

Memorandum

Florida Department of
Environmental Protection

TO: Buck Oven

THROUGH: Al Linero *all* *6/16*
Clair Fancy *[Signature]*

FROM: Teresa Heron *[Signature]*

DATE: June 16, 1995

SUBJECT: Florida Crushed Stone
Incompleteness/Insufficiency Review
File No. PSD-FL-227 and PA 82-17

Following are additional requests pursuant to the May 10, 1995, Florida Crushed Stone response to the Department's letter of April 21, 1995.

1. Please supply the basis for the calculations of emissions (lb/hr, ton/yr and/or lb/MMBTU, lb/ton, if applicable) for each pollutant emitted (criteria and non-criteria) as a result of this project. Include all assumptions, reference materials, and engineering calculations.
2. Pursuant to Rule 62-212.200(2) and Rule 62-212.400(2)(e), F.A.C., please supply calculations for the last two (2) years of operation. Compare past actual emissions with the future potential emissions for each criteria and non-criteria pollutants emitted as a result of this project.
3. Please provide a process diagram of the new kiln which shows all input feeds of gases and materials along with the sources of these feeds. Provide a process diagram of the entire facility including the two kilns and power plant. Indicate whether the raw mill or the dryer for the new kiln will be fired by a combustion source. Provide a description of how the feed material is processed in the existing kiln and state whether any of this processed (heated or dried) material will be utilized in the new kiln.
4. Both Central Power and Lime (CPL) and Florida Crushed Stone (FCS) were authorized under the same Certification (PA 82-17). The recent modification of CPL's operation and the one proposed for FCS relate to the same Certification. Also, they are under common ownership, control, and contiguous (in fact integrated). In accordance with the attached August 1983 letter from EPA, please assure the Department that these two projects are unrelated and independent.

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5. The April 21, 1995 letter from the Department asked the applicant to investigate any emerging technology for the control of NOx (Question 17). Question 18 asked the applicant to provide a BACT analysis for each PSD pollutant. The applicant's response stated that the most stringent available control technologies have been selected for all pollutants and that no technical, economic, or environmental analysis are required. A top-down approach or a review of alternatives would have revealed that gas reburning is an available technology which is more stringent (gives a lower emission rate) than the one chosen. Please compare costs, energy and environmental effects of reaching a lower emission rate using alternatives including gas reburning, flue gas recirculation, low nitrogen fuels and possibly contemporaneous reductions from the power plant.
6. Please provide in a chronological order the different permitting activities that have occurred at this facility since the beginning of its operation.
7. Please address the comments in the attached National Park Service correspondence.

If you have any questions on this matter, please write to A. A. Linero, P.E. Supervisor or call Marty Costello, P.E. (BACT Engineer), Cleve Holladay (Meteorologist), John Glunn (Air Toxic Specialist) or Teresa Heron (Review Engineer) at (904)488-1344.

AL/th/t



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

4AW-AM

AUG 15 1983

Mr. Harold E. Hodges, P.E., Director
Division of Air Pollution Control
Tennessee Department of Public Health
150 Nineth Avenue North
Nashville, Tennessee 37203

Dear Mr. Hodges:

This is in answer to a request made by Angie Pitcock to Roger Pfaff by telephone on July 21, regarding EPA's policy on accumulation of de minimis increases in emissions at major stationary sources.

As you know, EPA interprets the PSD and nonattainment new source review rules (40CFR 51.24, 40CFR 52.21, 40CFR 51 Appendix S, 40 CFR 51.18 (j), 40CFR 52.24) as allowing an unlimited number of de minimis increases at major stationary sources without subjecting the source to review. This policy is stated in a memorandum from Edward E. Reich to Charles Whitmore, January 22, 1981, and is further confirmed in EPA's June 2, 1983 summary of applicability determinations (PSD-138).

Although the policy outlined in these documents allows a series of de minimis modifications to escape review, it is important that the reviewing agency not allow a source owner to circumvent the regulations by splitting up what would normally be considered a single major modification into two or more de minimis increases. Two or more increases should be considered by the reviewing agency to be part of the same project if they are considered part of the same project in the corporate planning of the source owner or if the emission units being constructed or modified are interdependent. For example, if the company institutes a "debottlenecking" project or a plant-wide energy conservation project involving several independent facilities, the project should be considered to be a single modification. If a company constructs a new boiler to generate steam and also adds new steam-using equipment, such as an evaporator, these units should also be considered part of the same project.

In order to facilitate agency decisions regarding whether two or more increases constitute a single project, EPA Region IV is adopting a policy which allows an initial presumption based upon easily distinguishable criteria, with allowance for rebuttal of the presumption by the applicant. Region IV policy is to consider two or more increases as a single project if the permit application for the last increase is submitted before the first increase is operational. This is a reasonable dividing line because it is easily discernible and because it would prohibit two facilities from being considered separate projects if one could not operate without the other.

For example, suppose a company obtains a permit for a new boiler at a major source in an attainment area on June 1, 1983. The new boiler emits 30 tons per year of SO₂ and escapes PSD review as a de minimis increase. On October 1, 1983, while the first boiler is under construction, the company submits an application for a second, identical, boiler. The agency would initially presume that these two boilers were part of a single project causing a significant increase in SO₂. Both boilers would be subject to PSD, including retroactive BACT for the first boiler. However, if the company could show, through engineering analysis and internal documents, that the two boilers were planned during separate time frames and involve separate, independent facilities (such as separate product lines at a large chemical plant), the agency could allow the boilers to be treated as separate projects. Conversely, if you know that two actions are actually one project, but the source owner is able to build and operate the first one before applying for the second, solely to avoid review, you should use that knowledge to subject the project to review.

The initial presumption criteria are used for the purpose of simplifying your decision process for the more obvious cases. The final criteria should always be whether or not the source owner is circumventing the new source review rules by separating what would normally be considered one project into two or more projects.

Sincerely yours,

James T. Wilburn, Chief
Air Management Branch
Air and Waste Management Division

cc: Ed Reich
Mike Trutna
All state agencies

Mr. C. H. Fancy
Chief, Bureau of Air Regulation
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Dear Mr. Fancy:

In our April 19, 1995, letter to you we commented on the Prevention of Significant Deterioration permit application for the new cement kiln (kiln #2) proposed by Florida Crushed Stone (FCS). The kiln would be located 20 km southeast of Chassahowitzka Wilderness Area, a Class I air quality area administered by the U.S. Fish and Wildlife Service. The new kiln would emit significant amounts of PM-10, sulfur dioxide, nitrogen oxides, and carbon monoxide. Our initial review determined that the application was incomplete for reasons stated in our April 19 letter. We have received additional information from FCS, but still find the application incomplete for the reasons given in the enclosed technical review document.

We would like to consult with your office on this project. Please contact Ellen Porter of our Air Quality Branch in Denver at (303) 969-2617.

