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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

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4APT-APB

Mr. A. A. Linero Florida Department of Environmental Protection 2600 Blair Stone Road Tallahassee, Florida 32399

BUREAU OF AIR REGULATION

Re:

ISC-PRIME Model for

Stone Container Corporation, Panama City Mill

Dear Mr. Linero:

This letter is in response to your request that the U.S. Environmental Protection Agency (EPA) document their approval of the use of the ISC-PRIME model to assess the ambient air quality impacts associated with the proposed modification to the Stone Container Corporation Panama City Mill in Panama City, Florida.

We have reviewed the documentation supplied in support of the use of the non-Guideline model ISC-PRIME [i.e., a model not currently recommended in EPA's Guideline on Air Quality Models (40 CFR 51, Appendix W)]. Based on EPA's technical and performance evaluations, ISC-PRIME has been found to be superior to the current guideline ISCST3 model. ISC-PRIME has, therefore, been proposed as a guideline model to replace ISCST3. Based on the following, we believe ISC-PRIME to be an appropriate and acceptable model to be used to estimate ambient air quality impacts for the proposed Stone Container modifications: 1) applicant's supporting documentation showing ISC-PRIME to be applicable and superior to ISCST3 in this application; 2) ISC-PRIME's technically superiority to the EPA guideline ISCST3 model; 3) ISC-PRIME better performance than ISCST3 in comparisons with observations; and 4) performance evaluations that show that ISC-PRIME is not significantly biased toward under-estimation of maximum concentrations.

We therefore approve the use of the ISC-PRIME model for the assessment of air quality impacts from the proposed modifications to Stone Container Corporation's Panama City Mill. In accordance with EPA's division of responsibilities with respect to the use of alternative non-Guideline models (Appendix W; Section 3.2), this approval by EPA Region 4 is a case-specific approval and should not be construed to imply approval for applications of ISC-PRIME to other projects. Although EPA's Office of Air Quality Planning and Standards has proposed generic approval of the ISC-PRIME model as a guideline model, incorporation into Appendix W is not expected until early next year.

Please note that this case-specific approval of ISC-PRIME for application to this permit revision must be included in all public notices so the public has an opportunity to comment and request a public hearing on this matter.

If you have any questions, or if we can be of further assistance, please contact Stan Krivo of my staff at 404/561-9123.

Sincerely,

Kay J. Ource Kay T. Prince

Chief

Air Planning Branch Air, Pesticides and Toxics

Management Division

cc: David A. Buff, Golder Associates Inc. Cleve Holladay, FL DEP



Jeb Bush Governor

Department of Environmental Protection

Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

September 26, 2001

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Thomas L. Clements, Environmental Supt. Smurfit-Stone Container Corporation Post Office Box 59560 Panama City, Florida 32412-0560

Re: DEP File No. 0050009-005-AC (PSD-FL-288)

Panama City Mill

Pulp Production Increase

Dear Mr. Clements:

We have received your memo requesting the use of only four months of monitoring data to establish background SO₂ levels. We have insufficient information to make this determination. Based on my discussions with your consultant, Golder Associates, at least seven months of continuous monitoring data may be required. The preliminary modeling results they discussed with me indicated two worst case scenarios, one in the November to December timeframe and the other in May. I requested the final modeling results be sent to us. We have not received these results yet. The Department will resume processing this request after receipt of this modeling information. If you have any questions regarding this matter, please call me at (850) 921-8986.

Sincerely,

Cleve Holladay

New Source Review Section

Oleve Hall

CGH/ch

cc: Gregg Worley, EPA
Bruce Mitchell, DEP-BAR
David A. Buff, P.E., Golder Associates Inc.

