7/27/07

From:

Clements, Tom [TMCLEMEN@SMURFIT.COM]

Sent:

Monday, August 06, 2007 2:41 PM

To:

Harvey, Mary

Subject: RE: Smurfit-Stone Container Enterprises, Inc. - Project #0050009-028-AC-DRAFT

I was on vacation last week, sorry about that. Message received.

Tom Clements

From: Harvey, Mary [mailto:Mary.Harvey@dep.state.fl.us]

Sent: Wednesday, August 01, 2007 2:18 PM **To:** Mr. Jim Little, EPA Region 4; Clements, Tom

Subject: FW: Smurfit-Stone Container Enterprises, Inc. - Project #0050009-028-AC-DRAFT

Good Afternoon:

This email was sent to you on 7/27. Please email me back if you have received this letter. We need the read receipt so that we can complete the files.

Thank you very kindly.

Mary.

From: Harvey, Mary

Sent: Friday, July 27, 2007 2:46 PM

To: 'bsammons@smurfit.com'

Cc: Thomas, Bruce X.

Subject: FW: Smurfit-Stone Container Enterprises, Inc. - Project #0050009-028-AC-DRAFT

From: Harvey, Mary

Sent: Friday, July 27, 2007 2:09 PM

To: 'Mr. B. G. Sammons, Smurfit-Stone'; 'Mr. Tom Clements, Smurfit-Stone'; 'Mr. David Buff, Golder Associates'; Bradburn, Rick; 'Ms. Kathleen Forney, EPA Region 4'; 'Mr. Jim Little, EPA Region 4'; 'Mr. Dee Morse, National Park

Service'

Cc: Koerner, Jeff; Thomas, Bruce X.; Gibson, Victoria; Adams, Patty

Subject: Smurfit-Stone Container Enterprises, Inc. - Project #0050009-028-AC-DRAFT

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open

· From:

Harvey, Mary

Sent:

Wednesday, August 01, 2007 3:18 PM

To:

'Mr. Jim Little - EPA-Region 4'; 'Mr-Tom Clements, Smurfit-Stone'?

Subject:

FW: Smurfit-Stone Container Enterprises, Inc. - Project #0050009-028-AC-DRAFT

Attachments: 0050009.028:AC:D:-pdf.zip

Good Afternoon:

This-email was sent to you on 7/27. Please email me back if you have received this letter. We need the read receipt so that we can complete the files.

Thank you very kindly.

Mary -

From: Harvey, Mary

Sent: Friday, July 27, 2007 2:46 PM **To:** 'bsammons@smurfit.com'

Cc: Thomas, Bruce X.

Subject: FW: Smurfit-Stone Container Enterprises, Inc. - Project #0050009-028-AC-DRAFT

From: Harvey, Mary

Sent: Friday, July 27, 2007 2:09 PM

To: 'Mr. B. G. Sammons, Smurfit-Stone'; 'Mr. Tom Clements, Smurfit-Stone'; 'Mr. David Buff, Golder Associates'; Bradburn, Rick; 'Ms. Kathleen Forney, EPA Region 4'; 'Mr. Jim Little, EPA Region 4'; 'Mr. Dee Morse, National Park Service'

Cc: Koerner, Jeff; Thomas, Bruce X.; Gibson, Victoria; Adams, Patty

Subject: Smurfit-Stone Container Enterprises, Inc. - Project #0050009-028-AC-DRAFT

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: http://www.adobe.com/products/acrobat/readstep.html.

From:

Eorney.Kathleen@epamail.epa.gov

Sent:

Wednesday, August 01, 2007 3:41 PM

To:

Harvey, Mary

Cc:

Little.James@epamail.epa.gov

Subject:

RE: Smurfit-Stone Container Enterprises, Inc. - Project #0050009-028-AC-DRAFT

Hi Mary,

Sorry. I/didn't realize that you needed it from both of us. If Jim's suggestion isn't satisfactory, then maybe its just easier to only have one of us on the list.

Thanks, Katy

Katy R. Forney Air Permits Section

EPA - Region 4 61 Forsyth St., SW Atlanta, GA 30024

Phone: 404-562-9130 Fax: 404-562-9019

> "Harvey, Mary" <Mary.Harvey@dep .state.fl.us>

> 08/01/2007 03:36

PΜ

Kathleen Forney/R4/USEPA/US@EPA

CC

To

James Little/R4/USEPA/US@EPA

Subject

RE: Smurfit-Stone Container Enterprises, Inc. - Project #0050009-028-AC-DRAFT

Katy, yes I did get a confirmed receipt from you. I needed the confirmed receipt for Jim Little. Is this a confirmed receipt for Jim?

Thanks, Mary

----Original Message----

From: Forney.Kathleen@epamail.epa.gov [mailto:Forney.Kathleen@epamail.epa.gov] Sent: Wednesday, August 01, 2007 3:31 PM

To: Harvey, Mary

Cc: Little.James@epamail.epa.gov

Subject: Fw: Smurfit-Stone Container Enterprises, Inc. - Project #0050009-028-AC-DRAFT

Hey Mary,

- West page

I thought I confirmed the reciept of this previous, but just in case it didn't reach you... Yes we got this.

Thanks, Katy

Katy R. Forney Air Permits Section EPA - Region 4 61 Forsyth St., SW Atlanta, GA 30024

Phone: 404-562-9130 Fax: 404-562-9019

---- Forwarded by Kathleen Forney/R4/USEPA/US on 08/01/2007 03:30 PM

Kathleen Forney/R4/USEPA/

"Harvey, Mary"

07/27/2007 04:04

PM

<Mary.Harvey@dep.state.fl.us>

Subject

To

CC

Re: FW: Smurfit-Stone Container Enterprises, Inc. - Project #0050009-028-AC-DRAFT (Document

link: Kathleen Forney)

Thanks.

Katy R. Forney Air Permits Section EPA - Region 4 61 Forsyth St., SW Atlanta, GA 30024

Phone: 404-562-9130 Fax: 404-562-9019

> "Harvey, Mary" <Mary.Harvey@dep .state.fl.us>

07/27/2007 02:11 PM

James Little/R4/USEPA/US@EPA, Kathleen Forney/R4/USEPA/US@EPA

"Koerner, Jeff" <Jeff.Koerner@dep.state.fl.us>, "Adams, Patty" <Patty.Adams@dep.state.fl.us>, "Thomas, Bruce X." <Bruce.X.Thomas@dep.state.fl.us>

FW: Smurfit-Stone Container

Enterprises, Inc. - Project

2

From:

tittle:James@epamail.epa.gov

Wednesday, August 01, 2007 3:39 PM

Sent: To:

Harvey, Mary

Cc:

Forney.Kathleen@epamail.epa.gov

Subject:

RE: Smurfit-Stone Container Enterprises, Inc. - Project.#0050009-028-AC-DRAFT-

Mary -

Consider me_confirmed. In future, if either Katy Forney or I respond, that means we both received the message. Is that good enough, or do you still need both of us to respond?

Jim Little - EPA Region 4 (404) 562-9118

> "Harvey, Mary" <Mary.Harvey@dep .state.fl.us>

08/01/2007 03:36

PM

To Kathleen Forney/R4/USEPA/US@EPA

James Little/R4/USEPA/US@EPA

Subject

RE: Smurfit-Stone Container Enterprises, Inc. - Project

#0050009-028-AC-DRAFT

Katy...yes-I-did-get-a confirmed receipt from-you: I needed the confirmed receipt for Jim Little. Is this a confirmed receipt for Jim?-

Thanks,---Mary

----Original Message-----

From: Forney.Kathleen@epamail.epa.gov [mailto:Forney.Kathleen@epamail.epa.gov] Sent: Wednesday, August 01, 2007 3:31 PM

To: Harvey, Mary

Cc: Little.James@epamail.epa.gov

Subject: Fw: Smurfit-Stone Container Enterprises, Inc. - Project #0050009-028-AC-DRAFT

Hey-Mary,

T-thought T-confirmed the reciept of this previous, but just in case it didn't reach you... Yes we got this.

Thanks,

Katy

Katy R. Forney

From:

Harvey; Mary

Sent:

Wednesday, August 01, 2007 3:47 PM

To:

'Little:James@epamail.epa.gov'

Cc:

Forney:Kathleen@epamail.epa.gov

Subject: RE: Smurfit-Stone Container Enterprises, Inc. - Project #0050009-028²AC-DRAFT→

Jim -

I need a read receipt from you and Kathy please. This is needed for our permitting tracking system files.

Sorry for any inconvenience.

Thanks, Mary

----Original Message----

From: Little.James@epamail.epa.gov [mailto:Little.James@epamail.epa.gov]

Sent: Wednesday, August 01, 2007 3:39 PM

To: Harvey, Mary

Cc: Forney.Kathleen@epamail.epa.gov

Subject: RE: Smurfit-Stone Container Enterprises, Inc. - Project #0050009-028-AC-

DRAFT

Mary -

Consider me confirmed. In future, if either Katy Forney or I respond, that means we both received the message. Is that good enough, or do you still need both of us to respond?

Jim Little - EPA Region 4 (404) 562-9118

"Harvey, Mary" <Mary.Harvey@dep .state.fl.us>

08/01/2007 03:36

PM

To Kathleen Forney/R4/USEPA/US@EPA

James Little/R4/USEPA/US@EPA

Subject

CC

RE: Smurfit-Stone Container Enterprises, Inc. - Project #0050009-028-AC-DRAFT

From:

Sent:

Dee_Morse@nps.gov Monday, July 30, 2007 5:10 PM

To:

Subject:

Harvey, Mary
Smurfit-Stone Container Enterprises, Inc. - Project.#0050009-028-AC-DRAFT

Return Receipt

Your

Smurfit-Stone Container Enterprises, Inc. - Project #0050009-028-AC-DRAFT

document:

was

Dee Morse/DENVER/NPS

received

by:

at:

07/30/2007 03:10:32 PM

From:

Harvey, Mary

Sent:

Friday, July 27, 2007 2:09 PM

To:

'Mr. B. G. Sammons, Smurfit-Stone'; 'Mr. Tom Clements, Smurfit-Stone'; 'Mr. David Buff,

Golder Associates'; Bradburn, Rick; 'Ms. Kathleen Forney, EPA Region 4'; 'Mr. Jim Little, EPA

Region 4'; 'Mr. Dee Morse, National Park Service'

Cc:

Koerner, Jeff; Thomas, Bruce X.; Gibson, Victoria; Adams, Patty

Subject:

Smurfit-Stone Container Enterprises, Inc. *Project #0050009:028-AC-DRAFT

Attachments: 0050009.028.AC.D_pdf.zip

Tracking:

Recipient Delivery Read

L Mr. B. G. Sammons, Smurfit-Stone'

Mr. Tom Clements, Smurfit-Stone'

Mr. David Buff, Golder Associates'

Bradburn, Rick Delivered: 7/27/2007 2:09 PM

MS. Kathleen Forney, EPA Region 4'

Mr. Tim Little, EPA'Region'4'

Mr. Dee Morse, National Park: Service'

Delivered: 7/27/2007 2:09 PM

Thomas, Bruce X.

Adams, Patty

Delivered: 7/27/2007 2:09 PM Read: 7/27/2007 2:09 PM

Delivered: 7/27/2007 2:09 PM Read: 7/27/2007 2:17 PM

Delivered: 7/27/2007 2:09 PM

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: http://www.adobe.com/products/acrobat/readstep.html.

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

DEP, Bureau of Air Regulation

From:

To:

Sent:

Subject:

Buff, Dave [DBuff@GOLDER.com] undisclosed-recipients Friday, July 27, 2007 6:10 PM Read: Smurfit-Stone Container Enterprises, Inc. - Project #0050009-028-AC-DRAFT

Your message

To:

DBuff@GOLDER.com

Subject:

was read on 7/27/2007 6:10 PM.

From:

Sammons, Bob [BSAMMONS@SMURFIT.COM]

To:

undisclosed-recipients

Sent:

Subject:

Friday, July 27, 2007 4:30 PM Read: Smurfit-Stone Container Enterprises, Inc. - Project:#0050009-028-AC-DRAFT

Your message

To:

BSAMMONS@SMURFIT.COM

Subject:

was read on 7/27/2007 4:30 PM.

From:

Thomas, Bruce X.

To:

Harvey, Mary

Sent:

Friday, July 27, 2007 2:46 PM

Subject:

Read: FW: Smurfit-Stone Container Enterprises, Inc. - Project #0050009-028-AC-DRAFT

Your message

To:

'bsammons@smurfit.com'

Cc:

Thomas, Bruce X.

Subject:

FW: Smurfit-Stone Container Enterprises, Inc. - Project #0050009-028-AC-DRAFT

Sent:

7/27/2007 2:46 PM

was read on 7/27/2007 2:46 PM:

From:

Gibson, Victoria

To:

Harvey, Mary

Sent:

Friday, July 27, 2007 2:17 PM

Subject:

Read: Smurfit-Stone Container Enterprises, Inc. - Project #0050009-028-AC-DRAFT

Your message

To:

'Mr. B. G. Sammons, Smurfit-Stone'; 'Mr. Tom Clements, Smurfit-Stone'; 'Mr. David Buff, Golder Associates'; Bradburn, Rick; 'Ms.

Kathleen Forney, EPA Region 4'; 'Mr. Jim Little, EPA Region 4'; 'Mr. Dee Morse, National Park Service' Koerner, Jeff; Thomas, Bruce X.; Gibson, Victoria; Adams, Patty
Smurfit-Stone Container Enterprises, Inc. - Project #0050009-028-AC-DRAFT

Cc:

Subject:

Sent:

7/27/2007 2:09 PM

was read on 7/27/2007 2:17 PM.

From:

Bradburn, Rick

Sent:

Friday, July 27, 2007 2:09 PM

To:

Harvey, Mary

Subject:

Out of Office AutoReply: Smurfit-Stone Container Enterprises, Inc. - Project #0050009-028-

AC-DRAFT

I am currently out of the office. I will be back in the office on Monday, July 30. If you need assistance, please contact Mary Beth Curle at mary.beth.curle@dep.state.fl.us or 850-595-8300 ext. 1220 and she will direct you to the appropriate person.

Thank you.

From: Sent: Forney.Kathleen@epamail.epa.gov Friday, July 27, 2007 4:04 PM

To:

Harvey, Mary

Subject:

Re: FW: Smurfit-Stone Container Enterprises, Inc. - Project #0050009-028-AC-DRAFT

Thanks.

