4/26/07

# Harvey, Mary

From: Harvey, Mary

Sent: Wednesday, September 26, 2007 11:27 AM

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: Holladay, Cleve; Adams, Patty; Gibson, Victoria

Subject: SMURFIT CONTAINER ENTERPRISES, INC. - PROJECT #0050009-028-AC- PSD-FL-388

Attachments: 0050009.028.AC.F pdf.zip

Tracking: Read Recipient Mr. B. G. Sammons, Smurfit-Stone Mr. Tom Clements, Smurfit-Stone'

Mr. David Buff, Golder Associates'

L Bradburn, Rick Read: 9/26/2007 11:55 AM

Ms\_Kathleen Forney, EPA Region 4' /Mr. Jim Little, EPA Region 4 Mr. Dee Morse, National Park Service'

Holladay, Cleve Read: 9/26/2007 11:50 AM

Adams, Patty

Gibson, Victoria Read: 9/26/2007 11:34 AM

#### Dear Sir/Madam:

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Thank you,

DEP, Bureau of Air Regulation

From: Clements, Tom [TMCLEMEN@SMURFIT.COM]

Sent: Wednesday, September 26, 2007 11:30 AM

To: Harvey, Mary

Cc: BSAMMONS@SMURFIT.COM; Buff, Dave

Subject: RE: SMURFIT CONTAINER ENTERPRISES, INC. - PROJECT #0050009-028-AC- PSD-FL-388

Message received, Thank you.

Tom Clements

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

Sent: Wednesday, September 26, 2007 10:27 AM

To: Sammons, Bob; Clements, Tom; 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: Holladay, Cleve; Adams, Patty; Gibson, Victoria

Subject: SMURFIT CONTAINER ENTERPRISES, INC. - PROJECT #0050009-028-AC- PSD-FL-388

#### Dear Sir/Madam:

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Thank you,

DEP, Bureau of Air Regulation

From:

Gibson, Victoria

To:

Harvey, Mary

Sent:

Wednesday, September 26, 2007 11:34 AM

Subject:

Read: SMURFIT CONTAINER ENTERPRISES, INC. - PROJECT #0050009-028-AC- PSD-

FL-388

#### 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'

Cc:

Holladay, Cleve; Adams, Patty; Gibson, Victoria

Subject:

SMURFIT CONTAINER ENTERPRISES, INC. - PROJECT #0050009-028-AC- PSD-FL-388

Sent:

9/26/2007 11:27 AM

was read on 9/26/2007 11:34 AM.

From:

Holladay, Cleve

To:

Harvey Mary

Sent:

Wednesday, September 26, 2007 11:50 AM

Subject:

Read: SMURFIT CONTAINER ENTERPRISES, INC. - PROJECT #0050009-028-AC- PSD-

FL-388

#### 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'

Cc:

Holladay, Cleve; Adams, Patty; Gibson, Victoria

Subject:

SMURFIT CONTAINER ENTERPRISES, INC. - PROJECT #0050009-028-AC- PSD-FL-388

Sent:

9/26/2007 11:27 AM

was read on 9/26/2007 11:50 AM.

From:

To:

Sent:

Subject:

Buff, Dave [DBuff@GOLDER.com] undisclosed-recipients
Wednesday, September 26, 2007 11:40 AM
Read: SMURFIT CONTAINER ENTERPRISES, INC. - PROJECT #0050009-028-AC- PSD-

FL-388

Your message

To:

DBuff@GOLDER.com

Subject:

was read on 9/26/2007 11:40 AM.

From: To:

Bradburn, Rick

Sent:

Harvey, Mary

Wednesday, September 26, 2007 11:55 AM

Subject:

Read: SMURFIT CONTAINER ENTERPRISES, INC. - PROJECT #0050009-028-AC- PSD-

FL-388

#### 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'

Cc:

Subject:

Holladay, Cleve; Adams, Patty; Gibson, Victoria
SMURFIT CONTAINER ENTERPRISES, INC. - PROJECT #0050009-028-AC- PSD-FL-388

Sent:

9/26/2007 11:27 AM

was read on 9/26/2007 11:55 AM.