Sincerely,

Noreen K. Clough
Regional Director

Enclosure

cc: Jewell Harper, Chief
Air Enforcement Branch
Air, Pesticides and Toxic Management Division
U.S. EPA, Region 4
345 Courtland Street, NE
Atlanta, Georgia 30365

bcc: FWS-REG. 4: AQC
CHAS: Refuge Manager
AQD-DEN: Ellen Porter
National Park Service - AIR
P.O. Box 25287
Denver, CO 80225

**Technical Review of Additional Information
Regarding the Prevention of Significant Deterioration
Permit Application for Florida Crushed Stone's
Proposed New Cement Kiln, Hernando County, Florida**

by

Air Quality Branch, Fish and Wildlife Service - Denver

We received additional information regarding the Prevention of Significant Deterioration (PSD) permit application for Florida Crushed Stone's (FCS) proposed new cement kiln on March 21 (from Florida Department of Environmental Protection - FDEP) and May 10 (from FCS). Our comments on this additional information are given below.

Air Quality Modeling Analysis

The additional information did not clarify whether the proposed new kiln's sulfur dioxide (SO₂) emissions would significantly impact Chassahowitzka Wilderness Area (WA). Upon consultation with FDEP, we performed additional modeling analyses to determine the Class I SO₂ impact of the proposed kiln's emissions. The modeling was performed with the Environmental Protection Agency's (EPA) ISCST2 model, using the stack parameters for the proposed kiln found in Table 6-1 of the original permit application. Emissions from the proposed kiln were modeled, using an emission rate of 5.67 grams per second (Table 6-1). All three load scenarios (nominal, maximum, and minimum) described in table 6-1 were modeled. We used the standard 1982-1986 Tampa meteorological data obtained from FDEP. The thirteen receptors used were the standard set agreed to by FDEP and our office.

The modeling results (see attachments) predict that the proposed kiln's impacts at Chassahowitzka WA exceed the Fish and Wildlife Service (FWS) Class I 24-hr SO₂ significant impact level of 0.07 micrograms per cubic meter (ug/m³) for all five years (all load scenarios); the proposed kiln's impacts exceed the proposed EPA Class I 24-hr SO₂ significant impact level of 0.20 ug/m³ for several years (e.g., four out of five years for the nominal load). In addition, the proposed kiln exceeds the FWS Class I 3-hr SO₂ significant impact level for all five years (all load scenarios). Please note that FDEP has recognized the FWS significant impact levels since these levels were proposed four years ago and has required all PSD applicants to apply them.

Because emissions impacts from the FCS project exceed the Class I short-term SO₂ significant impact levels, we request that FCS perform a cumulative Class I SO₂ increment analysis. We ask that FCS use the source inventory used by recent Florida PSD applicants, including sources beyond 100 kilometers.

Visibility

The revised visibility analysis, submitted May 10, predicts numerous occurrences of a visible coherent plume at Chassahowitzka WA due to emissions from the proposed kiln. The VISCREEN model predicts a visible plume occurring 6.28 percent of the time within the Class I area (Table 7-2, May 10), with "delta E" values greater than 2.0 (the EPA- and FWS-accepted threshold value of a colored plume). This would correspond to approximately 275 hours of a visible coherent plume within the Class I area. This would constitute an adverse impact to visibility and would be unacceptable to us. We request that additional emissions controls for nitrogen oxides and PM-10 be required to alleviate the plume impacts. If the applicant wishes to perform a more refined analysis, they may use the EPA PLUVUE 2 model. However, due to the known limitations of the PLUVUE 2 model, and the difficulty in its application, we request that a written modeling protocol be developed and agreed to by our office, FDEP, EPA Region IV, and the applicant.

PSD Applicability/Source Definition

In our April 19 letter to FDEP, we requested clarification regarding the relationship between the Central Power & Lime PSD application and the FCS PSD application, since the two projects are at the same facility. FCS responded (May 10, Item 25) that the two projects are independent; the proposed megawatt increase for the power plant would only be for periods when the cement kilns are not operating. However, in their March 21 submittal to FDEP, FCS states that "...two cement kilns operating with the power plant, is the facility configuration most likely to occur the majority of the time." (p.1, par.2) We again ask FDEP to clarify this.

Air Quality Related Values (AORV) Analysis

We noted in our April 19 letter that the application lacked a Class I AORV analysis (other than for visibility). FCS's May 10 response stated that they had addressed impacts to soils and vegetation in the vicinity of the proposed project in the "Additional Impacts" section of the original application. Please note that FCS considered only impacts from the proposed project's emissions. A Class I AORV analysis should consider the total pollutant concentrations and loadings that resources at the Class I area will experience. It should consider emissions from all sources with the potential to affect these resources.

We recently established a list of lichen species found at Chassahowitzka WA. The lichen Ramalina americana, identified by Wetmore (1983) as SO₂-sensitive, occurs at the wilderness area. We are currently attempting to verify the presence of several other SO₂-sensitive lichen species at the wilderness area. We request that FCS perform a cumulative analysis so that we may adequately assess potential impacts of total pollutant concentrations and loadings to sensitive AORVs at the Class I area.

REFERENCES:

1983. Wetmore, C.M. Lichens of the Air Quality Class 1 National Parks. (Final Report, National Park Service).

LIST 1 78% 06/08/95 10:37 C:\F-CRUSH\CRU-82A.DAT

CO STARTING
 CO TITLEONE FL-CRUSHED NEW KILN AVE-FLOW CHAS 13 R 1982
 CO MODELOPT DFAULT CONC RURAL
 CO AVERTIME PERIOD 3 24
 CO POLLUTID SO2
 CO DCAYCOEF .000000
 CO RUNORNOT RUN
 CO ERRORFIL ERRORS.OUT
 CO FINISHED

SO STARTING

** Source Location Cards:

** SRCID SRCTYP XS YS ZS

SO LOCATION 1 POINT 360000.0000 3162500.000 .0000

** Source Parameter Cards:

** POINT: SRCID QS HS TS VS DS

** VOLUME: SRCID QS HS SYINIT SZINIT

** AREA: SRCID QS HS XINIT

SO SRCPARAM 1 005.67000 097.540 406.5000 16.4700 3.0500

SO EMISUNIT .100000E+07 (GRAMS/SEC) (MICROGRAMS/CUBIC-METER)

SO SRCGROUP ALL

SO FINISHED

RE STARTING

RE DISCCART 340300.00 3165700.00

RE DISCCART 340300.00 3169800.00

RE DISCCART 342000.00 3174000.00

RE DISCCART 343700.00 3178300.00

RE DISCCART 341100.00 3183400.00

RE DISCCART 340300.00 3167700.00

RE DISCCART 340700.00 3171900.00

RE DISCCART 343000.00 3176200.00

RE DISCCART 342400.00 3180600.00

RE DISCCART 339000.00 3183400.00

RE DISCCART 336500.00 3183400.00

RE DISCCART 334000.00 3183400.00

RE DISCCART 331500.00 3183400.00

RE FINISHED

Command *** Top-of-file ***

Keys: PgUp PgDn F10=exit F1=Help

LIST 30 63 06/08/95 10:37 C:\F-CRUSH\CRU-82A.DAT

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RE STARTING
RE DISCCART 340300.00 3165700.00
RE DISCCART 340300.00 3169800.00
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RE DISCCART 340300.00 3167700.00
RE DISCCART 340700.00 3171900.00
RE DISCCART 343000.00 3176200.00
RE DISCCART 342400.00 3180600.00
RE DISCCART 339000.00 3183400.00
RE DISCCART 336500.00 3183400.00
RE DISCCART 334000.00 3183400.00
RE DISCCART 331500.00 3183400.00
RE FINISHED