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
 Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	A. Received by (Please Print Clearly) B. Date of Delivery. C. Signature X. Agent Addressee
Article Addressed to:	D. Is delivery address different from item 17. If YES, enter delivery address below:
Mr. Thomas L. Clements Environmental Supt. Smurfit-Stone Container Corp. P. O. Box 59560	
Panama City, FL 32412-0560	3. Service Type XX Certified Mail ☐ Express Mail ☐ Registered ☐ Return Receipt for Merchandise ☐ Insured Mail ☐ C.O.D.
	4. Restricted Delivery? (Extra Fee) ☐ Yes
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Smurfit-Stone

Containerboard Mill Division

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BUREAU OF AIR REGULATION

August 22, 2001

Mr. C. H. Fancy Chief, Bureau of Air Regulation Florida Dept. of Environmental Protection Twin Towers Office Bldg. 2600 Blair Stone Rd. Tallahassee, FL 32399-2400

Re: DEP File No. 0050009-005-AC (PSD-FL-288)

Panama City Mill Pulp Production Increase

Dear Mr. Fancy

In my memo of March 21, 2001, I explained that the mill would not be in danger of exceeding it's pulp production permit limit in the year 2001. This is due to down time taken as a result of poor market conditions. We also felt that the use of ambient SO₂ data from the Pensacola area is inappropriate, and proposed four months of local SO₂ monitoring. We had requested that this monitoring be started early in 2002.

Discussions between your staff and our consultant, Golder & Associated, has indicated that any ambient monitoring should be conducted during "worst case" meteorological conditions. If these conditions exist at the end of the year, we may want to start monitoring in late 2001 and into early 2002.

In any event, we would like to confirm that four months of data would be considered sufficient to establish background SO₂ levels. Please call me at (850) 785-4311 ext. 470 if you have any questions.

Sincerely

Thomas L. Clements Environmental Supt.

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AL Bria, cleve



Containerboard Mill Division

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MAR 22 2001

BUREAU OF AIR REGULATION

03/21/01

Mr. C.H. Fancy, P.E. Chief, Bureau of Air Regulation Florida Dept. of Environmental Protection Twin Towers Office Bldg. 2600 Blair Stone Rd. Tallahassee, FL 32399-2400

Re: DEP File No. 0050009-005-AC (PSD-FL-288)

Panama City Mill

Pulp Production Increase

Dear Mr. Fancy

This is to reply to your incompleteness letter of December 5, 2000. We believe that the use of SO₂ ambient air quality data from the Pensacola area is not representative of conditions existing in Panama City. As a result, we propose to install a temporary ambient SO₂ monitor in the vicinity of the mill in order to obtain more representative data. We believe that four months of monitoring would be appropriate and sufficient for this purpose. Prior to installing the monitor, we will submit to the Department a monitoring protocol to obtain approval of the site location, monitoring methods, and data analysis methods to establish the background SO₂ concentration.

The mill is currently temporarily shut down due to market conditions. Because of this and other market related slowdowns, we will not be in any danger of exceeding our pulp production limit this year. We have been asked by the Corporation to defer any unnecessary spending. As a result we would propose begin the ambient monitoring in early 2002.

We request confirmation from the Department that a four month monitoring program would be sufficient to establish the SO₂ background concentration for the Panama City Mill. Please call me at (850) 785-4311 ext. 470 if you have any questions.

Sincerely

Thomas L. Clements Environmental Supt.

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Cc: Jack Prescott Charlie Ackel David Buff Q Q Q ·

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Department of Environmental Protection

File Can

Jeb Bush Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

David B. Struhs Secretary

December 5, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Jack B. Prescott, General Manager Stone Container Corporation One Everitt Avenue Panama City, Florida 32402

Re: DEP File No. 0050009-005-AC (PSD-FL-288)

Panama City Mill Pulp Production Increase

Dear Mr. Prescott:

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On November 6, 2000, the Department received the responses to its requests for additional information dated July 10 and October 31, 2000. Based on our review of the proposed project, we have determined that the following additional information is needed in order to continue processing this application package. Responses to each of the comments (Nos. 1 thru 11 and the concluding paragraph) in the letter received by the Department on November 6th are presented in the same order as they appear in the referenced letter.