From:

Sammons, Bob [BSAMMONS@SMURFIT.COM] undisclosed-recipients

To:

Sent:

Wednesday, September 26, 2007 12:04 PM

Subject:

Read: SMURFIT CONTAINER ENTERPRISES, INC. - PROJECT #0050009-028-AC- PSD-

FL-388

Your message

To:

BSAMMONS@SMURFIT.COM

Subject:

was read on 9/26/2007 12:04 PM.

From:

Forney.Kathleen@epamail.epa.gov

Sent:

Wednesday, September 26, 2007 2:29 PM

To:

Harvey, Mary

Cc:

little.james@epa.gov

Subject:

Re: FW: SMURFIT CONTAINER ENTERPRISES, INC. - PROJECT #0050009-028-AC- PSD-

FL-388

thanks we got it this time...

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>

09/26/2007 02:22 PM

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

Subject

FW: SMURFIT CONTAINER

ENTERPRISES, INC. - PROJECT #0050009-028-AC- PSD-FL-388

From: Harvey, Mary

Sent: Wednesday, September 26, 2007 11:28 AM

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

Subject: FW: SMURFIT CONTAINER ENTERPRISES, INC. - PROJECT

#0050009-028-AC- PSD-FL-388

From: Harvey, Mary

Sent: Wednesday, September 26, 2007 11:27 AM

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: Holladay, Cleve; Adams, Patty; Gibson, Victoria

Subject: SMURFIT CONTAINER ENTERPRISES, INC. - PROJECT #0050009-028-AC-

PSD-FL-388

From:

Adams, Patty

To:

Harvey, Mary

Sent:

Wednesday, September 26, 2007 3:53 PM

Subject:

Read: SMURFIT CONTAINER ENTERPRISES, INC. - PROJECT #0050009-028-AC- PSD-

FL-388

#### 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'

Cc:

Holladay, Cleve; Adams, Patty; Gibson, Victoria

Subject:

SMURFIT CONTAINER ENTERPRISES, INC. - PROJECT #0050009-028-AC- PSD-FL-388

Sent:

9/26/2007 11:27 AM

was read on 9/26/2007 3:53 PM.

From: Thomas, Bruce X.

To: Harvey, Mary

Sent: Thursday, September 27, 2007 9:01 AM

Subject: Read: FW: SMURFIT CONTAINER ENTERPRISES, INC. - PROJECT #0050009-028-AC-

PSD-FL-388

#### Your message

To: Thomas, Bruce X.

Subject: FW: SMURFIT CONTAINER ENTERPRISES, INC. - PROJECT #0050009-028-AC- PSD-FL-388

Sent: 9/27/2007 9:01 AM

was read on 9/27/2007 9:01 AM.

From: Dee\_Morse@nps.gov

Sent: Wednesday, September 26, 2007 5:53 PM

To: Harvey, Mary

Subject: SMURFIT CONTAINER ENTERPRISES, INC. - PROJECT #0050009-028-AC- PSD-FL-388

Return Receipt

Your SMURFIT CONTAINER ENTERPRISES, INC. - PROJECT

document: #0050009-028-AC- PSD-FL-388

was Dee Morse/DENVER/NPS

received

by:

at: 09/26/2007 03:52:33 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

#### **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).

#### **CONTENTS**

Section 1. General Information

Section 2. Administrative Requirements

Section 3. Emissions Units Specific Conditions

Section 4. Appendices

Joseph Kahn, Director

Division of Air Resource Management

# STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

#### NOTICE OF FINAL PERMIT

In the Matter of an Application for Permit by:

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 Panama City Mill Addition of Petcoke to Lime Kiln Bay County

Enclosed is the final PSD air construction permit which authorizes the addition of petcoke as a primary fuel for the existing lime kiln. The proposed work will be conducted at the Panama City Mill, which is located in Bay County at One Everitt Avenue in Panama City, Florida. As noted in the attached Final Determination, only minor changes and clarifications were made to the permit as drafted. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

Tring & Vilham

Trina Vielhauer, Chief Bureau of Air Regulation

#### CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final Permit and Final Determination) was sent by electronic mail with received receipt requested before close of business on 9/36/07 to the persons listed below.