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ME STARTING
ME INPUTFIL TAMP82X.BIN UNIFORM
ME ANEMHGHT 10.000 METERS
ME SURFDATA 12842 1982 SURFNAME
ME UAIRDATA 12842 1982 UAIRNAME
ME WINDCATS 1.54 3.09 5.14 8.23 10.80
ME FINISHED

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OU STARTING
OU RECTABLE ALLAVE FIRST SECOND THIRD
OU MAXTABLE ALLAVE 50
OU FINISHED

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Command *** End-of-file ***

Keys: PgUp PgDn F10=exit F1=Help

LIST 457 601 06/08/95 10:56 C:\F-CRUSH\CRU-82A.OUT

*** MODELING OPTIONS USED: CONC RURAL FLAT DFAULT

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION
INCLUDING SOURCE(S): 1

** CONC OF SO2 IN (MICROGRAMS/CUBIC-

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CO
1.	0.22910c	(82122224)	AT	(340300.00, 3165700.00)	DC	26.	0.
2.	0.21916	(82120324)	AT	(342000.00, 3174000.00)	DC	27.	0.
3.	0.17580	(82120224)	AT	(340300.00, 3169800.00)	DC	28.	0.
4.	0.17147	(82122524)	AT	(340300.00, 3165700.00)	DC	29.	0.
5.	0.16208	(82122424)	AT	(343700.00, 3178300.00)	DC	30.	0.
6.	0.15817	(82060424)	AT	(343700.00, 3178300.00)	DC	31.	0.
7.	0.15678	(82122624)	AT	(340300.00, 3167700.00)	DC	32.	0.
8.	0.15267	(82071324)	AT	(340300.00, 3165700.00)	DC	33.	0.
9.	0.15211c	(82051524)	AT	(340300.00, 3169800.00)	DC	34.	0.
10.	0.14662	(82060424)	AT	(342400.00, 3180600.00)	DC	35.	0.
11.	0.14475	(82112724)	AT	(340300.00, 3167700.00)	DC	36.	0.
12.	0.14417	(82120224)	AT	(340700.00, 3171900.00)	DC	37.	0.
13.	0.14375c	(82051724)	AT	(340300.00, 3165700.00)	DC	38.	0.
14.	0.14176	(82090124)	AT	(340300.00, 3165700.00)	DC	39.	0.
15.	0.14154	(82122724)	AT	(342000.00, 3174000.00)	DC	40.	0.
16.	0.14107	(82120424)	AT	(343000.00, 3176200.00)	DC	41.	0.
17.	0.13980	(82122424)	AT	(343000.00, 3176200.00)	DC	42.	0.
18.	0.13889	(82120324)	AT	(340700.00, 3171900.00)	DC	43.	0.
19.	0.13838	(82060424)	AT	(343000.00, 3176200.00)	DC	44.	0.
20.	0.13806	(82101224)	AT	(340300.00, 3167700.00)	DC	45.	0.
21.	0.13393	(82052624)	AT	(343000.00, 3176200.00)	DC	46.	0.
22.	0.13376c	(82072024)	AT	(343700.00, 3178300.00)	DC	47.	0.
23.	0.13332	(82060424)	AT	(340700.00, 3171900.00)	DC	48.	0.
24.	0.13237	(82120224)	AT	(340300.00, 3167700.00)	DC	49.	0.
25.	0.13221	(82021524)	AT	(340300.00, 3169800.00)	DC	50.	0.

*** RECEPTOR TYPES: CC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR
 BD = BOUNDARY

LIST 457 601 06/08/95 10:57 C:\F-CRUSH\CRU-83A.OUT

*** MODELING OPTIONS USED: CONC RURAL FLAT DFAULT

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION
INCLUDING SOURCE(S): 1

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1.	0.24114	(83030524)	AT	(343000.00, 3176200.00)	DC	26.	0.
2.	0.22984c	(83051024)	AT	(340700.00, 3171900.00)	DC	27.	0.
3.	0.21554	(83102324)	AT	(343700.00, 3178300.00)	DC	28.	0.
4.	0.18231c	(83041424)	AT	(343700.00, 3178300.00)	DC	29.	0.
5.	0.17915c	(83073024)	AT	(340300.00, 3165700.00)	DC	30.	0.
6.	0.17820	(83102324)	AT	(342400.00, 3180600.00)	DC	31.	0.
7.	0.17629	(83102324)	AT	(339000.00, 3183400.00)	DC	32.	0.
8.	0.16926	(83022724)	AT	(340300.00, 3167700.00)	DC	33.	0.
9.	0.16924	(83031524)	AT	(340300.00, 3167700.00)	DC	34.	0.
10.	0.16485	(83012024)	AT	(340700.00, 3171900.00)	DC	35.	0.
11.	0.16200	(83062824)	AT	(340300.00, 3165700.00)	DC	36.	0.
12.	0.15706	(83030524)	AT	(334000.00, 3183400.00)	DC	37.	0.
13.	0.15622c	(83062024)	AT	(340300.00, 3169800.00)	DC	38.	0.
14.	0.15383c	(83041424)	AT	(342400.00, 3180600.00)	DC	39.	0.
15.	0.14817c	(83041424)	AT	(339000.00, 3183400.00)	DC	40.	0.
16.	0.14193	(83050724)	AT	(342000.00, 3174000.00)	DC	41.	0.
17.	0.13821	(83012024)	AT	(340300.00, 3169800.00)	DC	42.	0.
18.	0.13283	(83050724)	AT	(340700.00, 3171900.00)	DC	43.	0.
19.	0.13281	(83050724)	AT	(343000.00, 3176200.00)	DC	44.	0.
20.	0.13197	(83020124)	AT	(342400.00, 3180600.00)	DC	45.	0.
21.	0.12991	(83031524)	AT	(340300.00, 3169800.00)	DC	46.	0.
22.	0.12905	(83030524)	AT	(336500.00, 3183400.00)	DC	47.	0.
23.	0.12842	(83022724)	AT	(340300.00, 3165700.00)	DC	48.	0.
24.	0.12507	(83020124)	AT	(343700.00, 3178300.00)	DC	49.	0.
25.	0.12482	(83022024)	AT	(340300.00, 3167700.00)	DC	50.	0.

