ALL DAYS. F-1612 ***

* 365-DAY AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM SOURCES: 2001, -3007,
* FOR THE DISCRETE RECEPTOR POINTS *

- X -	- Y -	CON.	- X -	- Y -	CON.	- X -	- Y -	CON.
-900.0	900.0	7.31935	-600.0	900.0	6.11983	-300.0	900.0	7.99475
0.	900.0	12.78673	-900.0	600.0	7.04610	-600.0	600.0	5.87125
-300.0	600.0	8.35735	0.	600.0	14.69744	-900.0	300.0	7.40608
-300.0	300.0	7.82567	-300.0	300.0	9.50586	-900.0	0.	8.15020
-600.0	0.	9.70935	-900.0	-300.0	9.68203	-600.0	-300.0	11.44038
-900.0	-600.0	12.13069	-600.0	-600.0	9.26472	-300.0	-600.0	8.79055
-900.0	-900.0	10.49494	-300.0	-900.0	9.70937	-300.0	-900.0	9.84829
-207.0	-334.0	12.32551	-262.0	-305.0	13.24925	-317.0	-220.0	17.32439
-348.0	-126.0	16.24794	-324.0	-18.0	16.20476	-354.0	65.0	13.05498
-348.0	146.0	12.87508	-274.0	195.0	9.95217	-207.0	244.0	8.99437
-201.0	260.0	9.50491	-104.0	317.0	15.81970	-24.0	378.0	22.20713
61.0	435.0	16.37359	146.0	396.0	10.22016	226.0	329.0	6.63320
287.0	335.0	5.81826	384.0	299.0	5.02286	300.0	900.0	7.16796
600.0	900.0	4.30013	900.0	900.0	4.57746	300.0	600.0	5.06346
600.0	600.0	3.96563	900.0	600.0	4.04257	900.0	300.0	4.73508
900.0	0.	3.43450	900.0	-300.0	3.33061	0.	-600.0	17.51250
300.0	-600.0	9.17578	600.0	-600.0	7.31603	900.0	-600.0	6.86196
0.	-900.0	15.70627	300.0	-900.0	11.00419	600.0	-900.0	8.07656
900.0	-900.0	7.99649	300.0	300.0	5.01679	600.0	300.0	4.64683
700.0	300.0	4.46205	600.0	300.0	4.37146	900.0	200.0	4.26928
900.0	100.0	3.75868	900.0	-100.0	3.77168	900.0	-200.0	3.20160
900.0	-400.0	4.64214	900.0	-500.0	5.91255	800.0	-600.0	7.03997
700.0	-600.0	7.02504	500.0	-600.0	7.62507	400.0	-600.0	7.97290
200.0	-600.0	11.45261	100.0	-600.0	14.17426	-750.0	-600.0	10.19634
-100.0	-550.0	13.34160	-150.0	-475.0	13.59359	-46000.0	7000.0	1.04576
-44000.0	7000.0	1.09137	-46000.0	5000.0	1.04919	-44000.0	5000.0	1.09970
-46000.0	5000.0	0.94912	-44000.0	3000.0	1.00204	-46000.0	1000.0	1.01275
-44000.0	1000.0	1.05510						

*** TYPE=TOTAL:ALL SCS PSD&NAAQS 32 REC. ALL DAYS. F-1612 ***

* 50 MAXIMUM 3-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *

* FROM SOURCES: 2001, -3007,

RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)	RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)
1	833.90865	6	229	-384.0	-18.0	26	469.11598	7	1	-24.0	378.0
2	735.13721	5	82	144.0	396.0	27	456.16159	1	253	-317.0	-220.0
3	732.07043C	1	229	-384.0	-18.0	28	462.72564	4	196	300.0	-900.0
4	638.41578	5	294	-384.0	-18.0	29	458.88803	1	105	-348.0	-128.0
5	654.31922	5	126	0.	900.0	30	456.82919	6	254	-343.0	-128.0
6	653.94589	1	230	-384.0	-18.0	31	456.23154	5	126	0.	600.0
7	652.23054	6	139	-384.0	-18.0	32	453.28205	5	255	-348.0	146.0
8	650.53137	1	179	-384.0	-18.0	33	450.89228	4	197	-600.0	-600.0
9	650.15653	8	352	-348.0	-128.0	34	450.60196	1	65	-104.0	317.0
10	503.50719	2	94	-24.0	378.0	35	448.06491	5	253	-348.0	-128.0
11	557.62040	5	327	-104.0	317.0	36	445.40341	4	145	900.0	-900.0
12	553.35928	5	20	-24.0	378.0	37	438.64626	4	184	0.	-900.0
13	550.60533	6	69	61.0	433.0	38	437.28999	4	253	-317.0	-220.0
14	527.19559	4	136	-343.0	-128.0	39	426.26065	4	100	-300.0	-300.0
15	524.63976	3	150	-384.0	-18.0	40	425.45282	2	82	-24.0	378.0
16	511.12439	6	82	-104.0	317.0	41	424.42504	4	82	-24.0	378.0
17	491.30849	7	291	-262.0	-305.0	42	423.14308	7	200	-384.0	-18.0
18	486.06368	4	20	-104.0	317.0	43	421.58957	3	255	-348.0	146.0
19	484.82859	7	139	-384.0	-18.0	44	420.94014	1	305	-384.0	-18.0
20	477.70831	4	356	-24.0	378.0	45	420.93783	4	197	-750.0	-600.0
21	475.63119	5	143	-24.0	378.0	46	418.63496	4	204	-274.0	195.0
22	472.45630	7	254	-348.0	-128.0	47	417.41027	7	304	-384.0	-18.0
23	472.33188	2	255	-348.0	-128.0	48	415.69027	5	1	61.0	433.0
24	471.27202	1	203	-384.0	85.0	49	415.46892	1	268	-317.0	-220.0
25	469.14153	6	103	144.0	396.0	50	415.24030	6	246	-207.0	-384.0

*** TYPE-TOTAL:ALL SOS PODNAAMS 32 REC. ALL DAYS. F-1012 ***

* 50 MAXIMUM 24-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *

* FROM SOURCES: 2001, -3007,

RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)
1	254.61457	1	255	-317.0	-220.0
2	241.95151	1	254	-317.0	-220.0
3	240.21241C	1	50	-150.0	-475.0
4	230.65902	1	252	-317.0	-220.0
5	220.13514	1	82	140.0	396.0
6	218.10591	1	254	-348.0	-126.0
7	216.39114	1	255	-348.0	148.0
8	212.32164C	1	327	-104.0	317.0
9	198.63911	1	254	-300.0	-300.0
10	198.31477	1	255	-354.0	35.0
11	196.83164C	1	20	-24.0	378.0
12	194.48341C	1	1	-24.0	378.0
13	191.40206	1	229	-304.0	-18.0
14	179.25932C	1	294	-304.0	-18.0
15	178.45615	1	82	81.0	433.0
16	177.90115	1	306	-202.0	-335.0
17	177.72693	1	82	-24.0	378.0
18	176.93640C	1	159	-304.0	-18.0
19	176.94955C	1	67	81.0	433.0
20	170.30105C	1	124	81.0	433.0
21	165.19594C	1	102	-24.0	378.0
22	164.21954C	1	50	-207.0	-384.0
23	155.74673	1	307	103.0	-600.0
24	151.92373C	1	124	-24.0	378.0
25	150.29998C	1	155	-207.0	-384.0
26	160.24642	1	165	-343.0	-128.0
27	159.91534	1	287	-317.0	-220.0
28	158.95543	1	268	-317.0	-220.0
29	155.63771C	1	155	-262.0	-305.0
30	154.93879	1	114	-354.0	85.0
31	154.69057C	1	305	-384.0	-18.0
32	150.89995C	1	96	-24.0	378.0
33	149.17783C	1	91	-24.0	378.0
34	145.68864C	1	155	-500.0	-900.0
35	145.05146	1	100	-384.0	-18.0
36	144.75547	1	255	-348.0	-128.0
37	144.32186C	1	90	-24.0	378.0
38	142.66996C	1	20	-104.0	317.0
39	142.74650C	1	50	-100.0	-550.0
40	140.28539C	1	329	-384.0	-18.0
41	140.04151C	1	305	-334.0	-18.0
42	137.67916	1	62	-104.0	317.0
43	137.77516	1	156	-317.0	-220.0
44	137.72926	1	246	-207.0	-384.0
45	136.55531C	1	102	-104.0	317.0
46	136.55596	1	114	-348.0	146.0
47	135.05379C	1	126	0.	900.0
48	134.81894	1	252	-348.0	-128.0
49	134.16176C	1	302	-348.0	-126.0
50	133.73886C	1	52	-207.0	244.0

ECHO PRINT OF INPUT DATA

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CARD      12345678901234567890123456789012345678901234567890123456789012345678901234567890

   1      80:B-BJTAL:ALL SCS PSD&NAAJS      52 REC.   ALL DAYS. F-1612   B*CBCA380  )
   2       1 5 1 1 0 1 C 0 1 0 C 0 0 0 1+1 0+1 1 1 0 1 1 00102+1+1+1+1+2
   3           14    30    08   032    15      0    00    00
   4           -0900.     0900.     0000.
   5           -0600.     0900.     0000.
   6           -0300.     0900.     0000.
   7            0000.     0900.     0000.
   8           -0900.     0600.     0000.
   9           -0600.     0600.     0000.
  10           -0300.     0600.     0000.
  11            0000.     0600.     0000.
  12           -0900.     0300.     0000.
  13           -0600.     0300.     0000.
  14           -0300.     0300.     0000.
  15           -0900.     0000.     0000.
  16           -0600.     0000.     0000.
  17           -0900.    -0300.     0000.
  18           -0600.    -0300.     0000.
  19           -0900.    -0600.     0000.
  20           -0600.    -0600.     0000.
  21           -0300.    -0600.     0000.
  22           -0900.    -0900.     0000.
  23           -0600.    -0900.     0000.
  24           -0300.    -0900.     0000.
  25           -0207.    -0364.     0000.
  26           -0262.    -0305.     0000.
  27           -0317.    -0220.     0000.
  28           -0348.    -0128.     0000.
  29           -0364.    -0013.     0000.
  30           -0354.     0085.     0000.
  31           -0343.     0145.     0000.
  32           -0274.     0195.     0000.
  33           -0207.     0244.     0000.
  34           -0201.     0283.     0000.
  35           -0104.     0317.     0000.
  36           -0024.     0378.     0000.
  37            0061.     0433.     0000.
  38            0146.     0396.     0000.
  39            0226.     0329.     0000.
  40            0287.     0335.     0000.
  41            0384.     0299.     0000.
  42            0300.     0900.     0000.
  43            0600.     0900.     0000.
  44            0900.     0900.     0000.
  45            0300.     0600.     0000.
  46            0600.     0600.     0000.
  47            0900.     0600.     0000.
  48            0900.     0300.     0000.
  49            0900.     0000.     0000.
  50            0900.    -0300.     0000.