Katy R. Forney Air Permits Section EPA - Region 4 61 Forsyth St., SW Atlanta, GA 30024

Phone: 404-562-9130 Fax: 404-562-9019

"Harvey, Mary" <Mary.Harvey@dep .state.fl.us>

07/27/2007 02:11 PM James Little/R4/USEPA/US@EPA,

Kathleen Forney/R4/USEPA/US@EPA

"Koerner, Jeff"

<Jeff.Koerner@dep.state.fl.us>,

"Adams, Patty"

<Patty.Adams@dep.state.fl.us>,

"Thomas, Bruce X."

<Bruce.X.Thomas@dep.state.fl.us>

Subject

FW: Smurfit-Stone Container Enterprises, Inc. - Project

#0050009-028-AC-DRAFT

From: Harvey, Mary

Sent: Friday, July 27, 2007 2:09 PM

To: 'Mr. B. G. Sammons, Smurfit-Stone'; 'Mr. Tom Clements, Smurfit-Stone'; 'Mr. David Buff, Golder Associates'; Bradburn, Rick; 'Ms. Kathleen Forney, EPA Region 4'; 'Mr. Jim

Little, EPA Region 4'; 'Mr. Dee Morse, National Park Service'

Cc: Koerner, Jeff; Thomas, Bruce X.; Gibson, Victoria; Adams, Patty

Subject: Smurfit-Stone Container Enterprises, Inc. - Project #0050009-028-AC-DRAFT

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting

From:

Adams, Patty

To:

Harvey, Mary

Sent:

Friday, July 27, 2007 3:45 PM

Subject:

Read: FW: Smurfit-Stone Container Enterprises, Inc. - Project #0050009-028-AC-DRAFT

Your message

To:

'Mr. Jim Little, EPA Region 4'; 'Ms. Kathleen Forney, EPA Region 4'

Cc:

Subject:

Koerner, Jeff; Adams, Patty; Thomas, Bruce X.
FW: Smurfit-Stone Container Enterprises, Inc. - Project #0050009-028-AC-DRAFT

Sent:

7/27/2007 2:11 PM

was read on 7/27/2007 3:45 PM.



Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Charlie Crist Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole Secretary

July 27, 2007

Mr. B. G. Sammons, General Manager Smurfit-Stone Container Enterprises, Inc. One Everitt Avenue Panama City, Florida 32402

Re: Draft Air Permit No. PSD-FL-388 Project No. 0050009-028-AC Panama City Mill, Lime Kiln Addition of Petroleum Coke

Dear Mr. Sammons:

On February 23, 2007, Smurfit-Stone Container Enterprises, Inc. submitted an application for an air construction permit subject to the preconstruction review requirements for the Prevention of Significant Deterioration of Air Quality. The primary purpose of the project is to modify the existing lime kiln to add petroleum coke as a primary fuel. This work will be conducted at the Panama City Mill, which is located in Bay County at One Everitt Avenue, Panama City, Florida. Enclosed are the following documents:

- The Written Notice of Intent to Issue Air Permit provides important information regarding: the Bureau of Air Regulation's intent to issue an air permit for the proposed project; the requirements for publishing a Public Notice of the Bureau of Air Regulation's intent to issue an air permit; the procedures for submitting comments on the Draft Permit; the process for filing a petition for an administrative hearing; and the availability of mediation.
- The Public Notice of Intent to Issue Air Permit is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project.
- The Technical Evaluation and Preliminary Determination summarizes the Bureau of Air Regulation's technical review of the application and provides the rationale for making the preliminary determination to issue a draft permit.
- The proposed Draft Permit includes the specific conditions that will regulate the emissions units covered by the proposed project.

If you have any questions, please contact the Project Engineer, Bruce Thomas, at 850/488-0114.

Timerely,

Trina Vielhauer, Chief Bureau of Air Regulation

Enclosures

TLV/jfk/bt

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

In the Matter of an Application for Air Permit by:

Smurfit-Stone Container Enterprises, Inc One Everitt Avenue Panama City, Florida 32402

Authorized Representative:

B. G. Sammons, General Manager

Air Permit No. PSD-FL-388 Project No. 0050009-028-AC Panama City Mill Existing Lime Kiln Addition of Petroleum Coke Bay County, Florida

Facility Location: The applicant, Smurfit-Stone Container Enterprises, Inc., operates the existing Panama City Mill, which is located in Bay County at One Everitt Avenue in Panama City, Florida. The existing facility is a Kraft pulp and paper mill.

Project: The purpose of this project is to modify the existing lime kiln to fire petroleum coke as a primary fuel. The project includes burners, a storage silo, a conveying system, a weigh feeder and blower, and enclosure or partial enclosure of the recovery boilers. The project is subject to preconstruction review for nitrogen oxides and sulfur dioxide in accordance with the Rule 62-212.400, Florida Administrative Code (F.A.C.) for the Prevention of Significant Deterioration of Air Quality. Details of the project are provided in the application and the enclosed Technical Evaluation and Preliminary Determination.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and F.A.C. Chapters 62-4, 62-210, and 62-212. The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Florida Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Bureau of Air Regulation's physical address is 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301 and the mailing address is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Bureau of Air Regulation's phone number is 850/488-0114.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above.

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed equipment will not adversely impact air quality and that the project will comply with all applicable provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Public Notice: Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Permit (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S. in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

at the address or phone number listed above. Pursuant to Rule 62-110.106(5) and (9), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within 7 days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

Comments: The Permitting Authority will accept written comments concerning the Draft Permit for a period of 30 days from the date of publication of the Public Notice. Written comments must be post-marked by the close of business (5:00 p.m.), on or before the end of this 30-day period by the Permitting Authority at the above address. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location in the Florida Administrative Weekly and in a newspaper of general circulation in the area affected by the permitting action. For additional information, contact the Permitting Authority at the above address or phone number. If written comments or comments received at a public meeting result in a significant change to the Draft Permit, the Permitting Authority will issue a revised Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard. Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/245-2241; Fax: 850/245-2303). Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this Written Notice of Intent to Issue Air Permit. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the attached Public Notice or within fourteen 14 days of receipt of this Written Notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Written Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available in this proceeding.

Executed in Tallahassee, Florida.

Trina Vielhauer, Chief Bureau of Air Regulation

CERTIFICATE OF SERVICE

Mr. B. G. Sammons, Smurfit-Stone (<u>bgsammons@smurfit.com</u>)

Mr. Tom Clements, Smurfit-Stone (tmclemen@smurfit.com)

Mr. David Buff, Golder Associates (dbuff@golder.com)

Mr. Rick Bradburn, NWD Office (<u>rick.bradburn@dep.state.fl.us</u>)

Ms. Kathleen Forney, EPA Region 4 (<u>forney.kathleen@epa.gov</u>)

Mr. Jim Little, EPA Region 4 (little.james@epa.gov)

Mr. Dee Morse, National Park Service (Dee Morse@nps.gov)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

(Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection
Division of Air Resource Management, Bureau of Air Regulation
Draft Air Permit No. PSD-FL-388, Project No. 0050009-028-AC
Smurfit-Stone Container Enterprises, Inc., Panama City Mill
Bay County, Florida

Applicant: The applicant for this project is Smurfit-Stone Container Enterprises, Inc. The applicant's authorized representative and mailing address is: B. G. Sammons, General Manager, Smurfit-Stone Container Enterprises, Inc., Panama City Mill, One Everitt Avenue, Panama City, Florida 32402.

Facility Location: Smurfit-Stone Container Enterprises, Inc., operates the existing Panama City Mill, which is located in Bay County at One Everitt Avenue in Panama City, Florida 32402. The existing facility is a Kraft pulp and paper mill.

Project: The applicant proposes to add petroleum coke as a primary fuel to the existing lime kiln. The following equipment will be installed: a new lime kiln burner capable of firing a combination of petroleum coke with No. 6 fuel oil and/or natural gas; a petcoke storage silo, a dense phase pneumatic conveying system that will be used to unload the delivery trucks and transport the ground petcoke to the storage silo; and a weigh feeder and blower with eductor to pneumatically convey the ground petcoke to the kiln burner. The project also includes enclosing or partially enclosing the recovery boiler building to reduce corrosion and maintenance.

The project is projected to result in a net actual emissions increase of 155 tons per year of nitrogen oxides (NO_x) and a net actual emissions increase of 77 tons per year of sulfur dioxide (SO₂). Because these rates are greater than the significant emissions rates, the project is subject to preconstruction review for these pollutants in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality. Pursuant to this rule, the Department is required to make a determination of the Best Available Control Technology (BACT) and review the ambient air quality impacts for each pollutant. The Department's preliminary BACT determination for NO_x is based on good combustion practices and low-NO_x burners. The Department's preliminary BACT determination for SO₂ is based on proper kiln design and operation, optimal mud washing and flue gas desulfurization with the existing wet scrubber.

The Department reviewed the applicant's air quality impact analysis. The following table shows the maximum predicted SO₂ and NO₂ increments consumed by all sources in the PSD Class II area (vicinity of the facility) including this project.

Pollutant	Averaging Time	Allowable Increment (μg/m³)	Increment Consumed (μg/m³)	Increment Consumed (%)
	3-hour	512	447	87%
SO_2	24-hour	91	78	86%
	Annual	20	0.12	0.6%
NO ₂	Annual	25	13	52%

In addition, there were no significant impacts predicted for the PSD Class I Bradwell Bay or St. Marks National Wilderness Areas located 96 and 112 kilometers east of the facility, respectively. Therefore, no PSD Class I increment consumption analyses were required for SO₂ and NO₂ in these areas. Emissions from the facility will not significantly contribute to or cause a violation of any state or federal ambient air quality standards.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is:

(Public Notice to be Published in the Newspaper)



PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above. In addition, electronic copies of these documents are available on the following web site: http://www.dep.state.fl.us/air/eproducts/apds/default.asp.

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Comments: The Permitting Authority will accept written comments concerning the Draft Permit for a period of 30 days from the date of publication of the Public Notice. Written comments must be post-marked by the close of business (5:00 p.m.), on or before the end of this 30-day period by the Permitting Authority at the above address. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location in the Florida Administrative Weekly and in a newspaper of general circulation in the area affected by the permitting action. For additional information, contact the Permitting Authority at the above address or phone number. If written comments or comments received at a public meeting result in a significant change to the Draft Permit, the Permitting Authority will issue a revised Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within 14 days of publication of this Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address and telephone number of the petitioner; the name address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial rights will

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

be affected by the agency determination; (c) A statement of when and how the petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Public Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available for this proceeding.

Memorandum

Florida Department of Environmental Protection

TO:

Trina Vielhauer, Bureau of Air Regulation

THROUGH:

Jeff Koerner, Air Permitting North Section

FROM:

Bruce Thomas, Air Permitting North Section

DATE:

July 25, 2007

SUBJECT:

Draft Air Permit No. PSD-FL-388

Project No. 0050009-028-AC

Smurfit-Stone Container Enterprises, Inc., Panama City Mill Addition of Petroleum Coke to the Existing Lime Kiln

This project is subject to PSD preconstruction review. Attached for your review are the following items:

- Written Notice of Intent to Issue Air Permit;
- Public Notice of Intent to Issue Air Permit;
- Technical Evaluation and Preliminary Determination;
- Draft Permit; and
- P.E. Certification.

The draft permit authorizes modification of the existing lime kiln to add petroleum coke as a primary fuel. The proposed work will be conducted at the existing Panama City Mill, which is located in Bay County, Florida. The Technical Evaluation and Preliminary Determination provides a detailed description of the project and the rationale for issuance. The P.E. certification briefly summarizes the proposed project. I recommend your approval of the attached Draft Permit.

Attachments

P.E. CERTIFICATION STATEMENT

APPLICANT

Smurfit-Stone Container Enterprises, Inc One Everitt Avenue Panama City, Florida 32402 Air Permit No. PSD-FL-388 Project No. 0050009-028-AC Panama City Mill, Lime Kiln Addition of Petroleum Coke Bay County, Florida

PROJECT DESCRIPTION

This project authorizes the addition of petcoke as a primary fuel for the existing lime kiln. The following new equipment will be installed: a new 180 MMBtu/hour lime kiln burner capable of firing a combination of petroleum coke with No. 6 fuel oil and/or natural gas; a 250 ton ground petcoke storage silo, a dense phase pneumatic conveying system that will be used to unload the delivery trucks and transport the ground petcoke to the storage silo; and a weigh feeder and blower with eductor to pneumatically convey the ground petcoke to the kiln burner. The project also includes enclosing the recovery boilers building to reduce corrosion and maintenance.

The project is subject to preconstruction review for particulate matter NO_X and SO_2 in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration of Air Quality, which requires a determination of the Best Available Control Technology (BACT) and an ambient air quality analysis. The Department's preliminary BACT determination for NO_X is based on good combustion practices and a low- NO_X burner system. The Department's preliminary BACT determination for SO_2 is based on proper kiln design and operation, optimal mud washing and flue gas desulfurization.

I HEREBY CERTIFY that the air pollution control engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including, but not limited to, the electrical, mechanical, structural, hydrological, geological, and meteorological features).

Jeffery F. Koerner, P.E. Registration No. 49441

(Date)



APPLICANT

Smurfit-Stone Container Enterprises, Inc. One Everitt Avenue Panama City, Florida 32402

> Panama City Mill ARMS Facility ID No. 0050009

PROJECT

Draft Permit No. PSD-FL-388 Project No. 0050009-028-AC Addition of Petroleum Coke to Lime Kiln

COUNTY

Bay County, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection Division of Air Resource Management Bureau of Air Regulation Air Permitting North Section 2600 Blair Stone Road, MS#5505 Tallahassee, Florida 32399-2400

1. GENERAL PROJECT INFORMATION

Facility Description and Location

The facility is a Kraft pulp and paper mill with Standard Industrial Classification codes of SIC No. 2611 and 2621. The facility is located in Bay County at One Everitt Avenue in Panama City, Florida. The UTM coordinates are Zone 16, 632.8 km East, and 3335.1 km North. The existing mill is comprised of major activities areas such as: wood handling facility; pulping, bleaching, and chemical recovery; power house operations; paper machines; finishing, shipping, and warehouse operations; and other associated processes and equipment.