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR
 BD = BOUNDARY

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*** MODELING OPTIONS USED: CONC RURAL FLAT DEFAULT

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION
INCLUDING SOURCE(S): 1

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3.	0.18706c	(84072124) AT (340300.00, 3165700.00) DC	28.	0.
4.	0.18220	(84021224) AT (340300.00, 3165700.00) DC	29.	0.
5.	0.16055	(84031224) AT (	340300.00, 3165700.00) DC	30.	0.
6.	0.16025c	(84071524) AT (	340300.00, 3165700.00) DC	31.	0.
7.	0.15564	(84022624) AT (	343700.00, 3178300.00) DC	32.	0.
8.	0.15230c	(84102824) AT (	342000.00, 3174000.00) DC	33.	0.
9.	0.15161c	(84072024) AT (	343700.00, 3178300.00) DC	34.	0.
10.	0.14930c	(84061724) AT (	340300.00, 3165700.00) DC	35.	0.
11.	0.14854	(84060924) AT (	340300.00, 3165700.00) DC	36.	0.
12.	0.14612	(84061624) AT (	340300.00, 3165700.00) DC	37.	0.
13.	0.14306c	(84022124) AT (	340300.00, 3167700.00) DC	38.	0.
14.	0.14216c	(84072224) AT (	342000.00, 3174000.00) DC	39.	0.
15.	0.13817	(84052424) AT (	342000.00, 3174000.00) DC	40.	0.
16.	0.13746c	(84080224) AT (	340300.00, 3169800.00) DC	41.	0.
17.	0.13666c	(84123124) AT (	343700.00, 3178300.00) DC	42.	0.
18.	0.13604	(84112724) AT (	343000.00, 3176200.00) DC	43.	0.
19.	0.13597c	(84032224) AT (	342000.00, 3174000.00) DC	44.	0.
20.	0.13547	(84021124) AT (	340300.00, 3165700.00) DC	45.	0.
21.	0.13506	(84021024) AT (	340300.00, 3167700.00) DC	46.	0.
22.	0.13487c	(84052224) AT (	342000.00, 3174000.00) DC	47.	0.
23.	0.13101	(84011024) AT (	342000.00, 3174000.00) DC	48.	0.
24.	0.12958	(84072324) AT (	340300.00, 3167700.00) DC	49.	0.
25.	0.12826c	(84120124) AT (	340300.00, 3165700.00) DC	50.	0.

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR
 BD = BOUNDARY

LIST 457 601 06/08/95 10:57 C:\F-CRUSH\CRU-85A.OUT

*** MODELING OPTIONS USED: CONC RURAL FLAT DFAULT

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION INCLUDING SOURCE(S): 1

** CONC OF SO2 IN (MICROGRAMS/CUBIC-

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1.	0.29438	(85083024)	AT	(343000.00, 3176200.00)	DC	26.	0.
2.	0.18507	(85083024)	AT	(334000.00, 3183400.00)	DC	27.	0.
3.	0.17318	(85072024)	AT	(342000.00, 3174000.00)	DC	28.	0.
4.	0.15830	(85061524)	AT	(343700.00, 3178300.00)	DC	29.	0.
5.	0.15229	(85083024)	AT	(331500.00, 3183400.00)	DC	30.	0.
6.	0.14856	(85041324)	AT	(340300.00, 3167700.00)	DC	31.	0.
7.	0.14705	(85010124)	AT	(342000.00, 3174000.00)	DC	32.	0.
8.	0.14111	(85102824)	AT	(343000.00, 3176200.00)	DC	33.	0.
9.	0.13937	(85041824)	AT	(340300.00, 3165700.00)	DC	34.	0.
10.	0.13806	(85041124)	AT	(340300.00, 3165700.00)	DC	35.	0.
11.	0.13792	(85090224)	AT	(340700.00, 3171900.00)	DC	36.	0.
12.	0.13467	(85061524)	AT	(342400.00, 3180600.00)	DC	37.	0.
13.	0.13194	(85072224)	AT	(340300.00, 3167700.00)	DC	38.	0.
14.	0.13111	(85061524)	AT	(343000.00, 3176200.00)	DC	39.	0.
15.	0.13105	(85072724)	AT	(340700.00, 3171900.00)	DC	40.	0.
16.	0.13020	(85083024)	AT	(343700.00, 3178300.00)	DC	41.	0.
17.	0.12983	(85090324)	AT	(340300.00, 3165700.00)	DC	42.	0.
18.	0.12870	(85090124)	AT	(343000.00, 3176200.00)	DC	43.	0.
19.	0.12867	(85072224)	AT	(340300.00, 3165700.00)	DC	44.	0.
20.	0.12822	(85112824)	AT	(343700.00, 3178300.00)	DC	45.	0.
21.	0.12725	(85082924)	AT	(340300.00, 3169800.00)	DC	46.	0.
22.	0.12677	(85083024)	AT	(336500.00, 3183400.00)	DC	47.	0.
23.	0.12450	(85112524)	AT	(340300.00, 3165700.00)	DC	48.	0.
24.	0.12306	(85111624)	AT	(340300.00, 3167700.00)	DC	49.	0.
25.	0.12257	(85021124)	AT	(342000.00, 3174000.00)	DC	50.	0.

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR
 BD = BOUNDARY

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*** MODELING OPTIONS USED: CONC RURAL FLAT DFAULT

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION INCLUDING SOURCE(S): 1

** CONC OF SO2 IN (MICROGRAMS/CUBIC-

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CO
1.	0.16520	(86031024)	AT	(343000.00, 3176200.00)	DC	26.	0.
2.	0.16389	(86031324)	AT	(343000.00, 3176200.00)	DC	27.	0.
3.	0.15996c	(86120124)	AT	(343700.00, 3178300.00)	DC	28.	0.
4.	0.15849c	(86071224)	AT	(342000.00, 3174000.00)	DC	29.	0.
5.	0.15580	(86081224)	AT	(340700.00, 3171900.00)	DC	30.	0.
6.	0.14997	(86052624)	AT	(343000.00, 3176200.00)	DC	31.	0.
7.	0.14895	(86031824)	AT	(343000.00, 3176200.00)	DC	32.	0.
8.	0.14451c	(86121924)	AT	(340700.00, 3171900.00)	DC	33.	0.
9.	0.14153c	(86052524)	AT	(342000.00, 3174000.00)	DC	34.	0.
10.	0.13977	(86112424)	AT	(343000.00, 3176200.00)	DC	35.	0.
11.	0.13782c	(86061424)	AT	(340300.00, 3165700.00)	DC	36.	0.
12.	0.13637	(86052724)	AT	(340300.00, 3167700.00)	DC	37.	0.
13.	0.13634c	(86120924)	AT	(340300.00, 3169800.00)	DC	38.	0.
14.	0.13573c	(86120124)	AT	(339000.00, 3183400.00)	DC	39.	0.
15.	0.13563c	(86120924)	AT	(340700.00, 3171900.00)	DC	40.	0.
16.	0.13319	(86052924)	AT	(340700.00, 3171900.00)	DC	41.	0.
17.	0.13193c	(86112924)	AT	(340300.00, 3169800.00)	DC	42.	0.
18.	0.13123	(86070524)	AT	(340700.00, 3171900.00)	DC	43.	0.
19.	0.13028c	(86080824)	AT	(343000.00, 3176200.00)	DC	44.	0.
20.	0.12909	(86030924)	AT	(340300.00, 3169800.00)	DC	45.	0.
21.	0.12757	(86031324)	AT	(343700.00, 3178300.00)	DC	46.	0.
22.	0.12584	(86110724)	AT	(340300.00, 3165700.00)	DC	47.	0.
23.	0.12561c	(86121924)	AT	(342000.00, 3174000.00)	DC	48.	0.
24.	0.12521c	(86062724)	AT	(340700.00, 3171900.00)	DC	49.	0.
25.	0.12398c	(86060324)	AT	(340300.00, 3167700.00)	DC	50.	0.