          1         2         3         4         5         6         7         8
12345678901234567890123456789012345678901234567890123456789012345678901234567890
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Year: 1980

ECHO PRINT OF INPUT DATA

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CARD    12345678901234567890123456789012345678901234567890123456789012345678901234567890

  51          0000.     -0600.     0000.
  52          0300.     -0600.     0000.
  53          0600.     -0600.     0000.
  54          0900.     -0600.     0000.
  55          0000.     -0900.     0000.
  56          0300.     -0900.     0300.
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  58          0900.     -0900.     0000.
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  60          0600.      0300.     0000.
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  66          0900.     -0200.     0000.
  67          0900.     -0400.     0000.
  68          0900.     -0500.     0000.
  69          0800.     -0500.     0000.
  70          0700.     -0600.     0000.
  71          0500.     -0600.     0000.
  72          0400.     -0500.     0000.
  73          0200.     -0600.     0000.
  74          0100.     -0500.     0000.
  75         -0750.     -0600.     0000.
  76         -0100.     -0550.     0000.
  77         -0150.     -0475.     0000.
  78        -46000.      7300.     0000.
  79        -44000.      7000.     0000.
  80        -46000.      5000.     0000.
  81        -44000.      5000.     0000.
  82        -46000.      3000.     0000.
  83        -44000.      3000.     0000.
  84        -46000.      1000.     0000.
  85        -44000.      1000.     0000.
  86          1   1   1   1   1   1   1   1   1   1   2   2
  87        2001  2002  2003  2004  3001  3002  3003  3004  3005  3006  3007  1001 -2004
  88        2001 -3007
  89         7.6          1.0001     5.0000     5.0000     8.5000    10.5000
  90      10000000.
  91      11111111111111111111111111111111111111111111111111111111111111111111111111111111
  92      11111111111111111111111111111111111111111111111111111111111111111111111111111111
  93      11111111111111111111111111111111111111111111111111111111111111111111111111111111
  94      11111111111111111111111111111111111111111111111111111111111111111111111111111111
  95      11111111111111111111111111111111111111111
  96       95605     50 13861     30
  97      100100   0 -0.3780   0084.   0060. 000.0 29.26 339.0   7.48   1.22 45.87 33.88 33.88
  98      100200   0 -0.5166   0075.   0069. 000.0 29.26 346.0  11.12   1.22 45.87 33.88 33.88
  99      100300   0 -0.5166   0070.   0098. 000.0 26.26 347.0   9.70   1.22 45.87 33.88 33.88
 100      200100   0  2.5326   0250.   0064. 000.0 33.10 477.0   8.16   2.21 22.86 27.84 27.84

                1         2         3         4         5         6         7         8
        12345678901234567890123456789012345678901234567890123456789012345678901234567890
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ECHO PRINT OF INPUT DATA

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                1         2         3         4         5         6         7         8
CARD    12345678901234567890123456789012345678901234567890123456789012345678901234567890

101      200200  0  0.3344 -0073. -0036. 000.0 49.38 345.0  9.60  1.22 45.87 33.88 33.88
102      200300  0  0.1006  0000.  0000. 000.0 61.56 303.0 10.46  3.96 45.87 33.88 33.88
103      200400  0127.0030  0000.  0000. 000.0 63.56 303.0 10.46  3.96 45.87 33.88 33.88
104      300100  0 55.3574  0051.  0014. 000.0 63.58 444.0 10.62  3.35 45.87 33.88 33.88
105      300200  0 52.0467 -0014. -0019. 000.0 63.56 411.0 12.36  2.74 45.87 33.88 33.88
106      300300  0173.0593 -0094. -0025. 000.0 63.56 406.0 17.40  2.90 45.87 33.88 33.88
107      300400  0  0.4256  0025.  0052. 000.0 43.25 350.0 11.86  0.91 45.87 33.88 33.88
108      300500  0  0.3591 -0056.  0000. 000.0 42.67 346.0  8.97  1.22 45.87 33.88 33.88
109      300600  0  0.3453 -0073. -0036. 000.0 49.38 345.0  9.60  1.22 45.87 33.88 33.88
110      300700  0262.7377  0000.  0000. 000.0 63.58 303.0 15.46  3.96 45.87 33.88 33.88

                1         2         3         4         5         6         7         8
        12345678901234567890123456789012345678901234567890123456789012345678901234567890
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*** SOURCE DATA ***

SOURCE NUMBER	TYPE	WAKE	NUMBER PART. CATS.	EMISSION RATE TYPE=0,1 (GRAMS/SEC) TYPE=2 (GRAMS/SEC) PER METER**2	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	HEIGHT (METERS)	TEMP. TYPE=0 (DEG.K); VERT.DIM TYPE=1 (METERS)	EXIT VEL. TYPE=0 (M/SEC); HORZ.DIM TYPE=1,2 (METERS)	DIAMETER TYPE=0 (METERS)	BLDG. HEIGHT TYPE=0 (METERS)	BLDG. LENGTH TYPE=0 (METERS)	BLDG. WIDTH TYPE=0 (METERS)
1001	0	0	0	-.373006 00	34.0	30.0	0.	29.26	339.00	7.46	1.22	45.37	33.88	33.88
1002	0	0	0	-.516606 00	73.0	39.0	0.	29.26	346.00	11.12	1.22	45.87	33.88	33.88
1003	0	0	0	-.516606 00	70.0	96.0	0.	26.26	347.00	9.70	1.22	45.87	33.88	33.88
2001	0	0	0	0.253266 01	256.0	54.0	0.	38.10	477.00	8.15	2.21	22.36	27.84	27.84
2002	0	0	0	0.344006-01	-73.0	-32.0	0.	49.36	345.00	9.80	1.22	45.87	33.88	33.88
2003	0	0	0	0.100306 00	0.	0.	0.	66.56	363.00	18.46	3.96	45.87	33.88	33.88
2004	0	0	0	0.127016 03	0.	0.	0.	66.56	363.00	18.46	3.96	45.87	33.88	33.88
3001	0	0	0	0.553576 02	81.0	14.0	0.	66.56	444.00	10.02	3.35	45.87	33.88	33.88
3002	0	0	0	0.520476 02	-14.0	-19.0	0.	66.53	411.00	12.06	2.74	45.87	33.88	33.88
3003	0	0	0	0.178066 03	-94.0	-28.0	0.	66.56	466.00	17.40	2.90	45.87	33.88	33.88
3004	0	0	0	0.425606 00	23.0	52.0	0.	43.28	350.00	11.86	0.91	45.87	33.88	33.88
3005	0	0	0	0.359106 00	-56.0	0.	0.	42.67	346.00	8.97	1.22	45.87	33.88	33.88
3006	0	0	0	0.545306 00	-73.0	-36.0	0.	49.36	345.00	9.80	1.22	45.87	33.88	33.88
3007	0	0	0	0.252746 03	0.	0.	0.	66.56	363.00	18.46	3.96	45.87	33.88	33.88
* CALM HOURS (=1) FOR DAY 1 *					0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0									
* CALM HOURS (=1) FOR DAY 2 *					1 1 1 1 1 0 1 1 1 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1									
* CALM HOURS (=1) FOR DAY 3 *					1 1 1 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1									
* CALM HOURS (=1) FOR DAY 4 *					1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0									
* CALM HOURS (=1) FOR DAY 6 *					0 0 0 0 0 1 1 1 0 0 0 0 0 1 0 0 0 1 1 1 1 1 1 1									
* CALM HOURS (=1) FOR DAY 7 *					1 1 1 1 1 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1									
* CALM HOURS (=1) FOR DAY 8 *					0 0 1 1 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 1 0 1 1									
* CALM HOURS (=1) FOR DAY 9 *					1 0 1 0 1 1 1 1 1 1 0 1 0 0 1 0 0 1 1 1 1 1 1 1									
* CALM HOURS (=1) FOR DAY 10 *					1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0									
* CALM HOURS (=1) FOR DAY 11 *					0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 0									
* CALM HOURS (=1) FOR DAY 12 *					0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0									
* CALM HOURS (=1) FOR DAY 14 *					0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 1									
* CALM HOURS (=1) FOR DAY 15 *					1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 0 1 1									
* CALM HOURS (=1) FOR DAY 16 *					0 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 1 1 1 0 1 1									
* CALM HOURS (=1) FOR DAY 18 *					0 1 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 0 1 1									
* CALM HOURS (=1) FOR DAY 19 *					0 1 0 1 0 0 1 1 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1									
* CALM HOURS (=1) FOR DAY 20 *					1 1 1 1 1 1 1 1 1 1 1 0 0 0 0 0 0 1 1 0 1 0 1 1									
* CALM HOURS (=1) FOR DAY 21 *					1 1 1 1 1 1 1 1 1 1 0 0 1 0 0 0 0 0 0 0 1 1 1 1									
* CALM HOURS (=1) FOR DAY 22 *					1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0									
* CALM HOURS (=1) FOR DAY 23 *					0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 0 0									
* CALM HOURS (=1) FOR DAY 24 *					0 0 0 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1									
* CALM HOURS (=1) FOR DAY 25 *					1 1 0 1 1 1 1 0 0 1 1 1 1 0 1 0 1 0 1 0 1 0 0 0									
* CALM HOURS (=1) FOR DAY 26 *					0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0									
* CALM HOURS (=1) FOR DAY 28 *					0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1									
* CALM HOURS (=1) FOR DAY 29 *					1 1 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1									
* CALM HOURS (=1) FOR DAY 30 *					1 1 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1									
* CALM HOURS (=1) FOR DAY 31 *					1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0									
* CALM HOURS (=1) FOR DAY 34 *					1 1 1 1 1 1 1 1 0 1 0 1 0 0 0 0 0 0 1 1 1 1 1 1									
* CALM HOURS (=1) FOR DAY 35 *					1 1 1 1 1 1 1 1 0 1 0 0 0 0 0 0 0 0 1 1 1 1 1 1									
* CALM HOURS (=1) FOR DAY 36 *					1 1 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 1 1 0 1 0									
* CALM HOURS (=1) FOR DAY 37 *					0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 0 0									
* CALM HOURS (=1) FOR DAY 38 *					0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 1 1									
* CALM HOURS (=1) FOR DAY 39 *					1 1 0 0 0 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0									
* CALM HOURS (=1) FOR DAY 40 *					0 0 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0									
* CALM HOURS (=1) FOR DAY 42 *					0 0 0 1 0 0 0 0 0 0 0 1 0 0 0 1 1 0 0 0 0 1 0 0									
* CALM HOURS (=1) FOR DAY 43 *					1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1									