Primary Regulatory Categories

- The facility is a major source of hazardous air pollutants.
- The facility has no units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 213, Florida Administrative Code (F.A.C.).
- The facility is a major stationary source in accordance with Rule 62-212.400 (PSD), F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Project Description

Smurfit-Stone Container Enterprises, Inc. submitted an application for an air construction permit subject to the PSD preconstruction review requirements of Rule 62-212.400, F.A.C. The applicant proposes to add petroleum coke (petcoke) as a primary fuel to the existing lime kiln. This project includes a new 180 million Btu/hour (MMBtu/hour) lime kiln burner system capable of firing a combination of petcoke with No. 6 fuel oil or natural gas; a 250 ton ground petcoke storage silo, a dense phase pneumatic conveying system that will be used to unload the delivery trucks and transport the ground petcoke to the storage silo; and a weigh feeder and blower with eductor to pneumatically convey the ground petcoke to the kiln burner. The petcoke will have a maximum sulfur content of 8.0% by weight. For purposes of flame stability, petcoke will be co-fired fired with oil or gas and will constitute up to 90% of the maximum heat input rate. Petcoke is a less expensive fuel than natural gas and fuel oil. The applicant estimates a savings of approximately \$2.2 million per year in fuel costs if 75% petcoke is fired.

The project will also partially enclose the recovery boiler building to reduce corrosion and maintenance. The enclosure will be implemented in two phases. The first phase will add a wall only along the east side of the building. The second phase will initially consist of adding a second wall along the south side of the building and may eventually include enclosing the entire building. The enclosures affect the dispersion of the stack plumes for the Nos. 3 and 4 combination boilers. Therefore, the applicant also requests lower sulfur dioxide emissions standards for these units.

The following existing emissions units will be affected by this project.

ID No.	Description
004	Lime Kiln
015	No. 3 Bark Boiler
016	No. 4 Bark Boiler

The following new emissions units will be added by this project.

ID No.	Description
038	Petcoke Handling and Storage

Processing Schedule

February 23, 2007	Department received the application for an air pollution construction permit.
March 23, 2007	Department requested additional information; application incomplete.
April 12, 2007	Department received additional information.
May 11, 2007	Department requested additional information; application incomplete.
June 13, 2007	Department received additional information.
July 23, 2007	Department received additional information; application complete.

2. APPLICABLE REGULATIONS

State Regulations

This project is subject to the applicable environmental laws specified in Section 403 of the Florida Statutes. The Florida Statutes authorize the Department of Environmental Protection (Department) to establish rules and regulations regarding air quality as part of the F.A.C. This project is subject to the applicable rules and regulations defined in the following F.A.C. Chapters: 62-4 (Permitting Requirements); 62-204 (Ambient Air Quality Requirements, PSD Increments, and Federal Regulations Adopted by Reference); 62-210 (Permits Required, Public Notice, Reports, Stack Height Policy, Circumvention, Excess Emissions, and Forms); 62-212 (Preconstruction Review, PSD Review and BACT, and Non-attainment Area Review and LAER); 62-213 (Title V Air Operation Permits for Major Sources of Air Pollution); 62-296 (Emission Limiting Standards); and 62-297 (Test Methods and Procedures, Continuous Monitoring Specifications, and Alternate Sampling Procedures).

The following summarizes the state rule applicability for the emissions units affected by this project:

- The lime kiln is currently subject to the applicable requirements in Rule 62-296.404, F.A.C. for Kraft pulp mills. No new requirements in this rule are triggered. As shown below, PSD preconstruction review in accordance with Rule 62-212.400, F.A.C. applies to the lime kiln.
- The new petcoke storage and handling activities are subject to the general preconstruction review requirements of Rule 62-212.300, F.A.C. These activities will result in increases of particulate matter emissions, but at less than the PSD significant emissions rate.
- The Nos. 3 and 4 combination boilers are not subject to any new requirements because the project will not
 increase emissions. Lower sulfur dioxide emissions standards are requested to satisfy requirements for the
 air quality analysis.

Federal Regulations

The Environmental Protection Agency establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 identifies New Source Performance Standards (NSPS) for a variety of industrial activities. Part 61 specifies National Emissions Standards for Hazardous Air Pollutant (NESHAP) based on specific pollutants. Part 63 specifies NESHAP provisions based on the Maximum Achievable Control Technology (MACT) for given source categories. Federal regulations are adopted in Rule 62-204.800, F.A.C. The following summarizes the affected emissions units with regard to the federal regulations.

- The lime kiln is currently subject to the applicable requirements in 40 CFR 63 for NESHAP Subparts A (General Provisions), S (Pulp and Paper Industry) and MM (Kraft Pulp Mills). The project does not trigger any new requirements in these rules for the lime kiln. However, the project does result in an increase in the maximum hourly emissions rate for particulate matter, which subjects the lime kiln to the applicable requirements for this pollutant in 40 CFR 60 for NSPS Subparts A (General Provisions) and BB (Kraft Pulp Mills). Therefore, the draft permit will include the applicable requirements from NSPS Subparts A and BB.
- The new petcoke storage and handling activities are not subject to any specific federal requirements.

• The Nos. 3 and 4 combination boilers are not subject to any new federal requirements as a result of this project.

General PSD Applicability

The Department regulates major stationary sources in accordance with Florida's PSD program pursuant to Rule 62-212.400, F.A.C. PSD preconstruction review is required in areas that are currently in attainment with the state and federal Ambient Air Quality Standards (AAQS) or areas designated as "unclassifiable" for these regulated pollutants. As defined in Rule 62-210.200, F.A.C., a facility is considered a "major stationary source" if it emits or has the potential to emit 5 tons per year of lead, 250 tons per year or more of any PSD pollutant, or 100 tons per year or more of any PSD pollutant and the facility belongs to one of the 28 listed PSD major facility categories. PSD pollutants include: carbon monoxide (CO); nitrogen oxides (NO_X); sulfur dioxide (SO₂); particulate matter; particulate matter with a mean particle diameter of 10 microns or less (PM₁₀); volatile organic compounds (VOC); lead (Pb); Fluorides (Fl); sulfuric acid mist (SAM); hydrogen sulfide (H₂S); total reduced sulfur (TRS), including H₂S; reduced sulfur compounds, including H₂S; municipal waste combustor organics measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans; municipal waste combustor metals measured as particulate matter; municipal waste combustor acid gases measured as SO₂ and hydrogen chloride (HCl); municipal solid waste landfills emissions measured as nonmethane organic compounds (NMOC); and mercury (Hg).

For major stationary sources, PSD applicability is based on emissions thresholds known as the "significant emission rates" as defined in Rule 62-210.200, F.A.C. Emissions of PSD pollutants from the project exceeding these rates are considered "significant" and the Best Available Control Technology (BACT) must be employed to minimize emissions of each PSD pollutant. Although a facility may be "major" for only one PSD pollutant, a project must include BACT controls for any PSD pollutant that exceeds the corresponding significant emission rate. Rule 62-210.200, F.A.C. defines "BACT" as:

An emission limitation, including a visible emissions standard, based on the maximum degree of reduction of each pollutant emitted which the Department, on a case by case basis, taking into account:

- 1. Energy, environmental and economic impacts, and other costs;
- 2. All scientific, engineering, and technical material and other information available to the Department; and
- 3. The emission limiting standards or BACT determinations of Florida and any other state;

determines is achievable through application of production processes and available methods, systems and techniques (including fuel cleaning or treatment or innovative fuel combustion techniques) for control of each such pollutant.

If the Department determines that technological or economic limitations on the application of measurement methodology to a particular part of an emissions unit or facility would make the imposition of an emission standard infeasible, a design, equipment, work practice, operational standard or combination thereof, may be prescribed instead to satisfy the requirement for the application of BACT. Such standard shall, to the degree possible, set forth the emissions reductions achievable by implementation of such design, equipment, work practice or operation.

Each BACT determination shall include applicable test methods or shall provide for determining compliance with the standard(s) by means which achieve equivalent results.

In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR Parts 60, 61, and 63.

In addition, applicants must provide an air quality analysis that evaluates the predicted air quality impacts resulting from the project for each significant PSD pollutant.

PSD Applicability for the Project

The project is located in Bay County, which is in an area that is currently in attainment with the state and federal AAQS or otherwise designated as unclassifiable. The facility is a Kraft pulp mill, which is one of the 28 listed PSD major facility categories, and emits or has the potential to emit 100 tons per year or more of at least one PSD pollutant. Therefore, the facility is a major stationary source and the project is subject to a PSD applicability review. The following table identifies the estimated emissions increases based on the initial application.

Summary of PSD Applicability as Provided by the Applicant

Pollutant	Net Emissions Increase	PSD Significant Subject to Emissions Rate PSD Revie		
СО	none projected	100 tons/year	No	
NO_X	155 tons/year	40 tons/year	Yes	
PM	16 tons/year	25 tons/year	No	
PM _{t0}	10 tons/year	15 tons/year	No	
SAM	6 tons/year	7 tons/year	No	
SO ₂	77 tons/year	40 tons/year	Yes	
VOC	none projected	40 tons/year	No	
Hg	none projected	200 pounds/year No		
Pb	none projected	1200 pounds/year No		
Fl	none projected	3 tons/year	3 tons/year No	
H ₂ S	none projected	10 tons/year	No	
TRS	5 tons/year	10 tons/year	No	
D/F	none projected	3.5 x 10 ⁻⁰⁶ tons/year	No	

The table identifies overall emissions increases based on projected emissions and a netting analysis. As shown in the table, the project is subject to PSD preconstruction review for emissions of NO_X and SO_2 . The following sections provide the BACT review and air quality analysis for these pollutants.

4. BACT REVIEW FOR LIME KILN (EU-004)

This section summarizes the review and preliminary determination of BACT for NO_X and SO₂ emissions.

NO_X BACT Analysis

Discussion

Emissions of NO_X are a result of the oxidation of nitrogen available in the combustion air (thermal NO_X) and the conversion of chemically-bound nitrogen in the fuel (fuel-bound NO_X). Thermal NO_X forms in the high temperature area of the burner, increases exponentially with increasing flame temperature and increases linearly with increasing residence time. Fuel-bound NO_X forms from the combustion of fuels containing bound nitrogen. Based on the applicant's proposal, the total potential NO_X emissions would be 449 tons per year. Projected actual NO_X emissions increases from the project are predicted to be 137 tons per year.

Applicant's Proposal

A summary of the applicant's evaluation of the available technologies is as follows:

Oxidation/Reduction Scrubbing (O/R)

Several proprietary add-on NO_X removal processes are commercially available, such as Tri-Mer Corporation's TRI-NO_X and The BOC Group's LoTO_X (Low Temperature Oxidation) NO_X control system. It has been reported that O/R scrubbing has a theoretical NO_X removal efficiency of 90%. The ability of O/R scrubbing to perform on a lime kiln or a similar source has never been demonstrated. The presence of carbon dioxide from both calcination and combustion is also a complicating factor. The technology is not listed for lime kilns in EPA's RACT/BACT/LAER Clearinghouse (RBLC). For the reasons listed above, the applicant does not consider O/R scrubbing as technically feasible for the lime kiln.

Selective Catalytic Reduction (SCR)

SCR involves the injection of ammonia (NH₃) and a catalytic reactor to convert NO_X to nitrogen and water vapor. Several technical and operational difficulties exist with SCR technology as applied to lime kilns. The SCR process is temperature sensitive, and efficient operation requires flue gas operating temperatures within a narrowly defined range. Load fluctuations can result in exhaust gas temperature fluctuations, which upset the NH₃/NO_X molar ratio and, in turn, affect removal efficiency. A lower than necessary temperature results in slow reaction rates, which leads to low NO_X conversion rates, as well as unreacted NH₃ passing through the reactor bed (ammonia slip). A higher temperature than necessary results in shortened catalyst life and can lead to the oxidation of NH₃ and the formation of additional NO_X. SCR technology has not been applied to lime kilns due to the variable exhaust temperatures associated with the process. Furthermore, the optimum temperature range for the catalytic reaction is 575°F to 750°F while a lime kiln typically operates in the 1,600 – 2,700 °F range for the hot end and approximately 600 °F for the cold end.

The NH₃ also causes potential corrosion problems, and unreacted ammonia may also react with sulfur to form ammonium bisulfate, which has the potential to create a visible and/or detached plume. The lime in the lime kiln may also react with the sulfur to form calcium sulfate. Ammonium bisulfate and calcium sulfate coatings, along with other dusts, will block the catalyst pores, thereby reducing the catalyst effectiveness. SCR technology is not listed for lime kilns in EPA's RBLC. The applicant does not consider SCR to be technically feasible due to the likelihood of catalyst fouling and operation outside the effective temperature range.

Selective Non-Catalytic Reduction (SNCR)

SNCR involves the injection of ammonia or urea at an optimum temperature window (1600° F to 2100° F) to convert NO_X to nitrogen and water vapor. Several difficulties preclude use of an SNCR system to control NO_X emissions from a lime kiln including: maintaining the proper temperature window, maintaining the correct NH₃/NO_X ratio during any load fluctuations, excessive ammonia slip and resulting formation of ammonium salts resulting in a visible plume. The optimum NH₃/NO_X molar ratio as well as correct reaction temperatures would be extremely difficult to monitor and maintain because of load and exhaust gas temperature fluctuations. In addition, the correct temperature window occurs inside the rotating body of the kiln, which presents difficulties in locating the ammonia injection nozzles and has not been attempted on any lime kiln. The applicant does not consider SNCR as technically feasible for a lime kiln at the present time.

Flue Gas Recirculation (FGR)

In a FGR control system, a portion of the flue gases are recirculated back to the primary combustion chamber to create a lower oxygen content atmosphere. This oxygen-lean atmosphere provides less oxygen available for NO_X formation. Due to the lower temperature of the recirculated gases, peak flame temperature is lowered. Therefore, FGR reduces both fuel and thermal NO_X . Reducing the peak flame temperature below the temperature necessary for proper lime formation is not acceptable for ensuring fully calcined lime. Since the kiln is 375 feet long, FGR would also require an excessive amount of ducting from the kiln outlet back to the kiln inlet. FGR has never been demonstrated on a lime kiln and the applicant does not consider FGR as technically feasible for the project.

Non-Selective Catalytic Reduction (NSCR)

NSCR is another exhaust gas treatment technique for NO_X reduction that uses a catalyst, typically a platinum/rhodium catalyst. Use of NSCR reduces emissions of NO_X , CO, and VOC simultaneously across the catalyst bed. It is only effective in fuel rich combustion air. To achieve a fuel-rich environment, excess combustion air must be kept to a minimum, typically resulting in a flue gas oxygen content of less than 3% by volume. Ideally, the oxygen content should be less than 0.5% by volume for proper operation of NSCR.

The lime kiln at the Panama City Mill will normally operate with in-stack oxygen concentrations above 5% by volume. Decreasing the excess air, and thus the oxygen concentrations, may result in increased CO emissions. In addition to the operational incompatibility of the control strategy, various problems will arise from the fuel-borne contaminants that cause catalyst poisoning from SO₂ and Cl₂ in the flue gas, and catalyst fouling and plugging from dust that can lead to excessive backpressure. All of these may cause premature failure of the catalyst and reduce the control efficiency. For all of the reasons mentioned above, the applicant considers NSCR as technically infeasible for the lime kiln.