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR
 BD = BOUNDARY

LIST 457 601 06/08/95 10:58 C:\F-CRUSH\CRU-82B.OUT

*** MODELING OPTIONS USED: CONC RURAL FLAT DEFAULT

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION INCLUDING SOURCE(S): 1

** CONC OF SO2 IN (MICROGRAMS/CUBIC-

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CO
1.	0.23492c	(82122224)	AT	(340300.00, 3165700.00)	DC	26.	0.
2.	0.22441	(82120324)	AT	(342000.00, 3174000.00)	DC	27.	0.
3.	0.18077	(82120224)	AT	(340300.00, 3169800.00)	DC	28.	0.
4.	0.17690	(82122524)	AT	(340300.00, 3165700.00)	DC	29.	0.
5.	0.16585	(82122424)	AT	(343700.00, 3178300.00)	DC	30.	0.
6.	0.16306	(82122624)	AT	(340300.00, 3167700.00)	DC	31.	0.
7.	0.16272	(82060424)	AT	(343700.00, 3178300.00)	DC	32.	0.
8.	0.16157	(82071324)	AT	(340300.00, 3165700.00)	DC	33.	0.
9.	0.15469c	(82051524)	AT	(340300.00, 3169800.00)	DC	34.	0.
10.	0.15077	(82060424)	AT	(342400.00, 3180600.00)	DC	35.	0.
11.	0.15046	(82112724)	AT	(340300.00, 3167700.00)	DC	36.	0.
12.	0.14834	(82120224)	AT	(340700.00, 3171900.00)	DC	37.	0.
13.	0.14634c	(82051724)	AT	(340300.00, 3165700.00)	DC	38.	0.
14.	0.14630	(82122724)	AT	(342000.00, 3174000.00)	DC	39.	0.
15.	0.14611	(82090124)	AT	(340300.00, 3165700.00)	DC	40.	0.
16.	0.14515	(82120424)	AT	(343000.00, 3176200.00)	DC	41.	0.
17.	0.14329	(82122424)	AT	(343000.00, 3176200.00)	DC	42.	0.
18.	0.14125	(82120324)	AT	(340700.00, 3171900.00)	DC	43.	0.
19.	0.14103	(82101224)	AT	(340300.00, 3167700.00)	DC	44.	0.
20.	0.14099	(82060424)	AT	(343000.00, 3176200.00)	DC	45.	0.
21.	0.14068	(82052624)	AT	(343000.00, 3176200.00)	DC	46.	0.
22.	0.13762	(82021524)	AT	(340300.00, 3169800.00)	DC	47.	0.
23.	0.13688c	(82113024)	AT	(342000.00, 3174000.00)	DC	48.	0.
24.	0.13636	(82120224)	AT	(340300.00, 3167700.00)	DC	49.	0.
25.	0.13611c	(82072024)	AT	(343700.00, 3178300.00)	DC	50.	0.

*** RECEPTOR TYPES: GC = GRIDCART
 CP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR
 BD = BOUNDARY

LIST 457 601 06/08/95 10:58 C:\P-CRUSH\CRU-89B.OUT

*** MODELING OPTIONS USED: CONC RURAL FLAT DEFAULT

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION
INCLUDING SOURCE(S): 1

** CONC OF SO2 IN (MICROGRAMS/CUBIC-

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR, YR)	OF TYPE	RANK	CO
1.	0.24679	(83030524)	AT	(343000.00, 3176200.00)	DC	26.	0.
2.	0.23964c	(83051024)	AT	(340700.00, 3171900.00)	DC	27.	0.
3.	0.22713	(83102324)	AT	(343700.00, 3178300.00)	DC	28.	0.
4.	0.18825c	(83041424)	AT	(342400.00, 3180600.00)	DC	29.	0.
5.	0.18688	(83182524)	AT	(342400.00, 3180600.00)	DC	30.	0.
6.	0.18580c	(83073024)	AT	(340300.00, 3165700.00)	DC	31.	0.
7.	0.18344	(83102324)	AT	(339000.00, 3183400.00)	DC	32.	0.
8.	0.18009c	(83073024)	AT	(340300.00, 3169800.00)	DC	33.	0.
9.	0.17642c	(83091124)	AT	(340300.00, 3167700.00)	DC	34.	0.
10.	0.17177	(83022724)	AT	(340300.00, 3167700.00)	DC	35.	0.
11.	0.16962	(83031524)	AT	(340300.00, 3167700.00)	DC	36.	0.
12.	0.16824	(83012024)	AT	(340700.00, 3171900.00)	DC	37.	0.
13.	0.16752	(83062824)	AT	(340300.00, 3165700.00)	DC	38.	0.
14.	0.16262c	(83062024)	AT	(340300.00, 3169800.00)	DC	39.	0.
15.	0.15960	(83030524)	AT	(334000.00, 3183400.00)	DC	40.	0.
16.	0.15853c	(83041424)	AT	(342400.00, 3180600.00)	DC	41.	0.
17.	0.15237c	(83080124)	AT	(340300.00, 3165700.00)	DC	42.	0.
18.	0.15205c	(83041424)	AT	(339000.00, 3183400.00)	DC	43.	0.
19.	0.14642	(83050724)	AT	(342000.00, 3174000.00)	DC	44.	0.
20.	0.14082	(83012024)	AT	(340300.00, 3169800.00)	DC	45.	0.
21.	0.13706	(83050724)	AT	(340700.00, 3171900.00)	DC	46.	0.
22.	0.13541	(83050724)	AT	(343000.00, 3176200.00)	DC	47.	0.
23.	0.13318	(83020124)	AT	(342400.00, 3180600.00)	DC	48.	0.
24.	0.13155	(83031524)	AT	(340300.00, 3169800.00)	DC	49.	0.
25.	0.13119	(83030524)	AT	(336500.00, 3183400.00)	DC	50.	0.

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR
 BD = BOUNDARY

LIST 457 601 06/08/95 10:58 C:\F-CRUSH\CRU-84B.OUT

*** MODELING OPTIONS USED: CONC RURAL FLAT DFAULT

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION INCLUDING SOURCE(S): 1

** CONC OF SO2 IN (MICROGRAMS/CUBIC-

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CO
1.	0.23012	(84021224)	AT	(340300.00, 3167700.00)	DC	26.	0.
2.	0.20286c	(84071524)	AT	(340300.00, 3167700.00)	DC	27.	0.
3.	0.19632c	(84021324)	AT	(342000.00, 3174000.00)	DC	28.	0.
4.	0.19632c	(84072124)	AT	(340300.00, 3165700.00)	DC	29.	0.
5.	0.18929	(84021224)	AT	(340300.00, 3165700.00)	DC	30.	0.
6.	0.16515	(84031224)	AT	(340300.00, 3165700.00)	DC	31.	0.
7.	0.16348c	(84071524)	AT	(340300.00, 3165700.00)	DC	32.	0.
8.	0.15843	(84022624)	AT	(343700.00, 3178300.00)	DC	33.	0.
9.	0.15662c	(84102824)	AT	(342000.00, 3174000.00)	DC	34.	0.
10.	0.15585c	(84061724)	AT	(340300.00, 3165700.00)	DC	35.	0.
11.	0.15362c	(84072024)	AT	(343700.00, 3178300.00)	DC	36.	0.
12.	0.15173	(84060924)	AT	(340300.00, 3165700.00)	DC	37.	0.
13.	0.15166c	(84072224)	AT	(342000.00, 3174000.00)	DC	38.	0.
14.	0.14962	(84061624)	AT	(340300.00, 3165700.00)	DC	39.	0.
15.	0.14752c	(84022124)	AT	(340300.00, 3167700.00)	DC	40.	0.
16.	0.14536c	(84080224)	AT	(340300.00, 3169800.00)	DC	41.	0.
17.	0.14467c	(84032224)	AT	(342000.00, 3174000.00)	DC	42.	0.
18.	0.14210	(84052424)	AT	(342000.00, 3174000.00)	DC	43.	0.
19.	0.14033c	(84123124)	AT	(343700.00, 3178300.00)	DC	44.	0.
20.	0.13922	(84112724)	AT	(343000.00, 3176200.00)	DC	45.	0.
21.	0.13913	(84021124)	AT	(340300.00, 3165700.00)	DC	46.	0.
22.	0.13912	(84021024)	AT	(340300.00, 3167700.00)	DC	47.	0.
23.	0.13811c	(84052224)	AT	(342000.00, 3174000.00)	DC	48.	0.
24.	0.13535c	(84120124)	AT	(340300.00, 3165700.00)	DC	49.	0.
25.	0.13519	(84011024)	AT	(342000.00, 3174000.00)	DC	50.	0.