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* CALM HOURS (=1) FOR DAY  44 *  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  0  0  1
* CALM HOURS (=1) FOR DAY  45 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  46 *  1  1  1  1  0  1  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0
* CALM HOURS (=1) FOR DAY  47 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY  48 *  1  1  1  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0
* CALM HOURS (=1) FOR DAY  50 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0
* CALM HOURS (=1) FOR DAY  51 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  52 *  0  0  1  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  53 *  0  0  0  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY  54 *  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0
* CALM HOURS (=1) FOR DAY  55 *  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY  56 *  0  1  0  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0  0
* CALM HOURS (=1) FOR DAY  57 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY  58 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY  59 *  1  1  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  60 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY  61 *  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY  63 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1  1  0
* CALM HOURS (=1) FOR DAY  64 *  1  0  0  1  1  1  1  1  0  0  0  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY  65 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY  66 *  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY  70 *  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY  71 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1  0  0
* CALM HOURS (=1) FOR DAY  74 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0
* CALM HOURS (=1) FOR DAY  75 *  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY  76 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  0
* CALM HOURS (=1) FOR DAY  79 *  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0
* CALM HOURS (=1) FOR DAY  81 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY  82 *  1  0  0  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  83 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY  84 *  0  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  85 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  1
* CALM HOURS (=1) FOR DAY  86 *  0  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  88 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  89 *  0  0  0  0  1  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  91 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1
* CALM HOURS (=1) FOR DAY  92 *  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  94 *  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  96 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  97 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  98 *  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY  99 *  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY 100 *  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  1
* CALM HOURS (=1) FOR DAY 101 *  1  1  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 102 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 103 *  1  0  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 106 *  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 107 *  1  0  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  1
* CALM HOURS (=1) FOR DAY 108 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 109 *  0  1  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 110 *  0  1  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 111 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 112 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 113 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 114 *  1  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 115 *  0  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 116 *  1  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 117 *  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 118 *  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 120 *  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 121 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 122 *  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0
* CALM HOURS (=1) FOR DAY 123 *  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
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* CALM HO    (=1) FOR DAY 124 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  1
* CALM HO    (=1) FOR DAY 125 *  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0
* CALM HOURS (=1) FOR DAY 126 *  0  0  0  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0  0
* CALM HOURS (=1) FOR DAY 127 *  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 128 *  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 129 *  1  1  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 130 *  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0
* CALM HOURS (=1) FOR DAY 131 *  1  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 132 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 133 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 134 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 135 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  1  1
* CALM HOURS (=1) FOR DAY 136 *  1  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 137 *  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 138 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 139 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 140 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0
* CALM HOURS (=1) FOR DAY 141 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 142 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 143 *  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 144 *  0  0  1  0  1  0  1  1  0  0  0  0  0  0  0  0  1  1  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 145 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  1  0  0  0  0  0  1  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 146 *  1  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 147 *  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 148 *  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 149 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 150 *  1  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 151 *  0  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0
* CALM HOURS (=1) FOR DAY 152 *  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 153 *  0  0  0  0  0  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 154 *  0  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 155 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 156 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 157 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 158 *  1  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 159 *  1  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 160 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 161 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 162 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 163 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  0
* CALM HOURS (=1) FOR DAY 164 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0  0
* CALM HOURS (=1) FOR DAY 165 *  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 166 *  1  0  0  0  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 167 *  1  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 168 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 169 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 170 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 171 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 172 *  0  1  1  0  1  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0  1  1  0  0
* CALM HOURS (=1) FOR DAY 173 *  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  1  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 174 *  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 175 *  0  1  0  0  0  0  0  1  1  0  0  0  0  0  0  1  0  0  0  0  1  1  0  1  1  1
* CALM HOURS (=1) FOR DAY 176 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 177 *  0  1  0  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 178 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 179 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 180 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  1  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 181 *  1  0  1  1  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 182 *  0  0  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 183 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 184 *  0  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 185 *  1  1  1  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 186 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
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* CALM HOURS (=1) FOR DAY 187 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 188 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0
* CALM HOURS (=1) FOR DAY 189 *  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY 190 *  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1
* CALM HOURS (=1) FOR DAY 191 *  0  1  1  1  1  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  1
* CALM HOURS (=1) FOR DAY 192 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  1  0
* CALM HOURS (=1) FOR DAY 193 *  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 194 *  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 195 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 196 *  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  0  0
* CALM HOURS (=1) FOR DAY 197 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0
* CALM HOURS (=1) FOR DAY 198 *  1  1  1  1  1  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0
* CALM HOURS (=1) FOR DAY 199 *  0  1  1  1  1  1  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 200 *  1  0  1  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0
* CALM HOURS (=1) FOR DAY 201 *  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 203 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 204 *  0  0  0  0  1  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  1  0  0  1  1
* CALM HOURS (=1) FOR DAY 205 *  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  1  0  1  0  1  0  1  1
* CALM HOURS (=1) FOR DAY 206 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  1
* CALM HOURS (=1) FOR DAY 207 *  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  1
* CALM HOURS (=1) FOR DAY 208 *  1  1  1  1  1  1  1  1  0  0  0  1  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 209 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0
* CALM HOURS (=1) FOR DAY 210 *  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 211 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 212 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 213 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 214 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 215 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 216 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 217 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 218 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 219 *  1  0  1  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 220 *  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0
* CALM HOURS (=1) FOR DAY 221 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 222 *  1  1  1  1  1  1  1  1  0  0  0  1  0  0  0  0  0  1  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 223 *  1  1  1  1  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0
* CALM HOURS (=1) FOR DAY 224 *  1  0  0  0  0  1  0  0  0  0  0  0  0  0  1  1  0  1  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 225 *  1  1  1  1  1  1  1  0  0  0  1  0  0  0  0  0  0  0  0  0  0  1  0  0  0  1
* CALM HOURS (=1) FOR DAY 226 *  1  1  1  1  1  1  1  0  0  1  1  0  0  0  0  0  0  0  1  1  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 227 *  0  1  1  1  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 228 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 229 *  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1
* CALM HOURS (=1) FOR DAY 230 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 231 *  1  1  1  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 232 *  1  0  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 233 *  1  1  1  1  1  1  1  1  0  0  0  1  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 234 *  1  1  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  0  1
* CALM HOURS (=1) FOR DAY 235 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 236 *  0  0  0  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 237 *  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 238 *  0  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  1  1
* CALM HOURS (=1) FOR DAY 239 *  1  1  1  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 240 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 241 *  0  0  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 242 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  1
* CALM HOURS (=1) FOR DAY 243 *  1  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 244 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  0  0  1
* CALM HOURS (=1) FOR DAY 245 *  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 246 *  1  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 247 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 248 *  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  0  0
* CALM HOURS (=1) FOR DAY 249 *  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 250 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
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* CALM HOURS (=1) FOR DAY 251 *	1	0	1	1	1	1	1	1	1	0	0	0	0	1	0	0	0	0	0	1	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 252 *	1	1	1	1	1	1	1	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	1	1	1
* CALM HOURS (=1) FOR DAY 253 *	1	1	1	1	1	1	1	0	0	0	0	0	1	1	0	0	0	0	0	1	1	0	1	1	1	1
* CALM HOURS (=1) FOR DAY 254 *	1	1	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 255 *	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 256 *	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1
* CALM HOURS (=1) FOR DAY 257 *	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
* CALM HOURS (=1) FOR DAY 258 *	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 259 *	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
* CALM HOURS (=1) FOR DAY 260 *	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
* CALM HOURS (=1) FOR DAY 261 *	1	1	1	1	1	1	1	1	0	1	0	0	0	1	0	0	0	0	0	1	1	1	0	0	1	0
* CALM HOURS (=1) FOR DAY 262 *	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0
* CALM HOURS (=1) FOR DAY 263 *	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 264 *	1	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 265 *	1	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0
* CALM HOURS (=1) FOR DAY 266 *	1	1	1	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	1	1	0	0	1
* CALM HOURS (=1) FOR DAY 267 *	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
* CALM HOURS (=1) FOR DAY 268 *	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 269 *	1	1	1	1	1	1	0	0	0	0	0	1	1	0	0	0	0	0	1	1	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 270 *	1	1	1	1	1	1	1	1	0	0	0	1	1	0	0	0	0	0	1	0	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 271 *	0	1	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	1	0
* CALM HOURS (=1) FOR DAY 272 *	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 273 *	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	0	0	0	0	0	1	1	0	1	1	0
* CALM HOURS (=1) FOR DAY 274 *	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	1	1	0	0	1	0	0
* CALM HOURS (=1) FOR DAY 275 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 276 *	1	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 277 *	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
* CALM HOURS (=1) FOR DAY 278 *	1	1	0	1	0	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 279 *	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
* CALM HOURS (=1) FOR DAY 280 *	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 281 *	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 282 *	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 283 *	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 284 *	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 285 *	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 286 *	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 287 *	1	0	1	1	1	1	1	0	0	0	0	0	0	1	0	0	1	0	0	0	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 288 *	1	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	1
* CALM HOURS (=1) FOR DAY 289 *	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0
* CALM HOURS (=1) FOR DAY 290 *	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0
* CALM HOURS (=1) FOR DAY 291 *	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 292 *	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 293 *	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0
* CALM HOURS (=1) FOR DAY 294 *	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0
* CALM HOURS (=1) FOR DAY 295 *	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	0	0	1	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 296 *	1	1	1	1	0	1	1	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 298 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 299 *	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 300 *	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 301 *	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 302 *	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 303 *	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 305 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 306 *	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 307 *	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 308 *	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 309 *	1	1	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY 310 *	1	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	1
* CALM HOURS (=1) FOR DAY 311 *	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 312 *	1	1	1	1	1	1	1	1	0	1	0	1	0	1	0	1	0	0	1	1	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 313 *	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	1	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 314 *	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	0	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY 315 *	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	1	0	1	0	1	1	1	1

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* CALM HOURS (=1) FOR DAY 317 *  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY 318 *  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 319 *  0  0  0  0  1  0  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  0  1  1
* CALM HOURS (=1) FOR DAY 320 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 321 *  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 322 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 323 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0
* CALM HOURS (=1) FOR DAY 324 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 325 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 326 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 327 *  1  0  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 328 *  0  0  0  0  0  1  1  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 329 *  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0
* CALM HOURS (=1) FOR DAY 330 *  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 331 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 332 *  0  0  0  0  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 333 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 334 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  1  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 335 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 336 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 337 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 338 *  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 339 *  1  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 340 *  1  1  1  1  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 341 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 342 *  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 343 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 344 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 345 *  0  0  0  0  1  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 346 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 347 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 348 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  1  1  1  0  1
* CALM HOURS (=1) FOR DAY 349 *  0  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 350 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  1  1  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 351 *  1  1  1  1  1  1  1  1  1  0  1  0  0  0  1  0  1  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 352 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 353 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 354 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 355 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 358 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 359 *  1  1  1  1  1  1  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 360 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0
* CALM HOURS (=1) FOR DAY 362 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY 363 *  0  1  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  1
* CALM HOURS (=1) FOR DAY 364 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 365 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0
* CALM HOURS (=1) FOR DAY 366 *  0  0  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  1  1  0  0  1  1  1
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*** 30:B-BOTAL:ALL SCS P3D6NAAQS 82 REC. ALL DAYS. F-1612 ***

* 366-DAY AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM SOURCES: 1001, -2004,
* FOR THE DISCRETE RECEPTOR POINTS *