- 1. The Department finds the response to this question sufficient.
- 2. Existing ambient monitoring data was provided in an attempt to satisfy the PSD preconstruction monitoring requirement for the following four pollutants: CO, NO_x , PM_{10} , and SO_2 . The Department finds the data for CO and NO_x acceptable for establishing ambient background concentrations. However, since modeled PM_{10} and SO_2 concentrations challenge the Florida and National AAQS, further evaluation of the background concentrations of these pollutants is necessary. Concerns with this issue are addressed more thoroughly in item 8.
- 3. The Department finds the response to this question sufficient to address the problems with receptors at the property boundary. However, the PM₁₀ AAQS analysis was submitted with a receptor network that is only suitable for a screening analysis. Please submit a refined PM₁₀ AAQS analysis that utilizes a denser receptor network centered upon the region of maximum impact.
- 4. The Department finds the response to this question sufficient, but the revised figures showing the property boundary that were mentioned in the response letter were not included. Please provide these figures to the Department.
 - 5. The Department finds the response to this question sufficient.
 - 6. The Department finds the response to this question sufficient.
 - 7. The Department finds the response to this question sufficient.

- 8. Revised short term ambient background concentrations were submitted for SO₂, and PM₁₀. However, the methods used to derive these values do not seem appropriate given the importance of these values to the ambient modeling analysis. A description of the errors found with the methods utilized for each pollutant are given below:
 - a) PM₁₀ Monitoring data for this pollutant was submitted from a monitor in Panama City, FL over a period that contained data from 1997-1999. Since this monitor is located about 0.6 km north-east of SCC, it is assumed that emission from SCC will have an impact on the monitor. However, the method used to eliminate SO₂ emissions from SCC that could have an impact on the monitor was inappropriate for the following reasons: First, only data from 1999 was used in the process, even though data from 1998 had higher observed concentrations. It appears that 1999 also had the least number of observations. Also, the meteorological data that was used in the analysis was from a National Weather service site that was over 80 km away, and was thus not appropriate for this type of analysis. Finally, the procedure that was used to derive the PM₁₀ background concentration was not consistent with the procedure that was used to derive the SO₂ background concentration.
 - b) SO₂ Monitoring data for this pollutant was submitted from a monitor in Pensacola, FL over a period that contained data from 1997-1999. However, since this monitor was located in an urban area, a modification of the procedure presented in Section 9.2.2 of the Guideline on Air Quality Models was used in an attempt to eliminate influences from large SO₂ sources in the region. This method is typically used to eliminate influences from only the source that is of concern, not surrounding sources. Although it is acknowledged that the Pensacola monitor could be influenced by nearby large sources of SO₂, it is believed that the method used to eliminate these influences was inappropriate for the following reasons: First, only data from the Ellyson Industrial Park (EIP) monitoring station was considered in the analysis, because the University Parkway (UP) station had missing wind information. However, due to the close proximity of the two monitors, it is possible to use measured PM₁₀ data from the UP station in conjunction with wind data from the EIP station. Also, it appears that the Solutia and Champion SO₂ emission sources are located at a distance that is too great for them to be considered for impacts on the EIP or UP SO₂ monitors. Finally, the wind sector that was used to eliminate SO₂ influences from competing sources was too large. This sector should be no larger than 90 degrees, and it should be centered around the Gulf Power Site.
- 9. It appears to the Department that Table 5-8 has been revised to reflect changes in the modeling. However, there is still a large discrepancy between the ISCST3 and the ISC-PRIME results in the Class I area. Also, the distances from the facility to the receptors of maximum concentrations in the Class I Area appear to be erroneous. It is the Department's opinion that this issue requires further review and explanation.
- 10. a) The Department finds the response to this portion of the question sufficient.
 - b) The Department finds the response to this portion of the question sufficient.
 - c) The Department finds the response to this portion of the question sufficient.
 - d) Tables 4-3, 4-5, and 4-7 still have some inconsistencies with the emission of SO₂, NO₃, and PM₁₀ from units that were selected to be modeled for the City of Tallahassee Hopkins Plant. Please explain the differences between theses tables.