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR
 BD = BOUNDARY

*** MODELING OPTIONS USED: CONC RURAL FLAT DFAULT

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION INCLUDING SOURCE(S): 1

** CONC OF SO2 IN (MICROGRAMS/CUBIC-

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR, YR)	OF TYPE	RANK	CO
1.	0.30240	(85083024)	AT (	343000.00, 3176200.00)	DC	26.	0.
2.	0.18807	(85083024)	AT (	334000.00, 3183400.00)	DC	27.	0.
3.	0.17844	(85072024)	AT (	342000.00, 3174000.00)	DC	28.	0.
4.	0.16569	(85061524)	AT (	343700.00, 3178300.00)	DC	29.	0.
5.	0.15479	(85083024)	AT (	331500.00, 3183400.00)	DC	30.	0.
6.	0.15216	(85041324)	AT (	340300.00, 3167700.00)	DC	31.	0.
7.	0.15147	(85010124)	AT (	342000.00, 3174000.00)	DC	32.	0.
8.	0.14478	(85102824)	AT (	343000.00, 3176200.00)	DC	33.	0.
9.	0.14321	(85041824)	AT (	340300.00, 3165700.00)	DC	34.	0.
10.	0.14102	(85090224)	AT (	340700.00, 3171900.00)	DC	35.	0.
11.	0.14057	(85061524)	AT (	342400.00, 3180600.00)	DC	36.	0.
12.	0.14045	(85041124)	AT (	340300.00, 3165700.00)	DC	37.	0.
13.	0.13744	(85061524)	AT (	343000.00, 3176200.00)	DC	38.	0.
14.	0.13582	(85090324)	AT (	340300.00, 3165700.00)	DC	39.	0.
15.	0.13539	(85072224)	AT (	340300.00, 3167700.00)	DC	40.	0.
16.	0.13430	(85072724)	AT (	340700.00, 3171900.00)	DC	41.	0.
17.	0.13419	(85090124)	AT (	343000.00, 3176200.00)	DC	42.	0.
18.	0.13333	(85083024)	AT (	343700.00, 3178300.00)	DC	43.	0.
19.	0.13268	(85072224)	AT (	340300.00, 3165700.00)	DC	44.	0.
20.	0.13161	(85083024)	AT (	340300.00, 3165700.00)	DC	45.	0.
21.	0.13152	(85112824)	AT (	343700.00, 3178300.00)	DC	46.	0.
22.	0.13007	(85072024)	AT (	340700.00, 3171900.00)	DC	47.	0.
23.	0.12885	(85083024)	AT (	336500.00, 3183400.00)	DC	48.	0.
24.	0.12842	(85112524)	AT (	340300.00, 3165700.00)	DC	49.	0.
25.	0.12694	(85021124)	AT (	342000.00, 3174000.00)	DC	50.	0.

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR
 BD = BOUNDARY

LIST 457 601 06/08/95 10:58 C:\F-CRUSH\CRU-86E.OUT

*** MODELING OPTIONS USED: CONC RURAL FLAT DFAULT

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION
INCLUDING SOURCE(S): 1

** CONC OF SO2 IN (MICROGRAMS/CUBIC-

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR, YR)	OF TYPE	RANK	CO
1.	0.17010	(86031024)	AT (	343000.00, 3176200.00)	DC	26.	0.
2.	0.16707	(86031324)	AT (	343000.00, 3176200.00)	DC	27.	0.
3.	0.16546c	(86071224)	AT (	342000.00, 3174000.00)	DC	28.	0.
4.	0.16505c	(86120124)	AT (	343700.00, 3178300.00)	DC	29.	0.
5.	0.16111	(86081224)	AT (	340700.00, 3171900.00)	DC	30.	0.
6.	0.15250	(86031824)	AT (	343000.00, 3176200.00)	DC	31.	0.
7.	0.15226	(86052624)	AT (	343000.00, 3176200.00)	DC	32.	0.
8.	0.15119c	(86121924)	AT (	340700.00, 3171900.00)	DC	33.	0.
9.	0.14727c	(86052524)	AT (	342000.00, 3174000.00)	DC	34.	0.
10.	0.14533c	(86061424)	AT (	340300.00, 3165700.00)	DC	35.	0.
11.	0.14232	(86112424)	AT (	343000.00, 3176200.00)	DC	36.	0.
12.	0.14184c	(86120924)	AT (	340300.00, 3169800.00)	DC	37.	0.
13.	0.14078c	(86120924)	AT (	340700.00, 3171900.00)	DC	38.	0.
14.	0.13924c	(86120124)	AT (	339000.00, 3183400.00)	DC	39.	0.
15.	0.13754c	(86112924)	AT (	340300.00, 3169800.00)	DC	40.	0.
16.	0.13749	(86052724)	AT (	340300.00, 3167700.00)	DC	41.	0.
17.	0.13546	(86052924)	AT (	340700.00, 3171900.00)	DC	42.	0.
18.	0.13546c	(86080824)	AT (	343000.00, 3176200.00)	DC	43.	0.
19.	0.13330	(86070524)	AT (	340700.00, 3171900.00)	DC	44.	0.
20.	0.13303c	(86121924)	AT (	342000.00, 3174000.00)	DC	45.	0.
21.	0.13100c	(86062724)	AT (	340700.00, 3171900.00)	DC	46.	0.
22.	0.13036	(86030924)	AT (	340300.00, 3169800.00)	DC	47.	0.
23.	0.13028	(86031324)	AT (	343700.00, 3178300.00)	DC	48.	0.
24.	0.13007	(86110724)	AT (	340300.00, 3165700.00)	DC	49.	0.
25.	0.12979c	(86010224)	AT (	340300.00, 3165700.00)	DC	50.	0.