- X -	- Y -	CON.	- X -	- Y -	CON.	- X -	- Y -	CON.
-900.0	900.0	0.75704	-800.0	900.0	0.87439	-300.0	900.0	0.77673
0.	900.0	1.34077	-700.0	800.0	0.85349	-600.0	600.0	0.32256
-300.0	600.0	0.50062	0.	800.0	1.15098	-900.0	300.0	0.93608
-600.0	300.0	0.44934	-300.0	300.0	-0.31336	-900.0	0.	1.23364
-600.0	0.	0.85978	-700.0	-300.0	1.44412	-600.0	-300.0	0.87752
-900.0	-600.0	1.51078	-600.0	-800.0	1.07071	-300.0	-600.0	0.58795
-900.0	-900.0	1.55066	-800.0	-900.0	1.27798	-300.0	-900.0	1.15576
-207.0	-304.0	0.34795	-262.0	-303.0	0.53703	-317.0	-220.0	0.55147
-348.0	-128.0	0.91732	-334.0	-18.0	1.23750	-354.0	85.0	0.12248
-348.0	146.0	0.11822	-274.0	195.0	-0.21781	-207.0	244.0	-0.67725
-201.0	280.0	-0.29152	-104.0	317.0	0.33659	-24.0	378.0	1.59894
61.0	433.0	0.50862	145.0	396.0	0.13049	226.0	329.0	0.00202
287.0	335.0	0.01103	364.0	299.0	-0.10747	300.0	900.0	0.86214
600.0	900.0	0.63585	900.0	900.0	0.70550	300.0	600.0	0.28539
600.0	600.0	0.29056	900.0	600.0	0.71267	900.0	300.0	0.68476
900.0	0.	0.63554	900.0	-300.0	0.56027	0.	-600.0	1.68207
300.0	-600.0	0.69048	600.0	-600.0	0.83710	900.0	-600.0	1.04924
0.	-900.0	1.87056	300.0	-900.0	1.24852	600.0	-900.0	1.05083
900.0	-900.0	1.27326	300.0	300.0	0.10691	600.0	300.0	0.32513
700.0	300.0	0.45456	800.0	300.0	0.53280	900.0	200.0	0.72084
900.0	100.0	0.57533	900.0	-100.0	0.55804	900.0	-200.0	0.50028
900.0	-400.0	0.65665	900.0	-500.0	0.80622	800.0	-600.0	1.06643
700.0	-600.0	0.94806	500.0	-600.0	0.71508	400.0	-600.0	0.57180
200.0	-600.0	0.74543	100.0	-600.0	0.82996	-750.0	-600.0	1.25556
-100.0	-550.0	0.98624	-150.0	-475.0	0.71007	-46000.0	7000.0	0.19890
-44000.0	7000.0	0.20113	-46000.0	5000.0	0.22438	-44000.0	5000.0	0.23283
-46000.0	3000.0	0.23836	-44000.0	3000.0	0.24858	-46000.0	1000.0	0.22803
-44000.0	1000.0	0.23770						

*** 50;E-TOTAL:ALL SCS PSD.NAAQS 82 REC. ALL DAYS. F-1612 ***

* 50 MAXIMUM 3-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *

* FROM SOURCES: 1001, -2004,

RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)	RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)
1	157.25465	7	66	61.0	455.0	26	91.69344	2	165	-348.0	-128.0
2	154.17164	2	240	-343.0	-128.0	27	89.82253	5	104	-24.0	378.0
3	137.55726	8	219	-334.0	-18.0	28	89.69463	4	133	-600.0	900.0
4	133.42765	4	317	-348.0	-128.0	29	88.94796	5	317	-343.0	-128.0
5	126.41370	6	67	-24.0	378.0	30	85.00461	2	157	-354.0	85.0
6	124.96442	1	151	-343.0	146.0	31	83.65588	6	77	-24.0	378.0
7	124.03143	5	40	-24.0	378.0	32	82.60178	4	257	-900.0	-600.0
8	121.55316C	8	157	-348.0	-128.0	33	82.37267	5	80	-24.0	378.0
9	116.14643C	8	152	-274.0	195.0	34	81.05270	7	104	146.0	396.0
10	113.54133	1	221	-364.0	-18.0	35	80.55127	4	64	0.	600.0
11	113.55277	4	144	61.0	455.0	36	80.15240	4	193	900.0	-300.0
12	108.09178	5	109	-24.0	378.0	37	80.10351	8	143	146.0	396.0
13	107.02538C	2	224	-364.0	-18.0	38	79.70888	1	220	-317.0	-220.0
14	105.52873	2	90	-24.0	378.0	39	79.48901	5	255	900.0	100.0
15	104.65172	8	318	-334.0	85.0	40	79.44344C	8	197	-274.0	195.0
16	104.10799	4	76	-201.0	250.0	41	79.40838	5	316	-262.0	-305.0
17	99.66879C	2	135	-274.0	195.0	42	79.17343C	1	219	-354.0	85.0
18	99.07855	6	80	146.0	396.0	43	78.95613	8	78	0.	-600.0
19	96.15589	8	290	-384.0	-18.0	44	78.92308	5	155	-600.0	-600.0
20	96.00972	8	75	-364.0	-18.0	45	78.13955	8	220	-348.0	146.0
21	95.56744	4	154	-900.0	-900.0	46	77.89603	4	215	600.0	-900.0
22	95.23262	1	246	200.0	-600.0	47	77.74571	2	77	-104.0	317.0
23	94.82949	4	77	-24.0	378.0	48	77.71194	5	208	900.0	600.0
24	92.56495	5	52	-24.0	378.0	49	77.69943	4	196	900.0	-500.0
25	92.09770	4	213	-900.0	0.	50	77.60556	4	77	0.	600.0

*** SUB-TOTAL:ALL SCS PSDSNAAAS 82 REC. ALL DAYS. F-1612 ***

* 50 MAXIMUM 24-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *

* FROM SOURCES: 1001, -2004,

RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)	RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)
1	46.15693C	1	317	-343.0	-128.0	26	21.78517C	1	164	-900.0	-900.0
2	45.05347	1	104	-24.0	378.0	27	21.61894C	1	138	-348.0	146.0
3	36.89610C	1	219	-364.0	-18.0	28	21.54562C	1	194	900.0	-900.0
4	33.30948	1	77	-24.0	378.0	29	21.47338C	1	157	-354.0	85.0
5	30.04754C	1	240	-343.0	-128.0	30	21.31871C	1	331	-348.0	-128.0
6	29.66941C	1	151	-348.0	146.0	31	21.26161C	1	213	-900.0	0.
7	29.31648	1	67	-24.0	378.0	32	21.18165	1	77	61.0	433.0
8	28.53591C	1	221	-384.0	-18.0	33	21.16131	1	78	0.	-600.0
9	28.90907C	1	270	-384.0	-18.0	34	20.95775C	1	133	-600.0	900.0
10	28.13852C	1	34	-24.0	378.0	35	20.92641C	1	319	-354.0	35.0
11	25.93677C	1	33	-24.0	378.0	36	20.86844C	1	84	61.0	433.0
12	25.11136C	1	66	61.0	433.0	37	20.84504C	1	220	-343.0	-128.0
13	24.92237C	1	112	0.	-900.0	38	20.70830C	1	84	0.	600.0
14	24.55437C	1	76	-201.0	280.0	39	20.65754C	1	157	-348.0	-128.0
15	24.33725C	1	224	-384.0	-18.0	40	20.45992C	1	106	900.0	200.0
16	24.23344C	1	39	-384.0	-18.0	41	20.33064C	1	132	-300.0	600.0
17	24.23300C	1	144	61.0	433.0	42	20.28344C	1	196	300.0	-600.0
18	23.45603	1	67	0.	600.0	43	20.15463C	1	289	-600.0	0.
19	22.99776C	1	112	0.	-900.0	44	20.10504C	1	40	-24.0	378.0
20	22.86799C	1	195	900.0	-600.0	45	19.99247C	1	220	-900.0	-300.0
21	22.65435	1	50	146.0	396.0	46	19.96999C	1	75	-384.0	-18.0
22	22.57110C	1	176	900.0	-300.0	47	19.92503C	1	247	-384.0	-18.0
23	22.46351	1	77	0.	600.0	48	19.91832C	1	166	-600.0	-600.0
24	22.41728C	1	155	-343.0	-128.0	49	19.81226C	1	257	-900.0	-600.0
25	22.36365C	1	10	-364.0	-18.0	50	19.65131C	1	219	-600.0	0.

*** GOLD-OUT-ALL SCS PSDSNAAUS 82 REC. ALL DAYS. F-1612 ***

* 366-DAY AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM SOURCES: 2001, -3007,
* FOR THE DISCRETE RECEPTOR POINTS *

- X -	- Y -	CON.	- X -	- Y -	CON.	- X -	- Y -	CON.
-900.0	900.0	6.60332	-500.0	900.0	6.93672	-300.0	900.0	7.45783
0.	900.0	12.61559	-700.0	600.0	7.49715	-600.0	600.0	5.02018
-300.0	600.0	6.57519	0.	600.0	13.33759	-900.0	300.0	8.61714
-600.0	300.0	7.42020	-300.0	300.0	6.93078	-900.0	0.	11.56950
-300.0	0.	11.91952	-900.0	-300.0	11.85657	-600.0	-300.0	9.33663
-900.0	-600.0	10.93973	-600.0	-600.0	9.38412	-300.0	-600.0	7.59400
-900.0	-900.0	10.82465	-300.0	-900.0	9.46691	-300.0	-900.0	10.17932
-207.0	-364.0	8.93274	-262.0	-305.0	9.23302	-317.0	-220.0	9.88485
-348.0	-126.0	12.67238	-364.0	-18.0	15.49662	-354.0	85.0	10.92078
-348.0	146.0	9.81974	-274.0	195.0	7.46916	-207.0	244.0	6.90736
-291.0	260.0	7.56716	-104.0	317.0	11.93750	-24.0	378.0	17.76632
61.0	433.0	15.03531	140.0	396.0	10.64777	226.0	329.0	7.16540
287.0	335.0	6.13161	364.0	299.0	6.12664	300.0	900.0	8.08249
600.0	900.0	5.37341	900.0	900.0	6.02753	300.0	600.0	6.22928
600.0	600.0	5.13218	900.0	600.0	6.53722	900.0	300.0	6.75656
900.0	0.	5.57524	900.0	-300.0	5.13542	0.	-600.0	17.96821
300.0	-600.0	9.66060	600.0	-600.0	8.80179	900.0	-600.0	8.44306
0.	-900.0	17.15183	300.0	-900.0	11.33481	600.0	-900.0	9.22162
900.0	-900.0	9.50695	300.0	300.0	6.54797	600.0	300.0	6.79516
700.0	300.0	6.71405	300.0	300.0	6.50384	900.0	200.0	6.59393
900.0	100.0	5.71101	900.0	-100.0	4.90613	900.0	-200.0	4.58829
900.0	-400.0	5.95755	900.0	-500.0	7.19032	800.0	-600.0	8.91409
700.0	-600.0	8.90409	500.0	-600.0	8.45257	400.0	-600.0	8.58814
209.0	-600.0	11.61542	100.0	-600.0	15.02452	-750.0	-600.0	9.98650
-100.0	-550.0	14.73070	-150.0	-475.0	12.06225	-46000.0	7000.0	1.07665
-44000.0	7000.0	1.06954	-46000.0	5000.0	1.22277	-44000.0	5000.0	1.26621
-46000.0	5000.0	1.30475	-44000.0	5000.0	1.35843	-46000.0	1000.0	1.24248
-44000.0	1000.0	1.27602						