- e) It was recommended in the previous letter that the two sources at the Arizona Chemical plant be separated. However, the two sources were still combined in the modeling files that were submitted to the Department. Since the maximum SO₂ and PM₁₀ modeled concentrations are close to the site boundary and challenge the Florida and National AAQS, it is still recommended that these sources not be combined in the modeling. Also, there is a discrepancy between the location of Combination Boilers No. 3 and No. 4 that are listed on Table 2-3 and the location of the boilers that were input into the ISC-PRIME model.
- 11. The Department finds the response to this issue sufficient.
- 12. Based on your concluding paragraph, the following response is made. We will be applying the new source review requirements contained in Rule 62-212.400(5), F.A.C., which includes the determination of BACT. Please review your earlier submittal, which provided a BACT evaluation for the affected emissions units subject to a BACT determination, to see if there is/are any changes that you would like to make in light of the potential application of BACT to them.
- 13. The future proposed potential pollutant emissions for VOC for the recovery boilers, if limited by permit, will be in violation with what has been calculated and reported as actual emissions in the AOR data submittals for the 1996 and 1997 calendar years. Please provided a response that will reconcile this situation and any other similar situation.
- 14. The Department is unable to verify the baseline emissions (reported within the application) from years 1996 and 1997. What follows are the TPY emissions, which were reported by SCC to FDEP, as found within FDEP's database. Please specify those Emission Units, which are excluded within SCC's baseline emissions submittal. Additionally, please justify why this data should <u>not</u> be used in lieu of your data presented; and, note that FDEP intends to utilize this data in its analysis, absent its determination of adequate support from SCC to the contrary, and the maximum future potential emissions should be re-evaluated in light of this data.

E.U.	1	RECOVERY BOILER #1
E.U.	4	LIME KILN BURNS LIME MUD TO PRODUCE CALCIUM OXIDE
E.U.	5	LIME SLAKER
E.U.	15	BARK BOILER #3
E.U.	16	BARK BOILER #4 (FLY ASH ARRESTOR & WET SCRUBBER)
E.U.	19	RECOVERY BOILER #2
E.U.	20	SMELT DISSOLVING TANK #2 (DEMISTER PADS)
E.U.	21	SMELT DISSOLVING TANK #1 (DEMISTER PADS)
E.U.	25	WOODYARD FACILITY
E.U.	26	MULTIPLE EFFECT EVAPORATOR (MEE) SYSTEM
E.U.	27	DIGESTER SYSTEM FOR COOKING WOOD CHIPS TO PRODUCE
E.U.	30	WOODYARD FACILITY
E.U.	31	METHANOL STORAGE TANK

SCC data submitted to FDEP for 1996												
EU's>	001	004	005	015	016	019	020	021	026	027	030	031
со	1621	30.3		402 9	377	1714.4			0	0		
H:15							- ···		0	0		0.913
NOX	265.3	303.2		415.4	1433.3	280.5	452	427.4	0	0		
PB				0.007	0.407				0	0		
PM	194 4	106.3	1.8	161.2	166.2	148.9	104.3	56	0	0	15.7	
PM10	181.3	17.8	0.3	62.8	64.8	138.9	92.4	49.6	0	0	8.6	
SO2	1031.6	91		376.1	1259.4	1091	31.2	29.4	0	0		
TRS	30.45	8.3			0.3	36.4	2.5	1.9	Ō	0		
Voc	287.4	75.8		276.07	127.71	303.9	24.9	23.6	0	0		0.91