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR
 BD = BOUNDARY

LIST 457 601 06/08/95 10:59 C:\F-CRUSH\CRU-82C.OUT

*** MODELING OPTIONS USED: CONC RURAL FLAT DFAULT

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION INCLUDING SOURCE(S): 1

** CONC OF SO2 IN (MICROGRAMS/CUBIC-

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CO
1.	0.18180	(82120324)	AT (	342000.00, 3174000.00)	DC	26.	0.
2.	0.14099	(82120224)	AT (	340300.00, 3169800.00)	DC	27.	0.
3.	0.13359	(82122424)	AT (	343700.00, 3178300.00)	DC	28.	0.
4.	0.13354	(82122524)	AT (	340300.00, 3165700.00)	DC	29.	0.
5.	0.12788c	(82051724)	AT (	340300.00, 3165700.00)	DC	30.	0.
6.	0.12746c	(82122224)	AT (	340300.00, 3165700.00)	DC	31.	0.
7.	0.12605	(82060424)	AT (	343700.00, 3178300.00)	LC	32.	0.
8.	0.12120	(82120324)	AT (	340700.00, 3171900.00)	DC	33.	0.
9.	0.11761	(82060424)	AT (	343000.00, 3176200.00)	DC	34.	0.
10.	0.11741	(82060424)	AT (	342400.00, 3180600.00)	DC	35.	0.
11.	0.11371	(82120224)	AT (	340700.00, 3171900.00)	DC	36.	0.
12.	0.11302	(82122424)	AT (	343000.00, 3176200.00)	DC	37.	0.
13.	0.11162	(82120424)	AT (	345000.00, 3176200.00)	DC	38.	0.
14.	0.11138	(82122624)	AT (	340300.00, 3167700.00)	DC	39.	0.
15.	0.11036	(82112724)	AT (	340300.00, 3167700.00)	DC	40.	0.
16.	0.10997	(82090124)	AT (	340300.00, 3165700.00)	DC	41.	0.
17.	0.10856c	(82051724)	AT (	340300.00, 3167700.00)	DC	42.	0.
18.	0.10689	(82122724)	AT (	342000.00, 3174000.00)	DC	43.	0.
19.	0.10515	(82120224)	AT (	340300.00, 3167700.00)	DC	44.	0.
20.	0.10502	(82060424)	AT (	339000.00, 3183400.00)	DC	45.	0.
21.	0.10392	(82110124)	AT (	340300.00, 3165700.00)	DC	46.	0.
22.	0.10348	(82021424)	AT (	340300.00, 3165700.00)	DC	47.	0.
23.	0.10304	(82051324)	AT (	340300.00, 3165700.00)	DC	48.	0.
24.	0.10208	(82122424)	AT (	342400.00, 3180600.00)	DC	49.	0.
25.	0.10166	(82122424)	AT (	342000.00, 3174000.00)	DC	50.	0.

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR
 BD = BOUNDARY

LIST 457 601 06/08/95 10:59 C:\F-CRUSH\CRU-83C.OUT

*** MODELING OPTIONS USED: CONC RURAL FLAT DFAULT

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION
INCLUDING SOURCE(S): 1

** CONC OF SO2 IN (MICROGRAMS/CUBIC-

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR, YR)	OF TYPE	RANK	CO
1.	0.19759	(83080524)	AT (	343000.00, 3176200.00)	DC	26.	0.
2.	0.16680c	(83051024)	AT (	340700.00, 3171900.00)	DC	27.	0.
3.	0.14602	(83022724)	AT (	340300.00, 3167700.00)	DC	28.	0.
4.	0.14156c	(83073024)	AT (	340300.00, 3165700.00)	DC	29.	0.
5.	0.14089	(83102324)	AT (	343700.00, 3178300.00)	DC	30.	0.
6.	0.13876c	(83041424)	AT (	343700.00, 3178300.00)	DC	31.	0.
7.	0.13683	(83030524)	AT (	334000.00, 3183400.00)	DC	32.	0.
8.	0.13584	(83012024)	AT (	340700.00, 3171900.00)	DC	33.	0.
9.	0.12706	(83102324)	AT (	339000.00, 3183400.00)	DC	34.	0.
10.	0.12573	(83102324)	AT (	342400.00, 3180600.00)	DC	35.	0.
11.	0.12008c	(83041424)	AT (	342400.00, 3180600.00)	DC	36.	0.
12.	0.11940c	(83041424)	AT (	339000.00, 3183400.00)	DC	37.	0.
13.	0.11554	(83012024)	AT (	340300.00, 3169800.00)	DC	38.	0.
14.	0.11362	(83050724)	AT (	343000.00, 3176200.00)	DC	39.	0.
15.	0.11290	(83050724)	AT (	342000.00, 3174000.00)	DC	40.	0.
16.	0.11224c	(83062024)	AT (	340300.00, 3169800.00)	DC	41.	0.
17.	0.11173	(83030524)	AT (	336500.00, 3183400.00)	DC	42.	0.
18.	0.10942	(83022724)	AT (	340300.00, 3165700.00)	DC	43.	0.
19.	0.10564	(83050724)	AT (	340700.00, 3171900.00)	DC	44.	0.
20.	0.10364	(83022024)	AT (	340300.00, 3167700.00)	DC	45.	0.
21.	0.10092	(83082624)	AT (	342000.00, 3174000.00)	DC	46.	0.
22.	0.09951	(83112024)	AT (	341100.00, 3183400.00)	DC	47.	0.
23.	0.09788	(83051824)	AT (	340300.00, 3167700.00)	DC	48.	0.
24.	0.09647	(83030524)	AT (	331500.00, 3183400.00)	DC	49.	0.
25.	0.09611c	(83091824)	AT (	340300.00, 3165700.00)	DC	50.	0.

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR
 BD = BOUNDARY

*** ISCST2 - VERSION 93109 *** *** FL-CRUSHED NEW KILN AVE-FLOW CHAS 13 R 1

*** MODELING OPTIONS USED: CONC RURAL FLAT DFAULT

*** THE SUMMARY OF MAXIMUM PERIOD (8

Command

Keys: PgUp PgDn F10=exit F1=Help

LIST 457 601 06/08/95 10:59 C:\F-CRUSH\CRU-84C.OUT

*** MODELING OPTIONS USED: CONC RURAL FLAT DFAULT

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION
INCLUDING SOURCE(S): 1 ,