*** 50;6-TOTAL;ALL SCS PDD&NAAQS 82 REC. ALL DAYS. F-1612 ***

* 50 MAXIMUM 3-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *

* FROM SOURCES: 2001, -3007,

RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)	RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)
1	852.62679	2	240	-348.0	-126.0	26	430.88024	5	109	-24.0	378.0
2	736.32506	4	317	-348.0	-126.0	27	427.86641	5	155	-600.0	-600.0
3	725.50272	3	219	-384.0	-18.0	28	427.20113	5	235	900.0	100.0
4	619.33600	3	137	-348.0	-126.0	29	425.65302	4	77	-24.0	378.0
5	610.85442	1	56	61.0	433.0	30	425.24715	4	76	-201.0	280.0
6	532.22924	4	134	-900.0	-900.0	31	423.09402	3	106	900.0	200.0
7	524.85056	5	317	-348.0	-126.0	32	420.14090	5	220	-900.0	-300.0
8	524.24878	4	133	-600.0	900.0	33	417.30112	2	39	-384.0	-18.0
9	521.10529	1	221	-384.0	-18.0	34	415.81487	4	210	600.0	-900.0
10	518.64016	6	57	-24.0	378.0	35	414.01227	4	196	900.0	-500.0
11	516.66533	4	213	-900.0	0.	36	411.83077	8	290	-384.0	-18.0
12	515.72318	4	144	61.0	433.0	37	410.36230	6	52	-24.0	378.0
13	508.62973	2	224	-384.0	-18.0	38	408.31482	4	164	-600.0	-600.0
14	504.01923	2	165	-348.0	-126.0	39	408.08668	4	127	900.0	-900.0
15	469.50878	6	75	-384.0	-18.0	40	406.31196	3	143	146.0	396.0
16	469.08569	6	80	146.0	396.0	41	404.65965	5	235	900.0	200.0
17	466.37950	5	40	-24.0	378.0	42	403.79715	2	203	-384.0	-18.0
18	473.12359	4	257	-900.0	-600.0	43	402.56142	6	77	-24.0	378.0
19	470.92488	5	208	900.0	600.0	44	400.37148	4	200	0.	900.0
20	466.42073	2	90	-24.0	378.0	45	399.07415	5	194	900.0	-900.0
21	463.07108	4	193	900.0	-900.0	46	398.32128	5	170	287.0	335.0
22	467.97307	4	215	600.0	-900.0	47	397.43194	4	196	900.0	-400.0
23	465.14172	1	151	-348.0	146.0	48	396.09634	4	193	900.0	-400.0
24	454.29602	5	316	-262.0	-305.0	49	394.64481	5	166	-750.0	-600.0
25	452.90034	3	318	-354.0	85.0	50	393.88364	5	243	-900.0	-600.0

*** 50:6-TOTAL:ALL SCS PSDGNAAQS 32 REC. ALL DAYS. F-1612 ***

* 50 MAXIMUM 24-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *

* FROM SOURCES: 2001, -3007,

RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)	RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)
1	275.821060	1	317	-548.0	-128.0	25	157.622770	1	10	-384.0	-18.0
2	224.53720	1	134	-24.0	576.0	27	157.185810	1	269	-900.0	0.
3	203.528210	1	219	-384.0	-18.0	28	156.294590	1	176	900.0	-600.0
4	195.65520	1	77	-24.0	576.0	29	155.255840	1	59	600.0	300.0
5	185.816360	1	240	-548.0	-128.0	30	155.19617	1	57	61.0	433.0
6	170.868750	1	55	-24.0	576.0	31	152.15279	1	104	61.0	433.0
7	162.40739	1	57	-24.0	576.0	32	151.870440	1	196	900.0	-600.0
8	158.74744C	1	331	-548.0	-128.0	33	151.65327	1	68	61.0	433.0
9	157.12543C	1	59	-384.0	-18.0	34	151.21223	1	77	0.	600.0
10	152.934350	1	221	-384.0	-18.0	35	150.932920	1	137	-354.0	85.0
11	152.611370	1	289	-600.0	0.	36	129.79906	1	57	0.	600.0
12	150.73552	1	77	61.0	433.0	37	129.620290	1	133	-600.0	900.0
13	149.158860	1	289	-384.0	-18.0	38	129.28147	1	60	146.0	396.0
14	148.925940	1	165	-548.0	-128.0	39	129.207560	1	151	-354.0	85.0
15	146.253390	1	84	-24.0	576.0	40	128.315850	1	220	-548.0	-128.0
16	141.788340	1	290	-384.0	-18.0	41	126.553510	1	183	-300.0	-900.0
17	141.643300	1	112	0.	-900.0	42	126.36371	1	104	0.	600.0
18	141.364360	1	144	61.0	433.0	43	125.529010	1	164	-900.0	-900.0
19	140.779780	1	151	-548.0	146.0	44	125.21851	1	104	-104.0	317.0
20	140.612170	1	54	61.0	433.0	45	124.958750	1	317	-900.0	-300.0
21	138.035550	1	112	0.	-600.0	46	124.266050	1	196	300.0	-600.0
22	138.822250	1	327	-548.0	-128.0	47	124.885420	1	194	900.0	-900.0
23	138.67255	1	336	-202.0	-305.0	48	124.648750	1	224	-384.0	-18.0
24	137.758830	1	108	900.0	200.0	49	124.43890	1	13	-317.0	-220.0
25	137.626310	1	59	300.0	300.0	50	123.821560	1	55	61.0	433.0

ECHO PRINT OF INPUT DATA

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CARD    12345678901234567890123456789012345678901234567890123456789012345678901234567890

   1    01:B-BTTAL:ALL SCS PSDWAAAS       32 REC.   ALL DAYS. F-1612   @*(BCA3d1  )
   2     1 3 1 1 0 1 0 0 1 0 0 0 0 1+1 0+1 1 1 0 1 1 0J102+1+1+1+1+2
   3        14    JO     00    082     15      0     00     00
   4        -0900.     0900.     0000.
   5        -0600.     0900.     0300.
   6        -0300.     0900.     0300.
   7         0000.     0900.     0300.
   8        -0900.     0600.     0300.
   9        -0600.     0600.     0300.
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  11         0000.     0600.     0000.
  12        -0900.     0300.     0300.
  13        -0600.     0300.     0000.
  14        -0300.     0300.     0300.
  15        -0900.     0000.     0000.
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  17        -0900.    -0300.     0000.
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  19        -0900.    -0600.     0000.
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  23        -0600.    -0900.     0300.
  24        -0300.    -0900.     0000.
  25        -0207.    -0384.     0300.
  26        -0262.    -0305.     0300.
  27        -0317.    -0220.     0300.
  28        -0348.    -0128.     0300.
  29        -0304.    -0015.     0000.
  30        -0354.     0085.     0000.
  31        -0343.     0146.     0300.
  32        -0274.     0195.     0300.
  33        -0207.     0244.     0300.
  34        -0201.     0280.     0300.
  35        -0104.     0317.     0000.
  36        -0024.     0378.     0300.
  37         0061.     0433.     0000.
  38         0145.     0396.     0000.
  39         0226.     0329.     0300.
  40         0287.     0333.     0300.
  41         0384.     0299.     0000.
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  48         0900.     0300.     0000.
  49         0900.     0300.     0000.
  50         0900.    -0300.     0300.

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Year: 1981

ECHO PRINT OF INPUT DATA

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CARD    12345678901234567890123456789012345678901234567890123456789012345678901234567890

 51          0300.     -0600.      0000.
 52          0500.     -0500.      0000.
 53          0500.     -0600.      0000.
 54          0900.     -0500.      0000.
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 77         -0150.     -0475.      0000.
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 84        -46000.      1000.      0000.
 85        -44000.      1000.      0000.
 86          1   1   1   1   1   1   1   1   1   1   1   1   2   2
 87       2001  2002  2003  2004  3001  3002  3003  3004  3005  3006  3007  1001 -2004
 88       2001 -3007
 89        7.6         1.0001     3.0000     3.3600     8.5000    10.5000
 90     10000000.
 91     11111111111111111111111111111111111111111111111111111111111111111111111111111111
 92     11111111111111111111111111111111111111111111111111111111111111111111111111111111
 93     11111111111111111111111111111111111111111111111111111111111111111111111111111111
 94     11111111111111111111111111111111111111111111111111111111111111111111111111111111
 95     11111111111111111111111111111111111110
 96      95865     81 15661     81
 97      100100  0 -0.5730   3834.   0000. 000.0 29.20 339.0   7.48   1.22 45.37 33.88 33.88
 98      100200  0 -0.5166   3075.   0069. 000.0 29.20 346.0 11.12   1.22 45.37 33.88 33.88
 99      100300  0 -0.5166   3070.   0058. 000.0 23.20 347.0   9.70   1.22 45.87 33.88 33.88
100      200100  0  2.5526   9256.   0084. 000.0 36.10 477.0   8.18   2.21 22.86 27.84 27.84

                1         2         3         4         5         6         7         8
       12345678901234567890123456789012345678901234567890123456789012345678901234567890
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END PRINT OF INPUT DATA

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CARD    12345678901234567890123456789012345678901234567890123456789012345678901234567890

101       200.00   0  0.0344 -0873. -0034. 000.0 47.38 345.0  7.30  1.22 45.37 33.88 33.88
102       200300   0  0.1008  0000.  0300. 030.0 60.58 363.0 13.40  3.96 45.37 33.88 33.88
103       200400   0127.0080  0000.  0000. 000.0 64.58 333.0 10.46  2.96 45.87 33.88 33.38
104       300100   0 33.3574  1091.  0014. 000.0 61.58 444.0 10.32  3.33 45.37 33.88 33.88
105       300200   0 32.0467 -0016. -0017. 000.0 60.58 411.0 12.00  2.74 45.87 33.88 33.88
106       300300   0173.0573 -0094. -0025. 030.0 60.58 400.0 17.40  2.90 45.87 33.88 33.88
107       300400   0  3.4256  0023.  0024. 030.0 43.28 330.0 11.30  3.91 45.37 33.88 33.88
108       300500   0  3.3591 -0166.  0000. 000.0 42.57 346.0  8.76  1.22 45.37 33.88 33.88
109       300600   0  0.3453 -0073. -0033. 000.0 47.38 345.0  7.60  1.22 45.87 33.88 33.38
110       300700   0262.7377  0000.  0000. 000.0 63.58 363.0 10.46  3.96 45.87 33.88 33.88

                1         2         3         4         5         6         7         8
        12345678901234567890123456789012345678901234567890123456789012345678901234567890
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*** SOURCE DATA ***

SOURCE NUMBER	TYPE	MAK	NUMBER PART. CATS.	EMISSION RATE TYPE=0,1 (GRAMS/SEC) TYPE=2 (GRAMS/SEC) *PER METER**2	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	HEIGHT (METERS)	TEMP. TYPE=0 (DEG.K); VERT.DIM TYPE=1 (METERS)	EXIT VEL. TYPE=0 (M/SEC); HORZ.DIM TYPE=1,2 (METERS)	DIAMETER TYPE=0 (METERS)	BLDG. HEIGHT TYPE=0 (METERS)	BLDG. LENGTH TYPE=0 (METERS)	BLDG. WIDTH TYPE=0 (METERS)
1001	0	0	0	-.37300E 00	54.0	60.0	0.	29.20	339.00	7.48	1.22	45.87	33.88	33.88
1002	0	0	0	-.51650E 00	75.0	89.0	0.	29.26	346.00	11.12	1.22	45.87	33.88	33.88
1003	0	0	0	-.51650E 00	70.0	98.0	0.	26.26	347.00	9.70	1.22	45.87	33.88	33.88
2001	0	0	0	0.23526E 01	258.0	64.0	0.	38.10	477.00	8.18	2.21	22.86	27.84	27.84
2002	0	0	0	0.34400E-01	-75.0	-38.0	0.	49.38	345.00	9.80	1.22	45.87	33.88	33.88
2003	0	0	0	0.13080E 00	0.	0.	0.	58.53	363.00	18.46	3.96	45.87	33.88	33.88
2004	0	0	0	0.12701E 03	0.	0.	0.	66.58	363.00	18.46	3.96	45.87	33.38	33.88
3001	0	0	0	0.55357E 02	31.0	14.0	0.	68.58	444.00	10.82	3.35	45.87	33.88	33.88
3002	0	0	0	0.52047E 02	-14.0	-19.0	0.	66.58	411.00	12.66	2.74	45.87	33.88	33.88
3003	0	0	0	0.17806E 03	-94.0	-28.0	0.	63.58	466.00	17.40	2.90	45.87	33.88	33.88
3004	0	0	0	0.42560E 00	23.0	52.0	0.	43.28	350.00	11.86	0.91	45.87	33.88	33.88
3005	0	0	0	0.35910E 00	-66.0	0.	0.	42.67	346.00	8.97	1.22	45.87	33.88	33.88
3006	0	0	0	0.54530E 00	-75.0	-38.0	0.	49.38	345.00	9.80	1.22	45.87	33.86	33.88
3007	0	0	0	0.26274E 03	0.	0.	0.	66.58	363.00	18.46	3.96	45.87	33.88	33.88