Low NO_X Burners (LNB) and Good Combustion Practices

Traditional burners in a lime kiln are designed to introduce the fuel and air into a single combustion zone. With this arrangement large amounts of excess air must be introduced to obtain optimal flames. This results in a relatively uncontrolled combustion condition and high flame temperatures. The high flame temperatures create thermal NO_X . LNB technology stages combustion at the burner in the high temperature zone of the flame to control the generation of thermal NO_X .

LNB have been extensively tested and used in utility and industrial boilers and this technology has been transferred to lime kilns to the extent possible. Burner flame properties are critical to the quality control and calcining process in the lime kiln. The burner flame shape and properties have a dramatic effect on calcining efficiency. Poor efficiency increases energy usage and decreases the calcining capacity of the kiln. The modern lime kiln burner incorporates features to stage the combustion, lower the peak flame temperature and result in lower NO_X emissions. LNB technology is feasible for this project.

Applicant's Conclusion:

As BACT, the applicant proposes good combustion practices, preventative maintenance and the installation of a LNB system with dual air and gas zones specifically designed to burn combinations of petcoke, gas and oil. For petcoke firing, the applicant proposes a NO_X emissions standard of 0.57 lb/MMBtu, which is equivalent to 103.0 lb/hour, 190.0 ppmvd @ 10% oxygen (O_2), and 5.61 lb/ton of lime produced. When firing natural gas or No. 6 fuel oil, the applicant proposes a single NO_X emission standard of 110 ppmvd @ 10% O_2 , which equates to 68.0 lb/hour, 0.38 lb/MMBtu and 3.71 lb/ton of lime produced.

Department's Review

The applicant provided a list of 19 recent NO_X BACT determinations for lime kilns from EPA's RBLC. The NO_X emissions standards range from 100 to 340 ppmvd @ 10% O_2 ; however, only the Weyerhaeuser Red River Mill identified petcoke as the fuel. The NO_X BACT determination for this project was 190 ppmvd @ 10% O_2 . Several of the 19 lime kilns specified "lb/hour" emissions rates, but did not identify any other standards or the kiln capacity, making comparison with Smurfit-Stone lime kiln difficult.

The Department discussed the RBLC listings with EPA Region 4 and adjoining state agencies. The Department was able to determine that the following additional mills fire petcoke: the Georgia-Pacific Port Hudson Mill, the Georgia-Pacific Monticello Mill, the Graymore Cellulose Mill, the Bellefonte Cellulose Mill and the Brunswick Cellulose Mill. The Department was only able to determine comparative units for the Brunswick Cellulose Mill, which is permitted for NO_X at 250 ppmvd @ 10% O_2 when firing petcoke blends and 150 ppmvd @ 10% O_2 when firing fuels other than petcoke blends based on burner design and operation. In addition, compliance for this unit is demonstrated continuously with a NO_X monitoring system.

The preliminary determination from the Georgia Department of Environmental Protection for the Brunswick Cellulose petcoke lime kiln conversion project included a discussion of test data collected on the lime kiln at the Georgia-Pacific Monticello Mill. Tests conducted in March of 2006, showed NO_X emissions of 304 ppmvd @ 10% O₂ when firing a fuel blend with 73% petcoke. Tests conducted in April of 2006 at the Georgia-Pacific Port Hudson Mill showed NO_X emissions of 245 ppmvd @ 10% O₂ when firing a fuel blend with 75% petcoke.

In addition, the Department is aware of the following control technology developments:

- The Department has recently permitted several new preheater/precalciner Portland cement kilns with SNCR systems. Although differences in the design and operation of cement and lime kilns is acknowledged, it is noted that the Portland cement industry claimed that SNCR was technically infeasible and incompatible with cement kilns for many years.
- In its research on Portland cement kilns, the Department discovered at least one cement kiln operating in Europe that currently uses SCR to control NO_X emissions.
- In addition, there is an existing wet cement kiln in Lumbres. France utilizing SNCR to control NO_X emissions overcoming the issue of locating the injectors and piping on the rotating body.
- Cadence Combustion Technology Partners offers a system to deliver mixing air and/or ammonia for SNCR on a rotating kiln.
- FuelTech, Inc., an SNCR vendor, holds a patent for the design of an SNCR system that uses compressed air to inject urea prill in a rotating kiln for SNCR control.

The Department requested the applicant to contact FuelTech, Inc., for a quote on an SNCR system. After reviewing the project, FuelTech, Inc. indicated that load fluctuations could be accommodated in the design of the SNCR system. However, the vendor concluded that an SNCR system would not provide any meaningful reductions because of: the difficulty of injecting the reagent within a rotating kiln; and the overall the length of the kiln (375 feet) and injecting the reagent in the hot end of the kiln (94 feet away from the optimum temperature zone) or injecting the reagent in the cold end of the kiln (200 feet away from the optimum temperature zone).

Conclusion

The Department will continue to research the transfer of SNCR and SCR technology to lime kilns. For this project to modify an existing lime kiln, the Department will establish the following preliminary BACT standards for NO_X emissions based on the new kiln burner design and good operating practices:

Petcoke Blended with Oil and/or Gas: 190.0 ppmvd @ 10% O₂ and 103.0 lb/hour based on a 30-day rolling average (equivalent to 5.61 lb/ton CaO)

Oil and/or Natural Gas: 110 ppmvd @ 10% O₂ and 68.0 lb/hour based on a 30-day rolling average (equivalent to 3.71 lb/ton CaO)

Based on the available information, the above standards appear to be the lowest for a lime kiln firing petcoke. Compliance with the standards will be demonstrated continuously with a NO_X monitoring system, which will be installed within 180 days of initial petcoke firing. The Department considered establishing separate limits for firing petcoke, fuel oil and natural gas and then prorating these limits for firing blends of these fuels. However, the vendor guarantees the NO_X emissions standards for firing petcoke blended with gas or oil. For purposes of flame stability, some gas or oil will be co-fired with up to approximately 90% petcoke. Because the purpose of the project is to reduce operating costs by firing the less expensive petcoke, the Department believes that petcoke will be fired as the primary fuel when fuel costs dictate and that the above standards are sufficient. The standards for firing oil and/or natural gas would apply only when these fuels are fired without petcoke.

SO₂ BACT Analysis

Discussion

Lime muds contain a small amount of sulfur that forms SO₂ when oxidized in the kiln. SO₂ is also formed in lime kilns when fuel oil or petroleum coke is fired as the primary fuel and when non-condensable gases (NCGs) or stripper off-gases (SOGs) containing sulfur are destroyed in the kiln when used as a control device. Much of the SO₂ formed is naturally scrubbed in the kiln as a result of the lime being processed. Based on the applicant's proposal, the potential SO₂ emissions would be 140 tons per year. Projected actual SO₂ emissions increases from the project are predicted to be 77 tons per year.

Applicant's Proposal

A summary of the applicant's evaluation of the available technologies is as follows:

Proper Kiln Design and Operation

The emission of SO₂ from a lime kiln is minimized by employing proper kiln design and operation, which is synonymous with good combustion practices to ensure that SO₂ in the flue gas is readily absorbed by the lime. Efficient combustion is a function of several parameters including the quantity of oxygen supplied in the burner to support combustion of the fuel and the temperature and residence time inside the kiln to which the products of fuel combustion are exposed. Good combustion control practices manage the process to maintain a consistent level of SO₂ absorption within the kiln. Employing good combustion practices is a technically feasible manner in which to control emissions of SO₂.

Optimal Mud Washing

Some sulfur removal (and therefore SO₂ removal) would be expected with optimal lime mud washing. By filtering and washing soluble sodium and sulfur compounds from the lime mud, ball and ring formation is minimized in the lime kiln, which reduces the amount of sulfur available to form SO₂, TRS, and SAM emissions. The Panama City Mill currently utilizes lime mud washing techniques on the lime kiln. The lime mud is washed as thoroughly as possible using fresh water. The solids off of the mud filter are tested on a regular basis, the amount of vacuum is monitored and recorded, and the filter is cleaned regularly with acid.

Flue Gas Desulfurization (FGD)/Wet Scrubbers

FGD systems are collection devices that use an absorbent to remove SO₂ from a gas stream. Although dry sorbents can be injected into the flue gas stream for effective control, FGD systems more frequently use a liquid absorbent as the scrubbing media. Wet scrubbers are collection devices that trap wet particles in order to remove them from a gas stream. They utilize inertial impaction and/or Brownian diffusion as the particle collection mechanism. Wet scrubbers typically use water as the cleaning liquid, but caustic or lime can be added for pH control in order to remove SO₂ from the gas stream. Types of scrubbers include spray scrubbers, cyclone scrubbers, packed-bed scrubbers, plate scrubbers, and venturi scrubbers. The most common scrubber is the venturi scrubber because of its simplicity (no moving parts) and high collection efficiency. In this type of scrubber, a gas stream is passed through a venturi section, before which, a low-pressure liquid (usually water) is added to the throat. The liquid is atomized by the turbulence in the throat and begins to collect pollutants impacting the liquid

The lime kiln at the Panama City Mill is currently equipped with a venturi scrubber followed by a cyclonic collector. The venturi scrubber primarily uses fresh water as the scrubbing media. Although not designed as an SO₂ control device, the venturi scrubber acts as a highly efficient SO₂ scrubber because it collects lime dust particles that exit the lime kiln in the flue gas. This renders the scrubbing liquid as highly alkaline and the venturi scrubber in essence becomes an FGD system using the lime slurry as the scrubbing media.

Applicant's Conclusion

The only feasible SO₂ control technologies for the lime kiln are: proper kiln design and operation; optimal mud

washing; and flue gas desulfurization with the existing wet scrubber. As BACT, the applicant proposes SO₂ emissions standards of 32.0 lb/hour when firing petcoke blends and 7.3 lb/hour when burning natural gas or No. 6 fuel oil. Based on firing a blend of 90% petcoke with 10% No. 6 oil and the maximum sulfur contents of the fuels, this represents 98.2% control efficiency.

Department's Review

The Department believes that the current system is capable of more than 98% control. Tests conducted in October of 2002 indicate an average SO₂ emission rate of 5.6 lb/hour when firing oil. Additional tests conducted in February of 2006 indicate an average SO₂ emission rate of less then 0.5 lb/hr when firing oil. The average of these tests would be 3.1 lb/hour. Based on a maximum sulfur content of 2.4% by weight for No. 6 oil and an assumption of 90% capacity during the tests, the Department estimates an uncontrolled stoichiometric SO₂ emission rate of 409.5 lb/hour, which doesn't account for any uncontrolled SO₂ generated from the lime mud. Therefore, the SO₂ control efficiency would be greater than 99%.

Conclusion

The Department preliminarily determines that proper kiln operation, optimal mud washing and wet flue gas desulfurization with proper parametric monitoring and good operating practices represent BACT for SO₂ control in the lime kiln. The following preliminary standards are established as BACT:

Petcoke Only: 1.02 lb/ton of lime produced and 18.8 lb/hour

No. 6 Fuel Oil Only: 0.25 lb/ton of lime produced and 4.6 lb/hour

Compliance will be demonstrated by conducting stack tests in accordance with EPA Methods 6C and 19. When firing a petcoke blend, the standards shall be prorated based on heat input provided from each fuel. No standard is set for natural gas, which contains nearly negligible amounts of sulfur.

Upon completing construction of the new burner system, the BACT standard for firing fuel oil is effective. For the first 180 calendar days after initially firing petcoke, the draft permit includes a temporary standard for petcoke only firing of 1.74 lb/ton of lime produced and 32.0 lb/hour as requested by the applicant. This will provide sufficient time to conduct testing and establish the operating conditions that reflect good control. The draft permit establishes a minimum pH level to be developed based on testing and periodic pH monitoring so that the scrubber liquid may be adjusted as necessary. After the initial temporary period for petcoke firing, the lower BACT standards apply; however, tests conducted within the first 180 days of petcoke firing may be used to demonstrate compliance with the final BACT standards.

5. OTHER PERMIT REQUIREMENTS

Lime Kiln, NSPS Subpart BB Applicability

The existing lime kiln predates NSPS Subpart BB for Kraft pulp mills and is not currently subject to this rule, which regulates TRS and PM emissions. The applicant indicates that the firing of petcoke will not increase the maximum hourly TRS mass emission rate, but will increase the maximum hourly PM emission rate. Pursuant to 40 CFR 60.14(a), "Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere." Therefore, the draft permit includes the NSPS Subpart BB provisions regulating PM emissions as well as the General Provisions in Subpart A. In addition, the draft permit includes a requirement to determine whether or not an increase in the maximum hourly TRS emissions rate occurred in accordance with 40 CFR 60, Appendix C (Determination of Emission Rate Change).

Lime Kiln, Actual PM and TRS Emissions Reports

For projects in which the applicant projects emissions to avoid PSD preconstruction review, Rule 62-212.300(1)(e), F.A.C. requires the permittee to monitor, report and keep records to determine whether a PSD significant emissions increase occurred as a result of the project. Both PM and TRS emissions are close to the

corresponding PSD significant emissions rate. Currently, compliance with the PM standards is demonstrated by annual stack tests and compliance with the TRS standard is demonstrated by CEMS. The draft permit requires the annual calculation of actual PM and TRS emissions and reporting pursuant to Rules 62-210.370 and 62-212.300(1)(e), F.A.C.

Petcoke Storage and Handling Activities

The new petcoke storage and handling activities are subject to the general preconstruction review requirements of Rule 62-212.300, F.A.C. Ground petcoke will be delivered to the facility by truck and pneumatically conveyed to a 250 ton ground petcoke storage silo. The storage silo will vent through a baghouse prior to discharging to atmosphere. The ground petcoke will drop into a weigh bin from the storage silo before being conveyed to the kiln burner through the use of a blower and eductor. The piping system that delivers the petcoke to the kiln burner will be completely enclosed. The displaced air from the weigh bin will be redirected to the storage silo and will exit the storage silo baghouse. The baghouse exhaust is limited to 5% opacity with initial and annual testing required. These activities will result in increases of particulate matter emissions, but the overall project is less than the corresponding PSD significant emissions rates.