SCC data submitted to FDEP for 1997												
EU's>	001	004	005	015	016	019	020	021	026	027	030	031
co	1902	34.5		309.5	273.6	1888			0	0		
H115									0	0		0.848
NOX	311	345	 	350	1575	309	495	50.4	0	0		
PB				0.007	0.513				0	0		<u> </u>
РM	173.7	90.7	1.6	130.5	95.49	172.8	90	84	0	0	16.9	
PM10	162	15.2	0.27	48	35.3	161.2	79.7	74	0	0	9.3	
SO2	1211	103		385	1230	1201.4	34	35	0	0		
TRS	26.4	10.7			0.03	33.5	3.8	3.4	0	0		
VOC	337	88	 	106.37	89.3	334.7	27	28	0	0		0.848

SCC data submitted to FDEP (average of 1996 and 1997)													
EU's>	001	004	005	015	016	019	020	021	026	027	030	031	Total
СО	1761.5	32.4	0	356.2	325.3	1801.2	0		0	0	0	0	4276.6
H115		0	0		0	Ü	0	0	0	0	0	0.8805	0.8805
NOX	288.15	324.1	0	382.7	1504.15	294.75	473.5	238.9	0	0	0	0	3506.3
PB	0	0	0	0.007	0.46	0	0	0	0	0	0	0	0.467
PM	184.05	98.5	1.7	145.85	130.845	160.85	97.15	70	0	0	16.3	0	905.2
PM10	171.65	16.5	0.285	55.4	50.05	150.05	86.05	61.8	0	0	8.95	0	600.7
SO2	1121.3	97	0	380.55	1244.7	1146.2	32.6	32.2	0	0	0	0	4054.6
TRS	28.425	9.5	0	0	0.165	34.95	3.15	2.65	0	0	0	0	78.84
VOC	312.2	80.9	0	191.22	108.505	319.3	25.95	25.8	0	0	0	0.8805	1064.8

Mr. Jack B. Prescott December 5, 2000 Page 5 of 5

The Department will resume processing this application after receipt of the requested information. If you have any questions regarding this matter, please call Bruce Mitchell at (850) 921-9506 or Chris Carlson at (850) 921-9537.

Sincerely,

O. H. Fancy, P.E.

Chief

Bureau of Air Regulation

CHF/bm

cc: Gregg Worley, EPA
John Bunyak, NPS
Ellen Porter, USF&WS
Sandra Veazey, NWD
David A. Buff, P.E., Golder Associates Inc.

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
 Complete items 1, 2, and 3. Also complete item 4 if restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	A. Received by (Please Print Clearly) B. Date of Delivery C. Signature X. Row Malloon Agent Addressee
Article Addressed to:	D. Is delivery address different from item 1? Yes If YES, enter delivery address below: No
Mr. Jack B. Prescott General Manager Stone Container Corporation One Everitt Avenue Panama City, Florida 32402	3. Service Type □ X Xertified Mail □ Registered □ Return Receipt for Merchandise □ Insured Mail □ C.O.D.
	4. Restricted Delivery? (Extra Fee) ☐ Yes
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7	Panama Ci	ty, Florid	a 32402
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INTEROFFICE MEMORANDUM

Sensitivity: COMPANY CONFIDENTIAL Date: 20-Nov-2000 12:07pm

From: Mike Halpin TAL

HALPIN_M

Dept: Air Resources Management

Tei No: 850/488-0114

To: Bruce Mitchell TAL (MITCHELL_B)

Subject: Stone Container

Bruce -

As you've requested, I've provided you with a copy of my initial draft of the BACT (DraftBACT) as well as the incompleteness letter (288inc4.doc). Of course, these were not yet well developed as I was attempting to learn the industry as I went.

These files, along with Syed's file and 4 other files I have put together are in a new folder on your drive:

O:\BAR\Title V\BRUCE\Stone288

I'll bring all of the historical information down to your office this afternoon.

Thanks Mike