* CALM HOURS (=1) FOR DAY	1	*	0	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY	2	*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY	3	*	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY	4	*	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY	5	*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
* CALM HOURS (=1) FOR DAY	6	*	1	1	1	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
* CALM HOURS (=1) FOR DAY	7	*	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
* CALM HOURS (=1) FOR DAY	8	*	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	0	1	0	1	1	1
* CALM HOURS (=1) FOR DAY	9	*	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	0	0	1	1	1	1
* CALM HOURS (=1) FOR DAY	10	*	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
* CALM HOURS (=1) FOR DAY	11	*	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY	12	*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0
* CALM HOURS (=1) FOR DAY	13	*	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY	14	*	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	0	1	1	0	1
* CALM HOURS (=1) FOR DAY	15	*	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY	16	*	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY	17	*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
* CALM HOURS (=1) FOR DAY	18	*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	1	1
* CALM HOURS (=1) FOR DAY	19	*	1	0	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY	20	*	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0
* CALM HOURS (=1) FOR DAY	21	*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
* CALM HOURS (=1) FOR DAY	22	*	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
* CALM HOURS (=1) FOR DAY	23	*	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	1	0
* CALM HOURS (=1) FOR DAY	24	*	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1
* CALM HOURS (=1) FOR DAY	25	*	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY	26	*	1	1	1	1	1	1	1	1	1	1	0	0	1	0	0	0	0	0	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY	27	*	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
* CALM HOURS (=1) FOR DAY	28	*	0	0	0	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
* CALM HOURS (=1) FOR DAY	29	*	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	0	1	0	1	1	1	1	1	1
* CALM HOURS (=1) FOR DAY	30	*	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0
* CALM HOURS (=1) FOR DAY	32	*	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY	34	*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
* CALM HOURS (=1) FOR DAY	35	*	1	1	1	1	1	1	0	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	0
* CALM HOURS (=1) FOR DAY	36	*	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0
* CALM HOURS (=1) FOR DAY	37	*	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* CALM HOURS (=1) FOR DAY	38	*	0	0	0	0	1	0	1	1	0	0	1	0	1	1	0	0	1	1	0	1	1	1	1	1

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* CALM HOURS (=1) FOR DAY  39 *  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY  40 *  1  1  1  1  1  1  1  0  0  0  0  0  1  0  0  0  0  1  1  1  0  0
* CALM HOURS (=1) FOR DAY  42 *  0  0  0  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  49 *  0  0  0  0  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  1  0
* CALM HOURS (=1) FOR DAY  50 *  1  0  0  0  1  0  0  0  0  1  1  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY  51 *  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1
* CALM HOURS (=1) FOR DAY  52 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  53 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  54 *  0  0  0  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY  55 *  1  1  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  56 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY  57 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  0  1  1  1
* CALM HOURS (=1) FOR DAY  58 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY  59 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY  60 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  62 *  0  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  1  1  1  0  1  1
* CALM HOURS (=1) FOR DAY  63 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  64 *  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1
* CALM HOURS (=1) FOR DAY  65 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  1
* CALM HOURS (=1) FOR DAY  66 *  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1
* CALM HOURS (=1) FOR DAY  67 *  0  0  1  1  1  1  1  1  0  0  0  0  0  0  1  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY  68 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  69 *  1  1  1  1  0  0  0  1  0  0  0  0  0  0  0  0  0  0  1  1  0  0
* CALM HOURS (=1) FOR DAY  70 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  1  1  0  1
* CALM HOURS (=1) FOR DAY  71 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  1  1  0  1  0  1  1  0
* CALM HOURS (=1) FOR DAY  72 *  1  1  1  1  1  1  0  1  1  0  0  0  0  1  1  0  1  0  0  1  1  1
* CALM HOURS (=1) FOR DAY  73 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  74 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  76 *  1  1  1  1  1  1  1  1  0  0  0  0  1  0  0  0  1  0  0  1  1  1
* CALM HOURS (=1) FOR DAY  77 *  1  1  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  79 *  0  0  0  0  0  1  1  0  1  1  0  0  0  0  0  0  0  1  1  1  1  0
* CALM HOURS (=1) FOR DAY  80 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  0
* CALM HOURS (=1) FOR DAY  81 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY  82 *  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  83 *  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  1  1  0  1  1  1
* CALM HOURS (=1) FOR DAY  84 *  1  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  85 *  1  1  1  1  1  1  0  1  1  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY  86 *  1  1  1  1  1  1  0  1  1  1  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY  87 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0
* CALM HOURS (=1) FOR DAY  89 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1
* CALM HOURS (=1) FOR DAY  90 *  1  1  1  1  1  1  0  0  0  0  1  1  1  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY  91 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  92 *  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  93 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  94 *  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY  95 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0
* CALM HOURS (=1) FOR DAY  96 *  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  97 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0
* CALM HOURS (=1) FOR DAY  98 *  0  0  0  1  0  0  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY  99 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 100 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 101 *  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 102 *  1  1  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0
* CALM HOURS (=1) FOR DAY 103 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1
* CALM HOURS (=1) FOR DAY 104 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  0  1
* CALM HOURS (=1) FOR DAY 105 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 107 *  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 108 *  1  1  1  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 109 *  1  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 110 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0
* CALM HOURS (=1) FOR DAY 111 *  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 112 *  0  0  0  0  0  0  0  1  1  1  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 113 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
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* CALM HOURS (=1) FOR DAY 114 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0
* CALM HOURS (=1) FOR DAY 115 *  1  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  0  1
* CALM HOURS (=1) FOR DAY 116 *  1  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 117 *  0  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 118 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 119 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  0
* CALM HOURS (=1) FOR DAY 120 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 121 *  1  0  1  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 122 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 123 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 124 *  1  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 125 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1
* CALM HOURS (=1) FOR DAY 126 *  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0
* CALM HOURS (=1) FOR DAY 128 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0
* CALM HOURS (=1) FOR DAY 129 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 130 *  1  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 132 *  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 133 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  1
* CALM HOURS (=1) FOR DAY 134 *  1  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  1
* CALM HOURS (=1) FOR DAY 135 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  1
* CALM HOURS (=1) FOR DAY 136 *  0  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 137 *  0  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 138 *  1  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 139 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 140 *  1  1  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 141 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 142 *  1  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  1
* CALM HOURS (=1) FOR DAY 143 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 144 *  0  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 145 *  1  1  1  0  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 147 *  1  0  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1
* CALM HOURS (=1) FOR DAY 148 *  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0
* CALM HOURS (=1) FOR DAY 149 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 150 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 151 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 152 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 153 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0
* CALM HOURS (=1) FOR DAY 154 *  0  0  0  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 155 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0
* CALM HOURS (=1) FOR DAY 156 *  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 157 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 158 *  0  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  0
* CALM HOURS (=1) FOR DAY 159 *  0  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0
* CALM HOURS (=1) FOR DAY 160 *  0  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0
* CALM HOURS (=1) FOR DAY 161 *  1  0  0  0  0  1  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  1  1  0  1  1
* CALM HOURS (=1) FOR DAY 162 *  1  0  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 163 *  0  1  1  1  1  1  1  1  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  1  1  0  0  1
* CALM HOURS (=1) FOR DAY 164 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  0
* CALM HOURS (=1) FOR DAY 165 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  1  1  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 166 *  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0  0
* CALM HOURS (=1) FOR DAY 167 *  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 168 *  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 169 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0  0
* CALM HOURS (=1) FOR DAY 170 *  0  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0  0
* CALM HOURS (=1) FOR DAY 171 *  1  0  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  0  0
* CALM HOURS (=1) FOR DAY 172 *  1  1  0  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 173 *  0  0  0  1  0  1  1  0  0  0  0  0  0  0  0  1  1  0  0  0  0  0  0  1  0  1  0  1  1
* CALM HOURS (=1) FOR DAY 174 *  0  0  0  0  0  0  0  1  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 175 *  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 176 *  0  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 177 *  0  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0
* CALM HOURS (=1) FOR DAY 178 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  1  0  0  1  0  0  0  0  0  1  1  1  1  1  1
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* CALM HOURS (=1) FOR DAY 152 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 153 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  0  0  0  1  0  0
* CALM HOURS (=1) FOR DAY 154 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1  0  1
* CALM HOURS (=1) FOR DAY 155 *  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 156 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 157 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 158 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 159 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0
* CALM HOURS (=1) FOR DAY 160 *  0  0  0  0  1  1  0  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 161 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 162 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 163 *  1  1  1  1  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 164 *  0  0  0  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 165 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 166 *  0  1  1  1  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 167 *  0  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0  0  0
* CALM HOURS (=1) FOR DAY 168 *  1  0  1  1  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 169 *  0  0  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 170 *  1  1  1  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 171 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 172 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 173 *  1  1  1  1  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 174 *  0  0  0  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0
* CALM HOURS (=1) FOR DAY 175 *  1  1  1  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 176 *  0  1  1  1  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 177 *  0  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0  0  0
* CALM HOURS (=1) FOR DAY 178 *  1  0  1  1  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 179 *  0  0  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 180 *  1  1  1  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 181 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 182 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 183 *  1  1  1  1  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 184 *  0  0  0  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0
* CALM HOURS (=1) FOR DAY 185 *  1  1  1  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 186 *  0  1  1  1  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 187 *  0  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0  0  0
* CALM HOURS (=1) FOR DAY 188 *  1  0  1  1  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 189 *  0  0  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 190 *  1  1  1  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 191 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 192 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 193 *  1  1  1  1  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 194 *  0  0  0  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0
* CALM HOURS (=1) FOR DAY 195 *  1  1  1  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 196 *  0  1  1  1  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 197 *  0  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0  0  0
* CALM HOURS (=1) FOR DAY 198 *  1  0  1  1  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 199 *  0  0  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 200 *  1  1  1  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 201 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 202 *  1  1  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 203 *  1  1  1  1  1  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 204 *  1  1  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 205 *  1  1  1  1  0  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0
* CALM HOURS (=1) FOR DAY 206 *  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 207 *  0  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 208 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 209 *  1  1  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 210 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 211 *  1  1  1  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  1  0
* CALM HOURS (=1) FOR DAY 212 *  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 213 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0
* CALM HOURS (=1) FOR DAY 214 *  0  0  0  0  1  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1
* CALM HOURS (=1) FOR DAY 215 *  0  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 216 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0
* CALM HOURS (=1) FOR DAY 217 *  0  1  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 218 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  1  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 219 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  1  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 220 *  1  1  1  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 221 *  1  1  1  1  1  1  1  0  1  0  0  0  0  0  0  0  1  1  0  1  1  1  0  1  1  0
* CALM HOURS (=1) FOR DAY 222 *  0  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 223 *  1  1  1  1  1  1  1  1  0  1  1  1  1  0  0  0  0  0  0  1  1  1  0  1  1  1
* CALM HOURS (=1) FOR DAY 224 *  0  0  1  1  1  1  1  0  0  0  1  0  0  0  0  0  0  0  0  0  1  1  1  0  1  1
* CALM HOURS (=1) FOR DAY 225 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0
* CALM HOURS (=1) FOR DAY 226 *  1  1  1  0  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 227 *  1  1  1  1  0  1  1  1  1  0  0  0  0  0  0  1  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 228 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  1  0  0  1  0  0  1  1  1  0  0
* CALM HOURS (=1) FOR DAY 229 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 230 *  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 231 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 232 *  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 234 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 236 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 237 *  1  0  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 238 *  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 240 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 241 *  0  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 242 *  1  1  1  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 243 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 244 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 245 *  0  1  0  0  1  1  1  1  1  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  1  0
* CALM HOURS (=1) FOR DAY 246 *  0  0  1  1  1  1  1  0  1  1  0  0  0  0  0  1  0  0  0  0  0  0  0  1  0  1
* CALM HOURS (=1) FOR DAY 247 *  1  0  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
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* CALM HOURS (=1) FOR DAY 248 *  1  1  1  0  0  0  1  1  0  0  0  0  0  0  0  0  1  0  1  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 249 *  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1
* CALM HOURS (=1) FOR DAY 250 *  0  1  0  0  1  1  0  0  0  0  1  0  0  0  1  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 251 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 252 *  1  1  1  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 253 *  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0
* CALM HOURS (=1) FOR DAY 254 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 255 *  1  1  1  1  1  1  1  0  1  0  1  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 256 *  1  1  1  1  1  1  1  1  1  0  1  1  1  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 257 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 258 *  1  1  1  1  0  1  1  0  1  0  0  0  0  0  0  0  0  0  0  1  0  1  0  1
* CALM HOURS (=1) FOR DAY 259 *  0  1  1  1  0  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 260 *  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 262 *  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 263 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 264 *  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  0
* CALM HOURS (=1) FOR DAY 265 *  1  1  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 266 *  1  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 267 *  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  0  0  0  1  1  0  0  0
* CALM HOURS (=1) FOR DAY 268 *  0  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  1
* CALM HOURS (=1) FOR DAY 269 *  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 270 *  0  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 271 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  1  1  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 272 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 273 *  1  1  1  0  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 274 *  1  1  1  1  1  1  1  1  1  0  0  0  0  1  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 275 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 276 *  0  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0
* CALM HOURS (=1) FOR DAY 277 *  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 278 *  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 279 *  1  1  0  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 280 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 281 *  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 282 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 283 *  0  1  1  1  1  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0
* CALM HOURS (=1) FOR DAY 284 *  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 285 *  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 286 *  0  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 289 *  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 290 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 291 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 292 *  0  0  0  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 293 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0
* CALM HOURS (=1) FOR DAY 294 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0
* CALM HOURS (=1) FOR DAY 295 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 296 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  1  0  1  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 299 *  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 300 *  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 301 *  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 302 *  1  1  0  1  1  1  1  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 304 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 307 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 308 *  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 309 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 310 *  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 311 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 312 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  1  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 313 *  1  1  1  1  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  1  1  1  0  1
* CALM HOURS (=1) FOR DAY 314 *  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 315 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 316 *  1  1  1  1  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0
* CALM HOURS (=1) FOR DAY 317 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1
* CALM HOURS (=1) FOR DAY 318 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
```