Enclosure for Recovery Boiler Building

The draft permit authorizes construction of an enclosure for the recovery boiler building to reduce corrosion and maintenance. The enclosure will be implemented in two phases. The first phase will add one wall along the east side of the building. The second phase will add a second wall along the south side of the building and may eventually include enclosing the entire building. The new enclosure adversely affects dispersion of the existing stack plumes. The draft permit includes the following new SO₂ emissions standards based on the air quality analysis provided in support of the PSD application:

Beginning on the day the permittee begins construction of the new enclosure of the east wall of the recovery boiler building:

- 1. SO₂ emissions from the No. 4 Combination Boiler shall not exceed 690 lb/hour based on a 24-hour average determined from CEMS data; and
- 2. The combined SO₂ emissions from the Nos. 3 and 4 Combination Boilers shall not exceed 1350 lb/hour based on a 24-hour rolling average determined from CEMS data.

Beginning on the day the permittee begins construction on one or more walls of the recovery boiler building in addition to the east wall:

- 1. SO₂ emissions from the No. 4 Combination Boiler shall not exceed 690 lb/hour based on a 24-hour average determined from CEMS data;
- 2. The combined SO₂ emissions from the Nos. 3 and 4 Combination Boilers shall not exceed 1350 lb/hour based on a 3-hour rolling average determined from CEMS data; and
- 3. The combined SO₂ emissions from the Nos. 3 and 4 Combination Boilers shall not exceed 1100 lb/hour based on a 24-hour average determined from CEMS data.

For each stage of construction identified above, the draft permit requires the permittee to notify the Compliance Authority within one business day of commencing construction of: the construction activity begun and the SO₂ emissions standards in effect. The supporting air quality analysis is discussed in the next section.

6. AIR QUALITY ANALYSIS

The proposed lime kiln project results in PSD significant emissions increases for SO₂ and NO_X. These are criteria pollutants with defined national and state ambient air quality standards (AAQS), PSD increments and significant impact levels. The PSD regulations require the following air quality analyses for this project:

- Significant impact analysis for SO₂ and NO_X;
- Analysis of existing air quality for SO₂ and NO₂;

- PSD increment analysis for SO₂ and NO₂; and
- AAQS analysis for SO₂ and NO₂.

Based on the required analyses, the Department has reasonable assurance that the proposed project, as described in this report and subject to the conditions of approval proposed herein, will not cause or significantly contribute to a violation of any AAQS or PSD increment. However, the following EPA-directed stack height language is included: "In approving this permit, the Department has determined that the application complies with the applicable provisions of the stack height regulations as revised by EPA on July 8, 1985 (50 FR 27892). Portions of the regulations have been remanded by a panel of the U.S. Court of Appeals for the D.C. Circuit in NRDC v. Thomas, 838 F. 2d 1224 (D.C. Cir. 1988). Consequently, this permit may be subject to modification if and when EPA revises the regulation in response to the court decision. This may result in revised emission limitations or may affect other actions taken by the source owners or operators." A discussion of the required analyses follows.

Determination of Background Concentrations

Background ambient concentrations of the PSD-significant pollutants must be established for use in the required AAQS analysis. The background concentrations represent the combined air quality impacts from sources not included in the modeling analysis and are added to the pollutant impacts predicted by model. To develop the background concentrations, preconstruction ambient monitoring is required for all pollutants subject to PSD review unless exempt or the data requirements can be otherwise satisfied.

Based on an initial air quality modeling analysis, if the maximum air quality impact resulting from the projected emissions increase is less than the corresponding pollutant-specific *de minimis* concentration, the project is exempt from the preconstruction ambient monitoring requirement. If existing representative ambient monitoring data is available, it may be used to satisfy the preconstruction ambient monitoring requirement. In addition, if an acceptable monitoring method has not been established for the specific pollutant, preconstruction ambient monitoring may not be required.

The following table summarizes the initial modeling analysis to determine whether the predicted PSD-pollutant concentrations are above the regulatory de minimis levels.

Maximum Project Impacts Compared to De Minimis Ambient Levels

Pollutant	Averaging Time	Maximum Predicted Impact (μg/m³)	De Minimis Level (μg/m ³)	Impact above de minimis level?
SO ₂	24-hour	31	13	Yes
NO ₂	Annual	5	14	No

As shown in the table, the predicted maximum SO₂ impact from the project is above the applicable de minimis level. Therefore, preconstruction ambient monitoring is required for SO₂. This requirement is satisfied by the use of existing representative ambient monitoring data that is available from Florida's ambient air monitoring network. In addition, this existing data will be used for the NO₂ background concentrations needed for subsequent analyses. The following table shows the background concentrations based on the existing representative ambient monitoring data.

Summary of Background Concentrations

Pollutant	Background Concentrations (μg/m ³)		
Foliutani	3-hour	24-hour	Annual
SO ₂	71	24	5
NO ₂	NA	NA	14

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Models and Meteorological Data

PSD Class II Area Model

The EPA-approved American Meteorological Society and EPA Regulatory Model (AERMOD) dispersion model was used to evaluate the pollutant emissions from the proposed project and other existing major facilities. In November of 2005, the EPA promulgated AERMOD as the preferred regulatory model for predicting pollutant concentrations within 50 km from a source. AERMOD is a replacement for the Industrial Source Complex Short-Term Model (ISCST3).

The AERMOD model calculates hourly concentrations based on hourly meteorological data. For evaluating plume behavior within the building wake of structures, the AERMOD model incorporates the Plume Rise Enhancement (PRIME) downwash algorithm developed by the Electric Power Research Institute (EPRI). AERMOD can predict pollutant concentrations for annual, 24-hour, 8-hour, 3-hour and 1-hour averaging periods. A series of specific EPA-recommended model features are referred to as the "regulatory options". The applicant used the regulatory options in each modeling scenario and building downwash effects were evaluated for stacks below the good engineering practice (GEP) stack heights. The stack associated with this project satisfied the GEP stack height criteria.

Meteorological data used in the AERMOD model consists of a concurrent 5-year period of hourly surface weather observations and twice-daily upper air soundings from the National Weather Service offices located at Apalachicola and Tallahassee Regional Airports, respectively. These stations were selected as the closest primary weather stations to the project area and are most representative of the project site. The meteorological data was collected from 2001 through 2005.

Because five years of data are used in AERMOD, the highest-second-high (HSH) short-term predicted concentrations were compared with the appropriate AAQS or PSD increments. For the annual averages, the highest annual average predicted by the model was compared with the corresponding standard. For determining the project's significant impact area in the vicinity of the facility, and for determining if significant impacts occur from the project on any PSD Class I area, both the highest short-term predicted concentrations and the highest predicted yearly averages were compared to the respective significant impact levels.

PSD Class I Area Model

The Bradwell Bay and St. Marks National Wilderness Areas (NWA) are identified as affected PSD Class I areas. Since these PSD Class I areas are greater than 50 km from the existing facility, long-range transport modeling was required for the PSD Class I increment analysis. The California Puff (CALPUFF) dispersion model was used to evaluate the potential impact from the proposed project on the PSD Class I increments. CALPUFF is a non-steady state, Lagrangian, long-range transport model that incorporates Gaussian puff dispersion algorithms. This model determines ground-level concentrations of inert gases or small particles emitted into the atmosphere by point, line, area, and volume sources. The CALPUFF model has the capability to treat time-varying sources. It is also suitable for modeling domains from tens of meters to hundreds of kilometers and has mechanisms to handle rough or complex terrain situations. Finally, the CALPUFF model is applicable for inert pollutants as well as pollutants that are subject to linear removal and chemical conversion mechanisms.

The meteorological data was processed for use in the CALPUFF model by the California Meteorological (CALMET) model. The CALMET model utilizes data from multiple meteorological stations and produces a three-dimensional modeling grid domain of hourly temperature and wind fields. The wind field is enhanced by the use of terrain data, which is also input into the model. Two-dimensional fields such as mixing heights, dispersion properties, and surface characteristics are produced by the CALMET model as well. Meteorological data were obtained and processed for the calendar years of 2001-2003. The CALMET wind field and the CALPUFF model options used were consistent with the suggestions of the federal land managers.

Significant Impact Analysis

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Initially, the applicant conducts a modeling analysis to determine whether the proposed project will exceed the regulatory "significant impact levels". If the modeling analysis shows the impacts will not be significant, no further modeling is required. If the modeling analysis shows significant impacts, additional multi-source modeling is required to determine the project's impacts on the AAQS and PSD increments.

To determine the significant impact areas for the proposed project in the PSD Class II area in the vicinity of the mill, SO₂ and NO_X concentrations were predicted by using discrete grids for receptor locations. The receptors were located at the following intervals and distances from the origin: every 100 meters from the site fence-line out to 2000 meters; and every 250 meters from 2000 out to 5000 meters. In the PSD Class I areas for the Bradwell Bay and St. Marks National NWA, maximum pollutant concentrations were predicted at 233 discrete receptors. If significant impacts are predicted and further AAQS and PSD increment modeling is required in the Class II area, modeling receptor refinements performed using a polar receptor grid (or equivalent) with a maximum spacing of 100 meters along each radial and an angular spacing between radials of 1 or 2 degrees.

The applicant first conducted modeling using only the proposed project's worst-case emissions changes. The lime kiln project's partial enclosure of the recovery boiler building would cause downwash from the Nos. 3 and 4 Combination Boilers. The following maximum emission rates from these units result in the highest predicted concentrations for comparing to the significant impact levels and, in turn, the AAQS or the allowable PSD Class II increments.

- Case 1 (east wall enclosure only): 1350 lb/hour based on a 24-hour average of combined emissions from both boilers with the No. 4 Combination Boiler operating at a maximum rate of 690 lb/hour (24-hour average, as proposed in the pending BART application).
- Case 2 (full enclosure): 1100 lb/hour based on a 24-hour average of combined emissions from both boilers with the No.3 Combination Boiler operating at a maximum rate of 887 lb/hour (24-hour average based on the current permit limit).
- Case 3 (full enclosure): 1350 lb/hour based on a 3-hour average of combined emissions from both boilers
 with the No. 3 Combination Boiler operating at its maximum limit of 887 lb/hour (24-hour average based on
 the current permit limit).

The following tables below show the results of the initial significant impact modeling analysis.

Significant Impact Analysis

Pollutant	Averaging Time	Maximum Predicted Impact (µg/m ³)	Significant Impact Level (µg/m³)	Significant Impact?	Radius of Significant Impact (km)		
	Class II Areas, Vicinity of Project						
	Annual	3	1	Yes	4		
SO ₂	24-hour	31	5	Yes	4		
	3-hour	146	25	Yes	4		
NO _X	Annual	5	1	Yes	1		
	Class I Areas, Bradwell Bay and St. Marks National NWA						
·	Annual	0.002	0.1	No	NA		
SO ₂	24-hour	0.03	0.2	No	NA		
	3-hour	0.09	1.0	No	NA		
NO_X	Annual	0.002	0.1	No	NA		

As shown, no significant impacts are predicted in the Class I areas; therefore, no further modeling analysis is required for the PSD Class I areas. Significant impacts are predicted in the Class II area of the project for SO₂ and NO₂. Therefore, an additional modeling analysis is required for SO₂ and NO₂ within the radius of predicted significant impact areas to determine impacts with regard to the AAQS and PSD increments.

AAQS Analysis

For PSD pollutants subject to an AAQS review, the total impact on ambient air quality is obtained by adding the maximum concentrations predicted by the model to representative "background" concentrations. The maximum concentrations predicted by the model are based on the modeled results of the maximum allowable emissions from sources at the facility as well as all other major sources in the vicinity of the facility. The background concentration is based on representative ambient data and accounts for all sources not explicitly modeled. As shown in the following table, the modeling analysis predicts total ambient impacts for SO₂ and NO₂ to be less than the corresponding AAQS.

AAQS Impacts

Pollutant	Averaging Time	Modeled Impacts (μg/m ³)	Background Concentrations (µg/m³)	Total Ambient Impacts (μg/m ³)	AAQS (μg/m³)	Total impact greater than AAQS?
	Annual	32	5	37	60	No
SO ₂	24-hour	235	24	259	260	No
	3-hour	898	71	969	1300	No
NO _X	Annual	18	14	32	100	No

PSD Class II Increment Analysis

The PSD increment represents the amount that new sources in an area may increase ambient ground-level concentrations of a pollutant from a regulatory baseline concentration that was established in 1977 for PM₁₀ and SO₂ and 1988 for NO₂. The baseline years are 1975 for existing major sources of PM₁₀ and SO₂ and 1988 for existing major sources of NO₂. Projects that increase emissions "consume" increment. The emission rates input to the model for predicting increment consumption are typically based on maximum potential emissions from increment-consuming sources at the facility and all other increment-consuming sources in the vicinity of the facility. The following table shows the maximum predicted PSD Class II increments for SO₂ and NO₂ consumed by this project and all other increment-consuming sources in the vicinity of the facility.

PSD Class II Increment Analysis

Pollutant	Averaging Time	Maximum Predicted Impact (μg/m³)	Allowable Increment (µg/m³)	Impact Greater Than Allowable Increment?
	Annual	0.12	20	No
SO ₂	24-hour	78	91	No
	3-hour	447	512	No
NO _X	Annual	13	25	No

As shown above, the project will not consume all of the available increment for SO₂ or NO₂.

Additional Impacts Analysis

Impacts on Soils, Vegetation, Wildlife, and Visibility

According to the modeling results, impacts based on the maximum allowable emission rates from the project are predicted to be less than the corresponding AAQS and PSD Class II increments. The AAQS are designed to protect both the public health and welfare. As such, it is reasonable to assume the impacts on soils, vegetation,

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and wildlife will be minimal or insignificant.

An air quality-related values (AQRV) analysis was conducted by the applicant for the affected PSD Class I and Class II areas. No significant impacts on these areas are expected based on this analysis. The long-range transport model CALPUFF was used to conduct a regional haze analysis for the PSD Class I areas. The analysis showed no significant impact on visibility in this area. Because SO₂ and NO_X emissions from the project exceeded the PSD significant emission rates, acid deposition rates for sulfur and nitrogen compounds were also predicted in the Class I areas and the results show the predicted impacts to be below the deposition analysis thresholds.

Growth-Related Air Quality Impacts

The proposed project will not cause a significant air quality impact from any associated changes in employment, population, housing, commercial development or industrial development in the area.

Conclusion

Based on the air quality analysis provided by the applicant, the project will not significantly contribute to or cause any exceedance of any ambient air quality standard, increment or visibility limit.

PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the Draft Permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the Draft Permit. Bruce Thomas is the project engineer responsible for reviewing the application and drafting the permit changes. Cleve Holladay is the meteorologist responsible for reviewing and approving the ambient air quality analyses. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

DRAFT PERMIT

PERMITTEE

Smurfit-Stone Container Enterprises, Inc One Everitt Avenue Panama City, Florida 32402

Authorized Representative:

Mr. B. G. Sammons, General Manager

Air Permit No. PSD-FL-388 Project No. 0050009-028-AC Expires: December 1, 2008 Panama City Mill

Facility ID No. 0050009 Addition of Petcoke to Lime Kiln

FACILITY AND LOCATION

Smurfit Stone Corporation's Panama City Mill is a Kraft process pulp and paper mill (SIC Nos. 2611 and 2621) located in Bay County at One Everitt Avenue in Panama City, Florida. The UTM coordinates are Zone 16, 632.8 km East, and 3335.1 km North.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.) and Title 40, Parts 60 and 63 of the Code of Federal Regulations (CFR). The permittee is authorized to install the proposed equipment in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

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Section 2. Administrative Requirements

Section 3. Emissions Units Specific Conditions

Section 4. Appendices

(DRAFT)	
Joseph Kahn, Director Division of Air Resource Management	Effective Date

FACILITY AND PROJECT DESCRIPTION

The permittee operates an existing Kraft process pulp and paper mill in Panama City. The existing mill is comprised of major activities areas such as: wood handling facility; pulping, bleaching, and chemical recovery; power house operations; paper machines; finishing, shipping, and warehouse operations; and other associated processes and equipment. This project authorizes the addition of petcoke as a primary fuel for the existing lime kiln. The project includes: installation of a new 180 million Btu/hour (MMBtu/hour) lime kiln burner capable of co-firing a combination of petcoke with distillate oil or natural gas; a 250 ton ground petcoke storage silo; a dense phase pneumatic conveying system to unload delivery trucks and transport ground petcoke to the storage silo; and a weigh feeder and blower with eductor to pneumatically convey the ground petcoke to the kiln burner. The project is subject to preconstruction review for emissions of nitrogen oxides (NO_X) and sulfur dioxide (SO₂) pursuant to Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality). This permit includes emissions standards for these pollutants representing the Best Available Control Technology (BACT).

The project will also partially enclose the area housing the recovery boilers to reduce corrosion and maintenance. The enclosure will be implemented in two phases. The first phase will add a wall only along the east side of the building. The second phase will initially consist of adding a second wall along the south side of the building and may eventually include enclosing the entire building. The enclosures affect the dispersion of the stack plumes. Therefore, the permittee requested lower 24-hour sulfur dioxide (SO₂) emissions standards for the Nos. 3 and 4 combination boilers.

This project affects the following existing emissions units.

EU No.	Emission Unit Description	
004	Lime Kiln	
015	#3 Bark Boiler	
016	#4 Bark Boiler	

This project adds the following new emissions unit.

EU No.	Emission Unit Description
038	Petcoke Handling and Storage Silo

REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants.
- The facility has no units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400 (PSD), F.A.C.

RELEVANT DOCUMENTS

The following relevant documents are not a part of this permit, but helped form the basis for this permitting action: the permit application and additional information received to make it complete; the Draft Permit; the Department's Technical Evaluation and Preliminary Determination; the Written Notice of Intent to Issue Air Permit; the Public Notice of Intent to Issue Air Permit; the publication in a newspaper of general circulation; comments received on the Draft Permit package; and the Department's Final Determination.

SECTION 2. ADMINISTRATIVE REQUIREMENTS (DRAFT PERMIT)

- 1. <u>Permitting Authority</u>: The Permitting Authority for this project is the Department's Bureau of Air Regulation in the Division of Air Resource Management. The mailing address for the Bureau of Air Regulation is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400.
- Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's Northwest District office. The mailing address is: 160 Governmental Center, Pensacola, Florida 32502-5794. The phone number is (850)595-8300.
- 3. <u>Appendices</u>: The following Appendices are attached as part of this permit: Appendix A (Citation Formats and Glossary of Common Terms), Appendix B (General Conditions), Appendix C (Common Conditions), Appendix D (Common Testing Requirements), Appendix E (Summary of BACT Determinations), Appendix F (CEMS Requirements) and Appendix G (NSPS Subpart BB Provisions).
- 4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
- 5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
- 6. <u>Modifications</u>: No emissions unit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Source Obligation:

- (a) Authorization to construct shall expire if construction is not commenced within 18 months after receipt of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. This provision does not apply to the time period between construction of the approved phases of a phased construction project except that each phase must commence construction within 18 months of the commencement date established by the Department in the permit.
- (b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
- (c) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

[Rule 62-212.400(12), F.A.C.]

SECTION 2. ADMINISTRATIVE REQUIREMENTS (DRAFT PERMIT)

8. <u>Title V Permit</u>: This permit authorizes specific modifications and/or new construction on the affected emissions units as well as initial operation to determine compliance with conditions of this permit. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after completing the required work and commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to each Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

A. Lime Kiln (EU-004)

This section of the permit addresses the following emissions unit.

Emissions Unit No. 004

Lime Kiln: The lime kiln processes approximately 85,000 pounds per hour of lime mud to produce 18.35 tons per hour of lime (CaO) to reuse in the recovery process. It is currently authorized to fire natural gas and No. 6 fuel oil with up to 2.4% sulfur by weight. The lime kiln is also used as the primary control device to thermally destroy non-condensable gases from the batch digesting system and multiple effects evaporator system. This permit authorizes petcoke with up to 8.0% sulfur by weight as a primary fuel to be blended with No. 6 fuel oil and natural gas. The maximum heat input rate for the petcoke burner system is 180 MMBtu per hour; however, for purposes of flame stability, petcoke will be co-fired with oil or gas and constitute up to 90% of the maximum heat input rate to the lime kiln.

Exhaust gas exits at 166° F from a stack that is 6.3 feet in diameter and 60.5 feet tall with a volumetric flow rate of 81,400 dscfm @ 10% oxygen (92,800 acfm).

{Permitting Note: In accordance with Rule 62-212.400 (PSD), F.A.C., the above emission unit is subject to BACT determinations for emissions of NO_X and SO_2 . The final BACT determinations are summarized Appendix D of this permit. Throughout this permit, particulate matter emissions are referred to as PM emissions, which serve as a surrogate for regulating $PM_{2.5}$ and PM_{10} emissions.

EXISTING APPLICABLE REQUIREMENTS

- 1. NSPS Subpart BB for Kraft Pulp Mills: As a result of the project, the lime kiln becomes subject to the applicable requirements for particulate matter in NSPS Subpart BB of 40 CFR 60. See Appendix G (NSPS Subpart BB Provisions) of this permit.
- 2. <u>State Rule for Kraft Pulp Mills</u>: The lime kiln remains subject to the applicable requirements of Rule 62-296.404, F.A.C. for Kraft pulp mills.
- 3. NESHAP Subpart MM for Kraft Pulp Mills: The lime kiln remains subject to the applicable requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) in Subpart MM of 40 CFR 63
- 4. NESHAP Subpart S for the Pulp and Paper Industry: The lime kiln remains subject to the applicable requirements of the NESHAP in Subpart S in 40 CFR 63.

EQUIPMENT

- 5. Petcoke Burners: The permittee is authorized to install a petcoke burner system on the lime kiln to fire a blend of petcoke with No. 6 fuel oil and natural gas. The maximum heat input rate for the new petcoke burner system is 180 MMBtu per hour. {Permitting Note: For purposes of flame stability, petcoke will be co-fired with oil or gas and constitute up to 90% of the maximum heat input rate to the lime kiln.} [Rule 62-210.200 (PTE), F.A.C. and Application No. 0050009-028-AC]
- 6. CEMS Required for Demonstrating Compliance: The permittee shall properly install, calibrate, maintain and operate continuous emissions monitoring systems (CEMS) to measure and record NO_X emissions in units of the applicable standard. The permittee shall comply with the conditions of Appendix F (CEMS Requirements) for each CEMS required to be installed by this permit as the compliance method for the permitted emission standard. [Rules 62-4.070(3) and 62-212.400 (PSD), F.A.C.]

A. Lime Kiln (EU-004)

PERFORMANCE RESTRICTIONS

- Permitted Capacity: The maximum allowable operating rate for the lime kiln is 85,000 pounds per hour of lime mud input (dry basis, 24-hour average) for a maximum lime production rate of 36,700 pounds of CaO per hour (dry basis). [Rule 62-210.200 (PTE), F.A.C. and Application No. 0050009-028-AC]
- 8. Authorized Fuel: The lime kiln is currently permitted to fire natural gas and No. 6 fuel oil with a maximum sulfur content of 2.4% by weight. This permit authorizes the firing of a blend of petcoke with No. 6 fuel oil and natural gas. The maximum sulfur content of petcoke shall be 8.0% by weight. [Rule 62-210.200 (PTE), F.A.C. and Application No. 0050009-028-AC]
- 9. Restricted Operation: The hours of operation of are not limited (8760 hours per year). [Rules 62-4.070(3) and 62-210.200 (PTE), F.A.C.]

EMISSIONS STANDARDS

10. Emissions Standards: Emissions from the lime kiln shall not exceed the following.

Pollutant	Fuel	Emission Standards	Averaging Time	Compliance Method	
NO _X ^a	natural gas or oil	110 ppmvd @ $10\% O_2$ and 68.0 lb/hour	30-day rolling average	CEMS	
	petcoke blends	190 ppmvd @ 10% O ₂ and 103.0 lb/hour	30-day rolling average	CEMS	
SO₂ b	No. 6 oil	4.6 lb/hour and 0.25 lb/ton of CaO	3-hour average		
	petcoke blends	First 180 days: 32.0 lb/hour and 1.74 lb/ton CaO	E 3-hour average	EPA Method 6C	
	percone orenus	After first 180 days: 18.8 lb/hour and 1.02 lb/ton CaO			

- a. NO_X: Continuous compliance with the NO_X standards shall be demonstrated based on CEMS data once the CEMS is installed and certified.
- b. SO₂: The SO₂ standards for oil firing are effective after completing construction of the burner system. The higher SO₂ standards for petcoke firing are effective during the first 180 calendar days after first firing petcoke. This is to provide sufficient time to evaluate and adjust the wet scrubber performance to accommodate the higher uncontrolled SO₂ emissions rate. The lower SO₂ standards for petcoke firing are effective following the first 180 calendar days after first firing petcoke; however, the permittee may demonstrate compliance with the lower SO₂ standards for petcoke firing with tests conducted during the first 180 calendar days after first firing petcoke.

TESTING REQUIREMENTS

- 11. <u>Test Requirements</u>: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix C (Common Testing Requirements) of this permit. [Rule 62-297.310(7)(a)9, F.A.C.]
- 12. Test Methods: Required tests shall be performed in accordance with the following reference methods.

A. Lime Kiln (EU-004)

EPA Method	Description	
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content	
6C	Method for Determining Sulfur Dioxide Emissions (Instrumental)	
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources (Instrumental)	
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)	

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]

- 13. Initial Compliance Tests: The emissions unit shall be tested to demonstrate initial compliance with the emissions standards for SO₂. Testing shall be conducted with the emissions unit operating at permitted capacity in accordance with Rule 62-297.310(2), F.A.C. The initial tests for SO₂ shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initial operation of the unit. The tests shall be conducted at the maximum sulfur content of petcoke expected to be fired. If the petcoke sulfur content increases by more than 0.5% by weight above the tested level, the permittee shall conduct an additional compliance test at the higher petcoke sulfur content to demonstrate compliance with the SO₂ standard. [Rules 62-4.070(3) and 62-297.310(7)(a)1, F.A.C.]
- 14. <u>Annual Compliance Tests</u>: During each federal fiscal year (October 1st to September 30th), the emissions unit shall be tested to demonstrate compliance with the emissions standards for SO₂. [Rule 62-297.310(7)(a)4, F.A.C.]

MONITORING REQUIREMENTS

15. Scrubber Monitoring: The permittee shall monitor the following scrubber parameters: bull nozzle flow rate in gpm, tangential flow rate in gpm, and pressure differential in inches of water column. The permittee shall monitor these scrubber parameters in accordance with the provisions in Subpart MM of 40 CFR Part 63. In addition, the permittee shall submit a testing protocol to the Bureau of Air Regulation for approval to determine the minimum pH operating level and the appropriate monitoring frequency that will provide reasonable assurance of compliance with the SO₂ BACT standard. The testing protocol shall include, but not be limited to, the following information: SO₂ stack testing methods and procedures, pH monitoring methods and frequency, pH adjustment, and a test schedule. Within 90 days of approval, the permittee shall conduct the tests. Within 30 days of conducting the last test, the permittee shall submit a report to the Bureau of Air Regulation that summarizes the testing program and proposes for approval a minimum pH operating level and the appropriate monitoring frequency that will provide reasonable assurance of compliance with the SO₂ BACT standard. The permittee shall operate the scrubber and conduct the monitoring in accordance with the approval. [Rule 62-4.070(3) and 62-212.400 (BACT), F.A.C.]

RECORDS AND REPORTS

16. <u>Test Reports</u>: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D, Section 4 of this permit. For each test run, the report shall also indicate the heat input, fuel type, sulfur content, and lime mud throughput (dry basis). [Rule 62-297.310(8), F.A.C.]

A. Lime Kiln (EU-004)

- 17. Operational Data: The permittee shall record the hours of operation and the sulfur content of each fuel in a written or electronic log. Information recorded and stored as an electronic file shall be available for inspection and printing within at least three days of a request by the Department.
 - [Rule 62-4.070(3), F.A.C.]
- 18. <u>Fuel Sulfur Records</u>: Records of the sulfur content of each shipment of fuel oil and petcoke shall be maintained and available for inspection by the Department.
- 19. Stack Test Reports: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Compliance Authority on the results of each such test. The required test report shall be filed with the Compliance Authority as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Compliance Authority to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report shall provide the applicable information specified in Rule 62-297.310(8), F.A.C. and summarized in Appendix C of this permit. [Rule 62-297.310(8), F.A.C.]
- 20. <u>CEMS Required for Reporting Annual Emissions</u>: The permittee shall use data from the CEMS when calculating annual emissions for purposes of computing actual emissions, baseline actual emissions and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for purposes of computing emissions pursuant to the reporting requirements of Rules 62-210.370(3) and 62-212.300(1)(e), F.A.C. The owner or operator shall follow the procedures in Appendix CEMS for calculating annual emissions.
- 21. TRS Report: After completion of construction and commencing operation on petcoke, the permittee shall conduct the analysis in Appendix C of 40 CFR 60 to determine whether the project resulted in an increase in the hourly total reduce sulfur (TRS) mass emission rate. The permittee shall submit the report to the Bureau of Air Regulation and the Compliance Authority within 180 days of first firing petcoke. [Appendix C of 40 CFR 60 and Rule 62-4.070(3), F.A.C.]
- 22. <u>Annual TRS and PM Emissions Reports</u>: In accordance with Rule 62-212.300(1)(e), F.A.C., the permittee shall comply with the following monitoring, reporting and recordkeeping provisions to determine whether a PSD significant emissions increase occurred:
 - a. The permittee shall monitor the TRS and PM emissions using the most reliable information available. On a calendar year basis, the permittee shall calculate and maintain a record of the annual emissions (tons per year) for a period of 5 years after completing construction of the petcoke burner. Emissions shall be computed in accordance with Rule 62-210.370, F.A.C.
 - b. Within 60 days after each calendar year following completion of construction of the petcoke burner, the permittee shall report to the Compliance Authority the annual emissions for each unit during the calendar year that preceded submission of the report. The report shall contain the following:
 - 1) The name, address and telephone number of the owner or operator of the major stationary source;
 - 2) The annual emissions as calculated pursuant to subparagraph 62-212.300(1)(e)1., F.A.C.;
 - 3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and
 - 4) Any other information that the owner or operator wishes to include in the report.
 - c. The information required to be documented and maintained shall be submitted to the Compliance Authority, where it will be available for review to the general public.