Mr. B. G. Sammons, Smurfit-Stone (bsammons@smurfit.com)

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

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

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

Ms. Kathleen Forney, EPA Region 4 (forney.kathleen@epa.gov)

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

Mr. Dee Morse, National Park Service (<u>Dee Morse@nps.gov</u>)

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.

#### PERMITTEE

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

#### 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

#### **PROJECT**

Air Permit No. PSD-FL-388 Project No. 0050009-028-AC Panama City Mill Addition of Petcoke to Lime Kiln

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; a weigh feeder and blower with eductor to pneumatically convey the ground petcoke to the kiln burner, and enclosure or partial enclosure of the recovery boilers.

#### NOTICE AND PUBLICATION

The Department distributed an "Intent to Issue Permit" package on July 27, 2007. The applicant published the Public Notice of Intent to Issue in the Panama City News Herald on August 2, 2007. The Department received the proof of publication on August 9, 2007. No petitions for administrative hearings or extensions of time to petition for an administrative hearing were filed.

#### **COMMENTS**

No comments on the Draft Permit were received from the public or the Department's Northwest District Office.

#### **EPA Comments**

On August 27, 2007 the Department received comments from the EPA Region 4 Office. EPA's comments were related to the modeling information. The applicant and the Department remodeled to address these comments. The following summarizes the comments and the Department's response.

#### Boiler No. 3 NO2 Emissions

1. Significant Impact Modeled Emissions (Table 6-3) in the application – The emissions provided in this table appear to only be used in SIL assessments.

Response: It is correct that the emissions in Table 6-3 were only used in the significant impact level (SIL) assessments. The SIL impact assessment only considers changes to the facility due to the project. Please note that in the original Table 6-3, the emission rates shown in the column labeled as "Future Potential Emissions" were actually "Projected Actual" emissions. This column has been revised to reflect future potential emissions. Note also that the past actual short-term NO<sub>x</sub> emissions (42.1 lb/hr) for the Lime Kiln have been corrected and increased to be equal to the long-term emissions. The revised table 6-3 is attached. The SIL impact assessments for NOx were revised with these emissions. In the PSD Class II area, these

changes resulted in higher modeled impacts (7 ug/m³ compared to 5 ug/m³) and in a larger significant impact area. However, the applicant had already modeled the AAQS and the PSD increment II with an even larger significant impact area than resulted from this modeling change. The department verified that the maximum modeled AAQS and PSD Class II NO<sub>2</sub> impacts were the same as submitted previously by the applicant. In the PSD Class I areas, the predicted NO<sub>x</sub> impacts were also larger, but were still well below the PSD Class I SIL.

2. Boiler No. 3 is included as having an increase in NO<sub>2</sub> emissions associated with the kiln project. The reason for this increase and the basis for the values provided should be explained.

Response: The NO<sub>x</sub> emissions increase for the No. 3 Combination Boiler is associated with a contemporaneous emissions change on the boiler, as shown in Table 3-3 of the application. This contemporaneous change involved the non-PSD permit issued for increasing the ability of the boiler to burn bark/wood (Permit No. 0050009-023-AC). The annual increase in actual emissions of 17.9 TPY (476.8 TPY minus 458.9 TPY) was documented in the permit application for the changes to the No. 3 Combination Boiler and in Permit No. 0050009-023-AC. However, the future potential NO<sub>x</sub> emissions from the No. 3 Combination Boiler have been used in the revised significant impact modeling, as reflected in the revised Table 6-3 (attached).