** CONC OF SO2 IN (MICROGRAMS/CUBIC-

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CO
1.	0.15145	(84021224)	AT (	340300.00, 3167700.00)	DC	26.	0.
2.	0.13267	(84022624)	AT (	343700.00, 3178300.00)	DC	27.	0.
3.	0.13234c	(84072124)	AT (	340300.00, 3165700.00)	DC	28.	0.
4.	0.12938	(84021224)	AT (	340300.00, 3165700.00)	DC	29.	0.
5.	0.12669	(84060924)	AT (	340300.00, 3165700.00)	DC	30.	0.
6.	0.12619	(84031224)	AT (	340300.00, 3165700.00)	DC	31.	0.
7.	0.12581c	(84102824)	AT (	342000.00, 3174000.00)	DC	32.	0.
8.	0.12201	(84061624)	AT (	340300.00, 3165700.00)	DC	33.	0.
9.	0.11248	(84112724)	AT (	343000.00, 3176200.00)	DC	34.	0.
10.	0.11225c	(84052224)	AT (	342000.00, 3174000.00)	DC	35.	0.
11.	0.11045c	(84123124)	AT (	343700.00, 3178300.00)	DC	36.	0.
12.	0.10978c	(84071524)	AT (	340300.00, 3167700.00)	DC	37.	0.
13.	0.10715	(84021124)	AT (	340300.00, 3165700.00)	DC	38.	0.
14.	0.10687c	(84061724)	AT (	340300.00, 3165700.00)	DC	39.	0.
15.	0.10616c	(84123124)	AT (	336500.00, 3183400.00)	DC	40.	0.
16.	0.10528	(84021024)	AT (	340300.00, 3167700.00)	DC	41.	0.
17.	0.10076c	(84081324)	AT (	342000.00, 3174000.00)	DC	42.	0.
18.	0.10001	(84021124)	AT (	340300.00, 3167700.00)	DC	43.	0.
19.	0.09960c	(84061724)	AT (	340300.00, 3167700.00)	DC	44.	0.
20.	0.09895	(84072324)	AT (	340300.00, 3167700.00)	DC	45.	0.
21.	0.09819	(84060724)	AT (	340300.00, 3165700.00)	DC	46.	0.
22.	0.09723	(84122824)	AT (	340300.00, 3167700.00)	DC	47.	0.
23.	0.09723	(84011024)	AT (	342000.00, 3174000.00)	DC	48.	0.
24.	0.09632	(84022624)	AT (	342400.00, 3180600.00)	DC	49.	0.
25.	0.09607	(84030524)	AT (	342400.00, 3180600.00)	DC	50.	0.

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR
 BD = BOUNDARY

LIST 457 601 06/08/95 10:59 C:\F-CRUSH\CRU-85C.OUT

*** MODELING OPTIONS USED: CONC RURAL FLAT DFAULT

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION
INCLUDING SOURCE(S): 1

** CONC OF SO2 IN (MICROGRAMS/CUBIC-

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CO
1.	0.23360	(85083024)	AT (	343000.00, 3176200.00)	DC	26.	0.
2.	0.16117	(85083024)	AT (	334000.00, 3183400.00)	DC	27.	0.
3.	0.14123	(85072024)	AT (	342000.00, 3174000.00)	DC	28.	0.
4.	0.13346	(85083024)	AT (	331500.00, 3183400.00)	DC	29.	0.
5.	0.11912	(85041324)	AT (	340300.00, 3167700.00)	DC	30.	0.
6.	0.11845	(85041124)	AT (	340300.00, 3165700.00)	DC	31.	0.
7.	0.11819	(85090224)	AT (	340700.00, 3171900.00)	DC	32.	0.
8.	0.11639	(85010124)	AT (	342000.00, 3174000.00)	DC	33.	0.
9.	0.11417	(85102824)	AT (	343000.00, 3176200.00)	DC	34.	0.
10.	0.11142	(85041824)	AT (	340300.00, 3165700.00)	DC	35.	0.
11.	0.11091	(85072724)	AT (	340700.00, 3171900.00)	DC	36.	0.
12.	0.11007	(85083024)	AT (	336500.00, 3183400.00)	DC	37.	0.
13.	0.10759	(85072224)	AT (	340300.00, 3167700.00)	DC	38.	0.
14.	0.10674	(85061524)	AT (	343700.00, 3178300.00)	DC	39.	0.
15.	0.10659	(85083024)	AT (	343700.00, 3178300.00)	DC	40.	0.
16.	0.10435	(85072224)	AT (	340300.00, 3165700.00)	DC	41.	0.
17.	0.10126	(85041124)	AT (	340300.00, 3167700.00)	DC	42.	0.
18.	0.10103	(85111624)	AT (	340300.00, 3167700.00)	DC	43.	0.
19.	0.09833	(85112524)	AT (	340300.00, 3165700.00)	DC	44.	0.
20.	0.09434	(85072624)	AT (	340300.00, 3165700.00)	DC	45.	0.
21.	0.09267	(85061524)	AT (	342400.00, 3180600.00)	DC	46.	0.
22.	0.09265	(85090324)	AT (	340300.00, 3165700.00)	DC	47.	0.
23.	0.09205	(85102724)	AT (	343700.00, 3178300.00)	DC	48.	0.
24.	0.09148	(85082924)	AT (	340300.00, 3169800.00)	DC	49.	0.
25.	0.09072	(85083024)	AT (	342400.00, 3180600.00)	DC	50.	0.

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR
 BD = BOUNDARY

LIST 457 601 06/06/95 11:00 C:\F-CRUSH\CRU-86C.OUT

*** MODELING OPTIONS USED: CONC RURAL FLAT DFAULT

*** THE MAXIMUM 50 24-HR AVERAGE CONCENTRATION
INCLUDING SOURCE(S): 1

** CONC OF SO2 IN (MICROGRAMS/CUBIC-

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR, YR)	OF TYPE	RANK	CO
1.	0.13766	(86031324)	AT	(343000.00, 3176200.00)	DC	26.	0.
2.	0.12764	(86031024)	AT	(343000.00, 3176200.00)	DC	27.	0.
3.	0.12316	(86112424)	AT	(343000.00, 3176200.00)	DC	28.	0.
4.	0.12130	(86081224)	AT	(340700.00, 3171900.00)	DC	29.	0.
5.	0.12126	(86031824)	AT	(343000.00, 3176200.00)	DC	30.	0.
6.	0.11859	(86070524)	AT	(340700.00, 3171900.00)	DC	31.	0.
7.	0.10550	(86031324)	AT	(343700.00, 3178300.00)	DC	32.	0.
8.	0.10489c	(86052524)	AT	(342000.00, 3174000.00)	DC	33.	0.
9.	0.10177	(86031324)	AT	(342400.00, 3180600.00)	DC	34.	0.
10.	0.10158c	(86060324)	AT	(340300.00, 3167700.00)	DC	35.	0.
11.	0.10061c	(86121924)	AT	(340700.00, 3171900.00)	DC	36.	0.
12.	0.09986	(86031824)	AT	(343700.00, 3178300.00)	DC	37.	0.
13.	0.09983c	(86120924)	AT	(340700.00, 3171900.00)	DC	38.	0.
14.	0.09953	(86110724)	AT	(340300.00, 3165700.00)	DC	39.	0.
15.	0.09919	(86031824)	AT	(340300.00, 3167700.00)	DC	40.	0.
16.	0.09727	(86081024)	AT	(342000.00, 3174000.00)	DC	41.	0.
17.	0.09682c	(86080824)	AT	(343000.00, 3176200.00)	DC	42.	0.
18.	0.09599c	(86120924)	AT	(340300.00, 3169800.00)	DC	43.	0.
19.	0.09544	(86031324)	AT	(341100.00, 3183400.00)	DC	44.	0.
20.	0.09459c	(86112524)	AT	(343700.00, 3178300.00)	DC	45.	0.
21.	0.09330c	(86112924)	AT	(340300.00, 3169800.00)	DC	46.	0.
22.	0.09307	(86031824)	AT	(336500.00, 3183400.00)	DC	47.	0.
23.	0.09294c	(86061324)	AT	(340300.00, 3167700.00)	DC	48.	0.
24.	0.09171c	(86051424)	AT	(340300.00, 3165700.00)	DC	49.	0.
25.	0.09162	(86031024)	AT	(334000.00, 3183400.00)	DC	50.	0.

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR
 BD = BOUNDARY