A. Lime Kiln (EU-004)

d. The permittee shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the Compliance Authority for any regulatory purpose.

[Rule 62-212.300(1)(e) and 62-210.370, F.A.C.]

B. Petcoke Handling and Storage (EU-038)

This section of the permit addresses the following emissions unit.

Emissions Unit No. 038

Petcoke Handling and Storage: Ground petcoke will be delivered to the facility by truck and pneumatically conveyed to a 250 ton ground petcoke storage silo. The storage silo will vent through a baghouse prior to discharging to atmosphere. The ground petcoke will drop into a weigh bin from the storage silo before being conveyed to the kiln burner through the use of a blower and eductor. The piping system that delivers the petcoke to the kiln burner will be completely enclosed. The displaced air from the weigh bin will be redirected to the storage silo and will exit the storage silo baghouse.

EQUIPMENT

1. <u>Petcoke Handling and Storage</u>: The permittee is authorized to construct a 250 ton ground petcoke storage silo; a dense phase pneumatic conveying system that will be used to unload the delivery trucks and transport the ground petcoke to the storage silo; and a weigh feeder and blower with eductor to pneumatically convey the ground petcoke to the kiln burner. [Application No. 0050009-028-AC]

PERFORMANCE RESTRICTIONS

2. Restricted Operation: The hours of operation of are not limited (8760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSION LIMITING AND PERFORMANCE STANDARDS

- 3. <u>Fugitive Dust Emissions</u>: During the construction period, fugitive dust emissions shall be minimized by techniques such as covering, confining and/or the application of water or dust suppressants to the affected areas, or removal of particulate matter from roads and other paved areas to prevent reentrainment, as necessary. [Rule 62-296.320(4)(c), F.A.C.]
- 4. Petcoke Storage Silo, Baghouse: The permittee shall install a baghouse to control particulate matter emissions from the petcoke storage silo and the weigh bin. The baghouse shall be designed and maintained for a flow rate of 2000 acfm and an outlet dust loading of 0.02 grains/dscf of exhaust. The permittee shall retain records from the vendor showing the control equipment meets this design specification. [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C. and Application No. 0050009-028-AC]
- 5. Opacity: As determined by EPA Method 9, visible emissions from the baghouse vent shall not exceed 5% opacity. [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

TESTING REQUIREMENTS

- 6. <u>Initial Compliance Tests</u>: The permittee shall test conduct EPA Method 9 testing to demonstrate compliance with the opacity standard for the baghouse vent. The minimum observation period for a visible emissions compliance test shall be 30 minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur. Initial tests shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initial operation of the unit. Subsequent tests shall be conducted during each federal fiscal year (October 1st to September 30th). [Rules 62-4.070(3) and 62-297.310(7)(a)1&4, F.A.C.]
- 7. <u>Test Requirements</u>: Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) in Section 4 of this permit, which include notifications, methods, procedures, test reports, etc. [Rule 62-297.310(7)(a)9, F.A.C.]

C. Nos. 3 and 4 Combination Boilers (EU-015 and EU-016)

This section of the permit addresses the following emissions units.

EU No.	Description
-015	No. 3 Combination Boiler (existing)
-016	No. 4 Combination Boiler (existing)

EQUIPMENT

1. Enclosure for Recovery Boiler Building: The permittee is authorized to construct an enclosure for the recovery boiler building to reduce corrosion and maintenance. The enclosure will be implemented in two phases. The first phase will add one wall along the east side of the building. The second phase will add a second wall along the south side of the building and may eventually include enclosing the entire building. [Rule 62-212.400(BACT), F.A.C. and Application No. 0050009-028-AC]

EMISSIONS STANDARDS

- 2. New SO₂ Standards: The following new SO₂ emissions standards apply to the Nos. 3 and 4 combination boilers in addition to any existing SO₂ emissions standards.
 - a. Beginning on the day the permittee begins construction of the new enclosure of the east wall of the recovery boiler building:
 - 1. SO₂ emissions from the No. 4 combination boiler shall not exceed 690 lb/hour based on a 24-hour average determined from CEMS data; and
 - 2. The combined SO₂ emissions from the Nos. 3 and 4 combination boiler s shall not exceed 1350 lb/hour based on a 24-hour rolling average determined from CEMS data.
 - b. Beginning on the day the permittee begins construction on one or more walls of the recovery boiler building in addition to the east wall, and thereafter:
 - 1. SO₂ emissions from the No. 4 combination boiler shall not exceed 690 lb/hour based on a 24-hour average determined from CEMS data;
 - 2. The combined SO₂ emissions from the Nos. 3 and 4 combination boilers shall not exceed 1350 lb/hour based on a 3-hour rolling average determined from CEMS data; and
 - 3. The combined SO₂ emissions from the Nos. 3 and 4 combination boilers shall not exceed 1100 lb/hour based on a 24-hour average determined from CEMS data.

For each stage of construction identified above, the permittee shall notify the Compliance Authority within one business day of commencing construction of: the construction activity begun and the SO₂ emissions standards in effect. {Permitting Note: The new enclosure adversely affects dispersion of the existing stack plumes. The new SO₂ emissions standards are based on the air quality analysis provided in support of the PSD application.} [Rule 62-212.400(BACT), F.A.C. and Application No. 0050009-028-AC]

SECTION 4. APPENDICES

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- Appendix A. Citation Formats and Glossary of Common Terms
- Appendix B. General Conditions
- Appendix C. Common Conditions
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- Appendix E. Summary of BACT Determinations
- Appendix F. CEMS Requirements
- Appendix G. NSPS Subpart BB Provisions

CITATION FORMATS AND GLOSSARY OF COMMON TERMS

CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

Old Permit Numbers

Example: Permit No. AC50-123456 or Permit No. AO50-123456

Where: "AC" identifies the permit as an Air Construction Permit

"AO" identifies the permit as an Air Operation Permit

"123456" identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: "099" represents the specific county ID number in which the project is located

"2222" represents the specific facility ID number for that county

"001" identifies the specific permit project number

"AC" identifies the permit as an air construction permit

"AF" identifies the permit as a minor source federally enforceable state operation permit

"AO" identifies the permit as a minor source air operation permit

"AV" identifies the permit as a major Title V air operation permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to the preconstruction review requirements of the Prevention of Significant

Deterioration of Air Quality

"FL" means that the permit was issued by the State of Florida

"317" identifies the specific permit project number

Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CRF 60.7]

Means: Title 40, Part 60, Section 7

CITATION FORMATS AND GLOSSARY OF COMMON TERMS

GLOSSARY OF COMMON TERMS

° F: degrees Fahrenheit

acfm: actual cubic feet per minute

ARMS: Air Resource Management System

(Department's database)

BACT: best available control technology

Btu: British thermal units

CAM: compliance assurance monitoring

CEMS: continuous emissions monitoring system

cfm: cubic feet per minute

CFR: Code of Federal Regulations

CO: carbon monoxide

COMS: continuous opacity monitoring system

DEP: Department of Environmental Protection

Department: Department of Environmental Protection

dscfm: dry standard cubic feet per minute

EPA: Environmental Protection Agency

ESP: electrostatic precipitator (control system for

reducing particulate matter)

EU: emissions unit

F.A.C.: Florida Administrative Code

F.D.: forced draft

F.S.: Florida Statutes

FGR: flue gas recirculation

FI: fluoride

ft²: square feet

ft3: cubic feet

gpm: gallons per minute

gr: grains

HAP: hazardous air pollutant

Hg: mercury

I.D.: induced draft

ID: identification

kPa: kilopascals

lb: pound

MACT: maximum achievable technology

MMBtu: million British thermal units

MSDS: material safety data sheets

MW: megawatt

NESHAP: National Emissions Standards for Hazardous

Air Pollutants

NO_X: nitrogen oxides

NSPS: New Source Performance Standards

O&M: operation and maintenance

O₂: oxygen

Pb: lead

PM: particulate matter

PM₁₀: particulate matter with a mean aerodynamic

diameter of 10 microns or less

PSD: prevention of signifi9cant deterioration

psi: pounds per square inch

PTE: potential to emit

RACT: reasonably available control technology

RATA: relative accuracy test audit

SAM: sulfuric acid mist

scf: standard cubic feet

scfm: standard cubic feet per minute

SIC: standard industrial classification code

SNCR: selective non-catalytic reduction (control system

used for reducing emissions of nitrogen oxides)

SO₂: sulfur dioxide

TPH: tons per hour

TPY: tons per year

UTM: Universal Transverse Mercator coordinate system

VE: visible emissions

VOC: volatile organic compounds

GENERAL CONDITIONS

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

- 1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- 3. As provided in Subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- 4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- 5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department.
- 6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- 7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
 - a. Have access to and copy and records that must be kept under the conditions of the permit;
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
 - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

- 8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - a. A description of and cause of non-compliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the F.S. or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, F.S.. Such evidence

GENERAL CONDITIONS

shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

- 10. The permittee agrees to comply with changes in Department rules and F.S. after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by F.S. or Department rules.
- 11. This permit is transferable only upon Department approval in accordance with Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- 12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
- 13. This permit also constitutes:
 - a. Determination of Best Available Control Technology;
 - b. Determination of Prevention of Significant Deterioration; and
 - c. Compliance with New Source Performance Standards.
- 14. The permittee shall comply with the following:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c. Records of monitoring information shall include:
 - 1) The date, exact place, and time of sampling or measurements;
 - 2) The person responsible for performing the sampling or measurements;
 - 3) The dates analyses were performed;
 - 4) The person responsible for performing the analyses;
 - 5) The analytical techniques or methods used; and
 - 6) The results of such analyses.
- 15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

COMMON CONDITIONS

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at the facility.

EMISSIONS AND CONTROLS

- 1. Plant Operation Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
- 2. <u>Circumvention</u>: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
- 3. Excess Emissions, Permitted: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- 4. Excess Emissions, Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
- 5. Excess Emissions Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
- 6. <u>VOC or OS Emissions</u>: No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]
- 7. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and 62-210.200(Definitions), F.A.C.]
- 8. <u>General Visible Emissions</u>: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]
- 9. <u>Unconfined Particulate Emissions</u>: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

{Permitting Note: Rule 62-210.700 (Excess Emissions), F.A.C., cannot vary any NSPS or NESHAP provision.}

RECORDS AND REPORTS

- 10. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least 5 years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rule 62-213.440(1)(b)2, F.A.C.]
- 11. <u>Annual Operating Report</u>: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(3), F.A.C.]

COMMON TESTING REQUIREMENTS

Unless otherwise specified in the permit, the following testing requirements apply to all emissions units at the facility.

COMPLIANCE TESTING REQUIREMENTS

- 1. Required Number of Test Runs: For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]
- 2. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. [Rule 62-297.310(2), F.A.C.]
- 3. <u>Calculation of Emission Rate</u>: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

4. Applicable Test Procedures

- a. Required Sampling Time.
 - (1) Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
 - (2) Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - (a) For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
 - (b) The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
 - (c) The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- b. *Minimum Sample Volume*. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.

COMMON TESTING REQUIREMENTS

- c. Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.
- d. Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

[Rule 62-297.310(4), F.A.C.]

5. Determination of Process Variables

- a. Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- b. Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

- 6. Sampling Facilities: The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must also comply with all applicable Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.
 - a. Permanent Test Facilities. The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.
 - b. Temporary Test Facilities. The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.
 - c. Sampling Ports.
 - (1) All sampling ports shall have a minimum inside diameter of 3 inches.
 - (2) The ports shall be capable of being sealed when not in use.
 - (3) The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.
 - (4) For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.
 - (5) On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

COMMON TESTING REQUIREMENTS

- d. Work Platforms.
 - (1) Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.
 - (2) On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.
 - (3) On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.
 - (4) All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toe board, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.
- e. Access to Work Platform.
 - (1) Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.
 - (2) Walkways over free-fall areas shall be equipped with safety rails and toe boards.
- f. Electrical Power.
 - (1) A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.
 - (2) If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.
- g. Sampling Equipment Support.
 - (1) A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.
 - (a) The bracket shall be a standard 3 inch × 3 inch × one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.
 - (b) A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.
 - (c) The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.
 - (2) A complete monorail or dual rail arrangement may be substituted for the eyebolt and bracket.
 - (3) When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

[Rule 62-297.310(6), F.A.C.]

- 7. <u>Frequency of Compliance Tests</u>: The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
 - a. General Compliance Testing.
 - 1. The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit.

COMMON TESTING REQUIREMENTS

- 2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid and/or solid fuel for more than 400 hours other than during startup.
- 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to sub-subparagraph 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - (a) Did not operate; or
 - (b) In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.
- 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - (a) Visible emissions, if there is an applicable standard;
 - (b) Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
 - (c) Each NESHAP pollutant, if there is an applicable emission standard.
- 5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
- 6. For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup.
- 7. For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to paragraph 62-296.405(2)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup.
- 8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.
- 9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- 10. An annual compliance test conducted for visible emissions shall not be required for units exempted from air permitting pursuant to subsection 62-210.300(3), F.A.C.; units determined to be insignificant pursuant to subparagraph 62-213.300(2)(a)1., F.A.C., or paragraph 62-213.430(6)(b), F.A.C.; or units permitted under the General Permit provisions in paragraph 62-210.300(4)(a) or Rule 62-213.300, F.A.C., unless the general permit specifically requires such testing.
- b. Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and

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- quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
- c. Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of paragraph 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.]