```
* CALM [illegible] (=1) FOR DAY 319 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  1  1  1  1  1  1  1  1
* CALM [illegible] (=1) FOR DAY 320 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  1  0  1  0  0  0
* CALM HOURS (=1) FOR DAY 321 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 322 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  1  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 323 *  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 325 *  0  0  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 326 *  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 327 *  1  1  1  1  1  1  1  1  1  1  0  1  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 328 *  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  1  1
* CALM HOURS (=1) FOR DAY 329 *  1  1  1  1  1  1  1  1  1  0  1  1  1  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 330 *  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 331 *  1  1  1  1  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 332 *  1  1  1  1  1  1  1  1  0  1  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 333 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 334 *  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 335 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  1
* CALM HOURS (=1) FOR DAY 336 *  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  1  1  0  0  1
* CALM HOURS (=1) FOR DAY 337 *  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 338 *  0  1  1  1  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 339 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  1  1  1
* CALM HOURS (=1) FOR DAY 340 *  1  1  1  1  1  1  0  1  0  0  1  0  1  1  0  0  0  1  0  1  0  1  0  1
* CALM HOURS (=1) FOR DAY 341 *  1  1  1  1  1  1  1  0  1  1  1  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 342 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 343 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0
* CALM HOURS (=1) FOR DAY 344 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0
* CALM HOURS (=1) FOR DAY 345 *  0  0  0  1  1  0  0  1  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 346 *  1  1  1  0  0  1  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 348 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 349 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 350 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  1  1  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 351 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  1  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 352 *  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 353 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 354 *  1  1  0  0  1  0  1  1  0  0  0  0  0  0  0  0  1  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 355 *  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 356 *  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  1  1  1  1
* CALM HOURS (=1) FOR DAY 357 *  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  1  1  1
* CALM HOURS (=1) FOR DAY 358 *  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
* CALM HOURS (=1) FOR DAY 360 *  0  1  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  1  0  0  0
* CALM HOURS (=1) FOR DAY 361 *  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0
* CALM HOURS (=1) FOR DAY 363 *  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
* CALM HOURS (=1) FOR DAY 365 *  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  1  0  0  0
```

*** SUB-TOTAL:ALL SCS PERIODAYS 82 REC. ALL DAYS. F-1612 ***

* 365-DAY AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM SOURCES: 1001, -2004,
* FOR THE DISCRETE RECEPTOR POINTS *

- X -	- Y -	CON.	- X -	- Y -	CON.	- X -	- Y -	CON.
-900.0	900.0	1.23072	-300.0	900.0	1.07942	-300.0	900.0	1.21443
0.	900.0	2.04658	-900.0	600.0	1.05452	-600.0	600.0	0.82551
-300.0	600.0	0.75350	0.	600.0	1.20863	-900.0	300.0	0.82016
-600.0	300.0	0.65813	-300.0	300.0	0.14045	-900.0	0.	0.72195
-600.0	0.	0.44745	-900.0	-300.0	1.11400	-600.0	-300.0	0.95629
-900.0	-600.0	1.29530	-600.0	-600.0	0.99131	-300.0	-600.0	0.85174
-900.0	-900.0	1.40525	-300.0	-900.0	1.28999	-300.0	-900.0	1.43485
-207.0	-384.0	0.80435	-262.0	-305.0	1.19452	-317.0	-220.0	1.33225
-343.0	-126.0	0.99000	-364.0	-16.0	1.15949	-354.0	85.0	-0.15585
-346.0	146.0	0.31030	-274.0	195.0	-0.01777	-207.0	244.0	-0.28405
-201.0	280.0	-0.04122	-104.0	317.0	0.59474	-24.0	378.0	2.26552
61.0	433.0	1.15691	146.0	396.0	0.02718	226.0	329.0	0.05588
267.0	355.0	0.16012	384.0	299.0	0.01234	500.0	900.0	1.25361
500.0	900.0	0.92049	700.0	900.0	1.02949	300.0	800.0	0.61199
800.0	800.0	0.45255	900.0	800.0	0.72529	900.0	500.0	0.41420
900.0	0.	0.31208	900.0	-300.0	0.54113	0.	-600.0	1.67268
300.0	-600.0	0.93699	500.0	-800.0	0.95125	900.0	-600.0	0.91517
0.	-900.0	1.90852	500.0	-900.0	1.51154	600.0	-900.0	1.25033
900.0	-900.0	1.24613	500.0	500.0	0.11516	600.0	500.0	0.23552
700.0	500.0	0.23579	500.0	500.0	0.31158	900.0	200.0	0.36966
900.0	100.0	0.23436	900.0	-100.0	0.31917	900.0	-200.0	0.35907
900.0	-400.0	0.67471	900.0	-500.0	0.88906	800.0	-600.0	0.75275
700.0	-800.0	0.72163	500.0	-800.0	0.86614	400.0	-600.0	0.87430
200.0	-800.0	1.17906	100.0	-800.0	1.13072	-750.0	-600.0	1.13154
-100.0	-550.0	1.23015	-150.0	-475.0	0.98515	-46000.0	7000.0	0.15524
-44000.0	7000.0	0.15320	-46000.0	5000.0	0.16223	-44000.0	5000.0	0.18850
-46000.0	5000.0	0.17112	-44000.0	3000.0	0.19980	-46000.0	1000.0	0.19504
-44000.0	1000.0	0.20377						

*** 81:B-TOTAL:ALL SCS PSDSNAAQS 82 REC. ALL DAYS. F-1612 ***

* 50 MAXIMUM 3-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *

* FROM SOURCES: 1001, -2003,

RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)	RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)
1	172.97676	8	97	-384.0	85.0	26	91.40289C	8	268	-384.0	-18.0
2	133.12912	5	41	-104.0	317.0	27	91.30760	8	52	-24.0	378.0
3	126.47171	2	89	-24.0	378.0	28	91.29747C	1	117	287.0	335.0
4	122.71044	5	52	-24.0	378.0	29	91.19970	8	87	-348.0	146.0
5	121.96240	8	52	-24.0	378.0	30	90.20097	5	355	-104.0	317.0
6	117.05341	1	41	-348.0	146.0	31	90.19101	1	324	-146.0	396.0
7	111.19734	8	237	-384.0	-18.0	32	89.99959	5	166	-300.0	-900.0
8	110.71754	7	105	-384.0	-18.0	33	88.03062	2	89	0.	600.0
9	109.01757	5	94	61.0	433.0	34	87.94866	7	65	-24.0	378.0
10	108.59283	5	65	-24.0	378.0	35	87.79382	5	110	900.0	600.0
11	107.63806C	2	124	-300.0	300.0	36	87.66282	1	305	-384.0	-18.0
12	106.42359	4	41	-300.0	600.0	37	87.04390	5	74	61.0	433.0
13	106.00022	8	156	-24.0	378.0	38	86.49527	7	180	-384.0	-18.0
14	105.55937	7	179	-348.0	146.0	39	86.47540C	1	101	287.0	335.0
15	102.60572	7	41	61.0	433.0	40	84.76094	8	77	384.0	299.0
16	102.57326	8	48	-354.0	85.0	41	84.59162	7	41	-24.0	378.0
17	102.55908	5	136	61.0	433.0	42	84.29213	4	146	-104.0	317.0
18	100.49752	1	295	-348.0	-126.0	43	83.89098	5	190	-600.0	-300.0
19	100.33246	4	52	0.	600.0	44	82.66637	8	180	-348.0	146.0
20	99.10153	1	308	-384.0	-18.0	45	82.79354	1	317	-317.0	-220.0
21	94.75028	5	59	61.0	433.0	46	81.89065	8	159	146.0	396.0
22	94.48369	8	105	-384.0	-18.0	47	81.86617	5	197	600.0	300.0
23	93.47959	8	236	-202.0	-305.0	48	81.50253	2	41	-348.0	146.0
24	91.85394	1	85	-24.0	378.0	49	81.26397	8	88	-24.0	378.0
25	91.40874	8	179	-384.0	-18.0	50	80.82557C	2	98	-384.0	-18.0