RECORDS AND REPORTS

8. Test Reports:

- a. The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- b. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- c. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information.
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 - 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 - 8. The date, starting time and duration of each sampling run.
 - 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 - 10. The number of points sampled and configuration and location of the sampling plane.
 - 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 - 12. The type, manufacturer and configuration of the sampling equipment used.
 - 13. Data related to the required calibration of the test equipment.
 - 14. Data on the identification, processing and weights of all filters used.
 - 15. Data on the types and amounts of any chemical solutions used.

COMMON TESTING REQUIREMENTS

- 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20. The applicable emission standard and the resulting maximum allowable emission rate for the emissions unit plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

SUMMARY OF BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATIONS

Project Description

The permittee operates an existing Kraft process pulp and paper mill in Panama City. The existing mill is comprised of major activities areas such as: wood handling facility; pulping, bleaching, and chemical recovery; power house operations; paper machines; and finishing, shipping, warehouse and associated processes and equipment. This project authorizes the addition of petcoke as a primary fuel for the existing lime kiln. For purposes of flame stability, petcoke will be co-fired with oil or gas and constitute up to 90% of the maximum heat input rate to the lime kiln. The project includes: installation of a new 180 million Btu/hour (MMBtu/hour) lime kiln burner; a 250 ton ground petcoke storage silo; a dense phase pneumatic conveying system to unload delivery trucks and transport ground petcoke to the storage silo; and a weigh feeder and blower with eductor to pneumatically convey the ground petcoke to the kiln burner. The project is subject to PSD preconstruction review for emissions of NO_X and SO₂ pursuant to Rule 62-212.400, F.A.C. This permit includes emissions standards for these pollutants representing BACT.

The project will also partially enclose the area housing the recovery boiler building to reduce corrosion and maintenance. The enclosure will be implemented in two phases. The first phase will add a wall only along the east side of the building. The second phase will initially consist of adding a second wall along the south side of the building and may eventually include enclosing the entire building. The enclosures affect the dispersion of the stack plumes. Therefore, the permittee requested lower 24-hour SO₂ emissions standards for the Nos. 3 and 4 combination boilers.

BACT Determinations

The following table summarizes the emissions standards representing the BACT determinations for NO_X and SO₂ emissions.

Pollutant	Fuel	Emission Standards	Averaging Time	Compliance Method
NO _X a	natural gas or oil	110 ppmvd @ 10% O ₂	30-day rolling average	CEMS
		68.0 lb/hour	3-hour average	EPA Method 7E
	90% petcoke blends	190 ppmvd @ $10\%~\mathrm{O}_2$	30-day rolling average	CEMS
		103.0 lb/hour	3-hour average	EPA Method 7E
SO₂ ^b	natural gas or oil	7.3 lb/hour and 0.40 lb/ton of CaO	3-hour average	
	90% petcoke blends	First 180 days: 32.0 lb/hour and 1.74 lb/ton CaO	3-hour average	EPA Method 6C
		After first 180 days: 18.8 lb/hour and 1.02 lb/ton CaO		

- a. NO_X: Initial compliance with the "lb/hour" standard shall be demonstrated based on stack testing. Continuous compliance with the "ppmvd @ 10% O₂" standard shall be demonstrated based on CEMS data once the CEMS is installed and certified. The basis for the NO_X BACT determination is the use of good combustion practices and a low-NO_X burner system.
- b. SO₂: The SO₂ standards for oil firing are effective after completing construction of the burner system. The higher SO₂ standards for petcoke firing are effective during the first 180 calendar days after first firing petcoke. This is to provide sufficient time to evaluate and adjust the wet scrubber performance to accommodate the higher uncontrolled SO₂ emissions rate. The lower SO₂ standards for petcoke firing are effective following the first 180 calendar days after first firing petcoke; however, the permittee may demonstrate compliance with the lower SO₂ standards for petcoke firing with tests conducted during the first 180 calendar days after first firing petcoke. The basis for the SO₂ BACT determination is proper kiln operation, optimal mud washing and wet flue gas desulfurization with proper parametric monitoring and good operating practices.

CEMS REQUIREMENTS

CEMS OPERATION PLAN

CEMS Operation Plan: The owner or operator shall create and implement a facility-wide plan for the proper
installation, calibration, maintenance and operation of each CEMS required by this permit. The owner or operator shall
submit the CEMS Operation Plan to the Bureau of Air Monitoring and Mobile Sources for approval at least 60 days
prior to CEMS installation. The CEMS Operation Plan shall become effective 60 days after submittal or upon its
approval. If the CEMS Operation Plan is not approved, the owner or operator shall submit a new or revised plan for
approval.

{Permitting Note: The Department maintains both guidelines for developing a CEMS Operation Plan and example language that can be used as the basis for the facility-wide plan required by this permit. Contact the Emissions Monitoring Section of the Bureau of Air Monitoring and Mobile Sources at 850/488-0114.}

INSTALLATION, PERFORMANCE SPECIFICATIONS AND QUALITY ASSURANCE

- 2. <u>Timelines</u>: The owner or operator shall install each CEMS required by this permit and conduct the appropriate performance specification for each CEMS no later than 180 calendar days after initial startup on petcoke.
- 3. <u>Installation</u>: All CEMS shall be installed such that representative measurements of emissions or process parameters from the facility are obtained. The owner or operator shall locate the CEMS by following the procedures contained in the applicable performance specification of 40 CFR part 60, Appendix B.
- 4. <u>Span Values and Dual Range Monitors</u>: The owner or operator shall set appropriate span values for the CEMS. The owner or operator shall install dual range monitors if required by and in accordance with the CEMS Operation Plan.
- 5. Continuous Flow Monitor: For compliance with mass emission rate standards, the owner or operator shall install a continuous flow monitor to determine the stack exhaust flow rate. The flow monitor shall be certified pursuant to 40 CFR part 60, Appendix B, Performance Specification 6. Alternatively, the owner or operator may install a fuel flow monitor and use an appropriate F-Factor computational approach to calculate stack exhaust flow rate.
- 6. <u>Diluent Monitor</u>: If it is necessary to correct the CEMS output to the oxygen concentrations specified in this permit's emission standards, the owner or operator shall either install an oxygen monitor or install a CO₂ monitor and use an appropriate F-Factor computational approach.
- 7. <u>Moisture Correction</u>: If necessary, the owner or operator shall determine the moisture content of the exhaust gas and develop an algorithm to enable correction of the monitoring results to a dry basis (0% moisture).
 - {Permitting Note: The CEMS Operation Plan will contain additional CEMS-specific details and procedures for installation.}
- 8. <u>Performance Specifications</u>: The owner or operator shall evaluate the acceptability of each CEMS by conducting the appropriate performance specification, as follows. CEMS determined to be unacceptable shall not be considered installed for purposes of meeting the timelines of this permit. For NO_X monitors, the owner or operator shall conduct Performance Specification 2 of 40 CFR part 60, Appendix B.
- 9. Quality Assurance: The owner or operator shall follow the quality assurance procedures of 40 CFR part 60, Appendix F. For NO_X, The required RATA tests shall be performed using EPA Method 7E in Appendix A of 40 CFR part 60. NO_X shall be expressed "as NO₂."
- 10. <u>Substituting RATA Tests for Compliance Tests</u>: Data collected during CEMS quality assurance RATA tests can substitute for annual stack tests, and vice versa, at the option of the owner or operator, provided the owner or operator indicates this intent in the submitted test protocol and follows the procedures outlined in the CEMS Operation Plan.

CALCULATION APPROACH

- 11. <u>CEMS Used for Compliance</u>: Once adherence to the applicable performance specification for each CEMS is demonstrated, the owner or operator shall use the CEMS to demonstrate compliance with the applicable emission standards as specified by this permit.
- 12. <u>CEMS Data</u>: Each CEMS shall monitor and record emissions during all periods of operation and whenever emissions are being generated, including during episodes of startups, shutdowns, and malfunctions. All data shall be used, except

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for invalid measurements taken during monitor system breakdowns, repairs, calibration checks, zero adjustments and span adjustments.

- 13. Operating Hours and Operating Days: For purposes of this appendix, the following definitions shall apply. An hour is the 60-minute period beginning at the top of each hour. Any hour during which an emissions unit is in operation for more than 15 minutes is an operating hour for that emission unit. A day is the 24-hour period from midnight to midnight. Unless otherwise specified by this permit, any day with at least one operating hour for an emissions unit is an operating day for that emission unit.
- 14. <u>Valid Hourly Averages</u>: Each CEMS shall be designed and operated to sample, analyze and record data evenly spaced over the hour at a minimum of one measurement per minute. All valid measurements collected during an hour shall be used to calculate a 1-hour block average that begins at the top of each hour.
 - a. Hours that are not operating hours are not valid hours.
 - b. For each operating hour, the 1-hour block average shall be computed from at least two data points separated by a minimum of 15 minutes. If less than two such data points are available, there is insufficient data, the 1-hour block average is not valid, and the hour is considered as "monitor unavailable."
- 15. <u>Calculation Approaches, 30-day Rolling Average</u>: Compliance with the 30-day rolling average shall be determined after each operating day by calculating the arithmetic average of all the valid hourly averages from that operating day and the prior 29 operating days.

MONITOR AVAILABILITY

16. Monitor Availability: The quarterly excess emissions report shall identify monitor availability for each quarter in which the unit operated. Monitor availability for the CEMS shall be 95% or greater in any calendar quarter in which the unit operated for more than 760 hours. In the event the applicable availability is not achieved, the permittee shall provide the Department with a report identifying the problems in achieving the required availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit.

EXCESS EMISSIONS

17. Definitions:

- a. Startup is defined as the commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.
- b. Shutdown means the cessation of the operation of an emissions unit for any purpose.
- c. *Malfunction* means any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.
- 18. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
- 19. Notification Requirements: The owner or operator shall notify the Compliance Authority within one working day of discovering any emissions that demonstrate noncompliance for a given averaging period. Within one working day of occurrence, the owner or operator shall notify the Compliance Authority of any malfunction resulting in the exclusion of CEMS data. For malfunctions, notification is sufficient for the owner or operator to exclude CEMS data.

ANNUAL EMISSIONS

- 20. CEMS Used for Calculating Annual Emissions: All valid data, shall be used when calculating annual emissions.
 - a. Annual emissions shall include data collected during startup, shutdown and malfunction periods.

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- b. Annual emissions shall include data collected during periods when the emission unit is not operating but emissions are being generated (for example, when firing fuel to warm up a process for some period of time prior to the emission unit's startup).
- c. Annual emissions shall not include data from periods of time where the monitor was functioning properly but was unable to collect data while conducting a mandated quality assurance/quality control activity such as calibration error tests, RATA, calibration gas audit or RAA. These periods of time shall be considered missing data for purposes of calculating annual emissions.
- d. Annual emissions shall not include data from periods of time when emissions are in excess of the calibrated span of the CEMS. These periods of time shall be considered missing data for purposes of calculating annual emissions.
- 21. Accounting for Missing Data: All valid measurements collected during each hour shall be used to calculate a 1-hour block average. For each hour, the 1-hour block average shall be computed from at least two data points separated by a minimum of 15 minutes. If less than two such data points are available, the owner or operator shall account for emissions during that hour using site-specific data to generate a reasonable estimate of the 1-hour block average.
- 22. <u>Emissions Calculation</u>: Hourly emissions shall be calculated for each hour as the product of the 1-hour block average and the duration of pollutant emissions during that hour. Annual emissions shall be calculated as the sum of all hourly emissions occurring during the year.

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As a result of this project, the existing lime kiln (EU-004) becomes subject to the applicable requirements for particulate matter in NSPS Subpart BB and the applicable general provisions in NSPS Subpart A of 40 CFR 60.

SUBPART A, GENERAL PROVISIONS

(The General Provisions are not included in this permit, but can be obtained from the Department upon request.)

- § 60.7 Notification and Record Keeping.
- § 60.8 Performance Tests.
- § 60.11 Compliance with Standards and Maintenance Requirements.
- § 60.12 Circumvention.
- § 60.13 Monitoring Requirements.
- § 60.19 General Notification and Reporting Requirements.

SUBPART BB, STANDARDS OF PERFORMANCE FOR KRAFT PULP MILLS

§ 60.280 Applicability and designation of affected facility.

- (a) The provisions of this subpart are applicable to the following affected facilities in kraft pulp mills: Digester system, brown stock washer system, multiple-effect evaporator system, recovery furnace, smelt dissolving tank, lime kiln, and condensate stripper system. In pulp mills where kraft pulping is combined with neutral sulfite semichemical pulping, the provisions of this subpart are applicable when any portion of the material charged to an affected facility is produced by the kraft pulping operation.
- (b) Except as noted in §60.283(a)(1)(iv), any facility under paragraph (a) of this section that commences construction or modification after September 24, 1976, is subject to the requirements of this subpart.

§ 60.281 Definitions.

As used in this subpart, all terms not defined herein shall have the same meaning given them in the Act and in subpart A.

- (a) Kraft pulp mill means any stationary source which produces pulp from wood by cooking (digesting) wood chips in a water solution of sodium hydroxide and sodium sulfide (white liquor) at high temperature and pressure. Regeneration of the cooking chemicals through a
- (n) Lime kiln means a unit used to calcine lime mud, which consists primarily of calcium carbonate, into quicklime, which is calcium oxide.

§ 60.282 Standard for particulate matter.

- (a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere:
 - (3) From any lime kiln any gases which contain particulate matter in excess of:
 - (i) 0.15 g/dscm (0.066 gr/dscf) corrected to 10 percent oxygen, when gaseous fossil fuel is burned.
 - (ii) 0.30 g/dscm (0.13 gr/dscf) corrected to 10 percent oxygen, when liquid fossil fuel is burned.

§ 60.285 Test methods and procedures.

- (a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures in this section, except as provided in §60.8(b). Acceptable alternative methods and procedures are given in paragraph (f) of this section.
- (b) The owner or operator shall determine compliance with the particulate matter standards in §60.282(a) (1) and (3) as follows:
 - (1) Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.8 dscf). Water shall be used as the cleanup solvent

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- instead of acetone in the sample recovery procedure. The particulate concentration shall be corrected to the appropriate oxygen concentration according to §60.284(c)(3).
- (2) The emission rate correction factor, integrated sampling and analysis procedure of Method 3B shall be used to determine the oxygen concentration. The gas sample shall be taken at the same time and at the same traverse points as the particulate sample.
- (3) Method 9 and the procedures in §60.11 shall be used to determine opacity.
- (f) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:
 - (1) For Method 5, Method 17 may be used if a constant value of 0.009 g/dscm (0.004 gr/dscf) is added to the results of Method 17 and the stack temperature is no greater than 204 °C (400 °F).