*** 61:0-61TAL:ALL SCS P3D&NAAAS 32 REC. ALL DAYS. F-1612 ***

* 50 MAXIMUM 24-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *

* FROM SOURCES: 1001, -2004,

RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)	RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)
1	52.079350	1	32	-24.0	378.0	26	23.651220	1	108	-300.0	-900.0
2	45.625380	1	69	-24.0	378.0	27	23.486170	1	138	0.	600.0
3	42.910640	1	33	-24.0	378.0	28	23.07697	1	287	-384.0	-18.0
4	37.734470	1	138	61.0	433.0	29	22.67467	1	45	-262.0	-305.0
5	36.832220	1	357	-24.0	378.0	30	22.363520	1	356	-24.0	378.0
6	36.790350	1	32	0.	600.0	31	22.328250	1	32	0.	900.0
7	35.34777	1	286	-317.0	-220.0	32	21.845430	1	109	0.	900.0
8	33.919410	1	105	-354.0	-18.0	33	21.430540	1	94	-24.0	378.0
9	32.963980	1	333	-24.0	378.0	34	21.21920	1	48	-354.0	85.0
10	32.455650	1	41	61.0	433.0	35	21.03419	1	44	-317.0	-220.0
11	31.942900	1	93	-274.0	195.0	36	20.919100	1	102	0.	900.0
12	31.52024	1	46	-317.0	-220.0	37	20.911410	1	102	0.	600.0
13	31.13660	1	286	-262.0	-305.0	38	20.889530	1	12	100.0	-600.0
14	31.066340	1	94	61.0	433.0	39	20.750800	1	138	0.	900.0
15	29.21936	1	47	-384.0	-18.0	40	20.71907	1	41	0.	600.0
16	27.43736	1	146	-104.0	317.0	41	20.63617	1	304	-348.0	-128.0
17	27.29925	1	41	-348.0	146.0	42	20.315440	1	17	0.	-600.0
18	27.15561	1	30	-104.0	317.0	43	19.977120	1	330	-274.0	195.0
19	27.069080	1	304	-262.0	-305.0	44	19.888120	1	39	0.	900.0
20	26.483740	1	93	-900.0	600.0	45	19.82896	1	41	-104.0	317.0
21	26.313690	1	97	-354.0	85.0	46	19.64163	1	304	-317.0	-220.0
22	26.259110	1	85	0.	-600.0	47	19.640770	1	74	-24.0	378.0
23	26.235490	1	85	0.	600.0	48	19.495220	1	96	-262.0	-305.0
24	25.724880	1	39	0.	600.0	49	19.45204	1	106	-348.0	-128.0
25	24.230520	1	156	-24.0	378.0	50	19.37665	1	180	-384.0	-18.0

*** SUMMARY:ALL SCS PSDGNAAAS 32 REC. ALL DAYS. F-1612 ***

* 365-DAY AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM SOURCES: 2001, -3007,
* FOR THE DISCRETE RECEPTOR POINTS *

- X -	- Y -	CON.	- X -	- Y -	CON.	- X -	- Y -	CON.
-900.0	900.0	8.63376	-600.0	900.0	8.44430	-300.0	900.0	9.89611
0.	900.0	17.05320	-900.0	600.0	8.42404	-600.0	600.0	7.67153
-300.0	600.0	8.31265	0.	600.0	17.39352	-900.0	300.0	7.38872
-600.0	300.0	7.54911	-300.0	300.0	8.43652	-900.0	0.	8.23378
-600.0	0.	9.01570	-900.0	-300.0	9.83373	-300.0	-300.0	10.14694
-900.0	-600.0	9.96914	-300.0	-600.0	9.45013	-300.0	-600.0	8.78317
-900.0	-300.0	10.33534	-600.0	-900.0	9.74573	-300.0	-900.0	11.18919
-207.0	-364.0	11.01917	-262.0	-525.0	12.99434	-317.0	-220.0	14.19567
-348.0	-126.0	13.55770	-314.3	-10.0	14.12634	-354.0	85.0	8.89888
-348.0	146.0	9.11906	-274.0	195.0	7.07207	-207.0	244.0	7.99838
-201.0	260.0	8.73745	-104.0	317.0	14.54944	-24.0	378.0	21.59684
61.0	433.0	16.79476	146.0	396.0	12.33213	226.0	329.0	8.83945
287.0	355.0	7.99975	364.0	279.0	6.72234	300.0	900.0	10.44754
300.0	900.0	8.06624	900.0	900.0	7.92941	300.0	600.0	8.24694
600.0	600.0	6.36036	700.0	600.0	6.71351	900.0	300.0	4.36177
700.0	0.	5.59717	700.0	-300.0	5.60093	0.	-600.0	17.19052
300.0	-600.0	10.86861	600.0	-600.0	8.55645	900.0	-600.0	7.86409
0.	-300.0	16.44432	300.0	-900.0	12.69295	600.0	-900.0	9.74182
900.0	-900.0	9.10255	600.0	300.0	5.65439	600.0	300.0	5.01335
700.0	300.0	4.26910	300.0	300.0	4.18644	900.0	200.0	3.91911
900.0	100.0	3.51153	900.0	-100.0	3.79991	900.0	-200.0	4.25048
900.0	-400.0	6.62134	900.0	-500.0	7.61699	800.0	-800.0	7.57673
700.0	-600.0	7.07343	500.0	-600.0	8.87868	400.0	-600.0	9.54630
200.0	-600.0	13.13692	100.0	-600.0	15.40594	-750.0	-600.0	9.54238
-100.0	-350.0	14.20950	-150.0	-475.0	12.76789	-46000.0	7000.0	0.84431
-44000.0	7000.0	0.83277	-46000.0	5000.0	0.99401	-44000.0	5000.0	1.02871
-46000.0	5000.0	1.04524	-44000.0	3000.0	1.09310	-46000.0	1000.0	1.06423
-44000.0	1000.0	1.11260						

*** S1:F-STTAL:ALL SCS P3D&NAAAS 82 REC. ALL DAYS. F-1612 ***

* 50 MAXIMUM 3-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *

* FROM SOURCES: 2001, -3007,

RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)	RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)
1	638.33644	3	77	-384.0	35.0	26	456.76601	6	156	-24.0	378.0
2	550.77092	7	105	-384.0	-18.0	27	451.45038	3	89	61.0	433.0
3	556.09586	1	295	-348.0	-128.0	28	450.59855	5	197	700.0	300.0
4	553.50510	2	39	-24.0	378.0	29	444.36764	4	41	-300.0	600.0
5	549.84958	3	287	-384.0	-18.0	30	443.69721	8	32	0.	600.0
6	545.26204	1	306	-384.0	-18.0	31	435.06153	7	179	-348.0	146.0
7	536.25398	3	41	-104.0	317.0	32	434.86660C	1	161	287.0	335.0
8	534.83824C	8	268	-384.0	-18.0	33	434.70892	1	305	-384.0	-18.0
9	522.85576	3	32	-24.0	378.0	34	433.76369	5	190	-900.0	-300.0
10	512.71928	6	32	-24.0	378.0	35	432.35538	8	105	-384.0	-18.0
11	509.33521	3	110	900.0	600.0	36	431.69468	8	32	-24.0	378.0
12	498.82108	5	94	61.0	433.0	37	427.29911	5	197	500.0	300.0
13	496.70383	3	166	-300.0	-900.0	38	425.51395	5	270	-900.0	-600.0
14	491.94756	8	206	-262.0	-305.0	39	425.45513	5	102	0.	900.0
15	490.23175	3	197	600.0	300.0	40	424.58194	4	121	-300.0	-900.0
16	487.20801	4	140	287.0	335.0	41	423.12941	2	89	0.	600.0
17	484.04113	6	77	364.0	299.0	42	422.45732	5	190	-500.0	-300.0
18	482.13213	1	41	-348.0	146.0	43	420.83726	6	141	-262.0	-305.0
19	479.74364	7	41	-24.0	378.0	44	417.42963	5	63	-24.0	378.0
20	471.92422	7	41	61.0	433.0	45	415.93722	5	64	900.0	900.0
21	470.23336	8	46	-384.0	35.0	46	413.49513	7	180	-384.0	-18.0
22	468.66734	3	138	61.0	433.0	47	411.92215	8	179	-384.0	-18.0
23	459.99601	5	77	287.0	335.0	48	411.40727	7	63	-24.0	378.0
24	456.81467	2	294	-317.0	-220.0	49	410.93854	1	89	-24.0	378.0
25	456.79530	4	92	-300.0	-900.0	50	410.76213	2	317	-348.0	-128.0

*** 31:E-BTTAL:ALL DCS PSD&NAAQS 32 REC. ALL DAYS. F-1612 ***

* 50 MAXIMUM 24-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *

* FROM SOURCES: 2001, -3007,

RANK	CON.	PER.	DAY	X OR RANGE (METERS)	Y(METERS) OR DIRECTION (DEGREES)
1	247.56919C	1	59	-24.0	378.0
2	239.06011C	1	32	-24.0	378.0
3	217.92523	1	286	-317.0	-220.0
4	213.93619	1	40	-317.0	-220.0
5	210.55389C	1	63	-24.0	378.0
6	202.37537C	1	138	61.0	433.0
7	195.16295C	1	357	-24.0	378.0
8	191.93318C	1	335	-24.0	378.0
9	178.63535	1	230	-262.0	-305.0
10	172.79501	1	47	-384.0	-18.0
11	171.82646C	1	32	0.	600.0
12	169.25806C	1	39	0.	600.0
13	167.30935C	1	105	-364.0	-18.0
14	167.12625C	1	304	-262.0	-305.0
15	165.64655	1	43	-262.0	-305.0
16	161.43937	1	364	-348.0	-128.0
17	160.43104C	1	94	-24.0	378.0
18	154.41864C	1	94	61.0	433.0
19	153.63570C	1	93	-900.0	600.0
20	152.77573C	1	32	-104.0	317.0
21	150.65712C	1	156	-24.0	378.0
22	150.02434C	1	65	0.	-600.0
23	146.74890C	1	59	61.0	433.0
24	146.58394C	1	138	0.	600.0
25	146.19592	1	86	-104.0	317.0
26	144.68960	1	146	-104.0	317.0
27	143.61416C	1	156	-24.0	378.0
28	143.36151C	1	89	0.	900.0
29	142.97281	1	305	-317.0	-220.0
30	142.53135	1	41	61.0	433.0
31	141.56506	1	44	-317.0	-220.0
32	138.47467	1	106	-348.0	-128.0
33	137.96036C	1	77	384.0	299.0
34	137.82144	1	179	-384.0	-18.0
35	137.09917C	1	96	-262.0	-305.0
36	136.95487C	1	335	-104.0	317.0
37	136.86921C	1	138	0.	900.0
38	136.10999C	1	65	0.	600.0
39	136.09949C	1	108	-300.0	-900.0
40	135.58764	1	48	-354.0	85.0
41	135.28127C	1	12	100.0	-600.0
42	133.93647C	1	285	-348.0	-128.0
43	133.58928	1	267	-384.0	-18.0
44	133.54267C	1	308	-384.0	-18.0
45	132.13714C	1	65	0.	-900.0
46	131.68619	1	41	-104.0	317.0
47	131.25053C	1	17	0.	-600.0
48	130.41792C	1	93	-274.0	195.0
49	130.27127C	1	65	-104.0	317.0
50	129.68100	1	45	-317.0	-220.0