3. The future potential for Boiler No. 3 appears to be the permit allowable value of 176.7 lb/hr or 773.9 TPY provided in Table 6-5. The basis for the smaller values in this table should be provided.

Response: As described above, the potential NO<sub>x</sub> emissions of 176.7 lb/hr associated with the No. 3 Combination Boiler have now been modeled in the SIL assessment, as shown in the revised Table 6-3.

#### Lime Kiln

1. The long term future potential SO<sub>2</sub> rate of 103 TPY is much less than the current permit limit of 144.3 TPY (Table D-1) in the application.

Response: As mentioned above, Table 6-3 has been revised. However, the SO<sub>2</sub> SIL modeling submitted with the original application correctly assessed the impact between the short-term emission rate associated with the 144.3 TPY and the short-term past actual emission rate (32.9 lb/hr and 5.6 lb/hr). This SIL assessment is conservative since the department's final permit contains a slightly lower lime kiln SO<sub>2</sub> emission limit of 32.0 lb/hr or 140.2 TPY instead of the applicant's requested 32.9 lb/hr.

2. The future short term NO<sub>2</sub> rate of 87.8 lb/hr is smaller that the PSD limit of 103 lb/hr.

Response: The potential NO<sub>x</sub> emissions associated with the Lime Kiln have now been modeled in the revised SIL assessment, as shown in the revised Table 6-3 (future potential long-term emission rate of 472.2 TPY, 13.58 g/s or 107.8 lb/hr). This analysis is conservative since the Department's final permit contains a limit of 103.0 lb/hr.

#### **PSD Sources Expanding Increment**

1. Two sources were indicated as PSD increment expanding sources. Arizona Chemical Company's inactive Boiler No. 1 and Florida Coast Paper which is no longer operating and is dismantled. These sources should be included in Table 6-9. Confirmation is needed that these emission sources were PSD baseline sources whose permits were revoked. The emission rates used in the modeling should be confirmed to be the actual emission rates occurring on the minor or major source baseline date.

Response: Upon further investigation, Boiler No. 1 at Arizona Chemical is no longer active and did not exist in the SO<sub>2</sub> baseline. Therefore, it is no longer included in the revised SO<sub>2</sub> AAQS or PSD increment modeling. Boiler No. 2 did not exist in the SO<sub>2</sub> baseline, but currently exists. Its actual emissions were used for the revised SO<sub>2</sub> PSD increment consumption modeling, while its potential emissions used for the revised SO<sub>2</sub> AAQS analysis. See revised Table 6-9 (attached). Florida Coast paper was not included in the analysis, which would make these analyses conservative, since this facility has now shutdown.

#### FINAL DETERMINATION

The revised SO<sub>2</sub> modeling using the above input changes and the draft SO<sub>2</sub> emission limits for the project resulted in SO<sub>2</sub> impact values greater than those in the draft permit. The applicant revised and lowered the emission rates for Combination Boilers No. 3 and No. 4 to values which result in predicted air quality impacts which are less than or equal to the PSD Class II increment impacts stated in the Public Notice.

The revised SO<sub>2</sub> emission limits are:

3 hour average: Combination Boiler No. 3 only operating: 1219 lb/hr

Combination Boiler No. 4 maximum: 1183 lb/hr plus 36 lb/hr from Combination Boiler

No. 3 = 1219 lb/hr

24 hour average: Combination Boiler No. 3 only operating: 845 lb/hr

Combination Boiler No. 4 only operating: 965 lb/hr

Combination Boiler No. 3 and No. 4 both operating: 300 lb/hr maximum for No. 3 and

643 lb/hr maximum for No. 4

Combination Boiler No. 3 has the worst case dispersion characteristics; therefore, the 24-hour maximum emission rates are less than No. 4.

The SO<sub>2</sub> emission limits were reduced from the draft permit to ensure that the impacts remained at or less than those published in the public notice. However, the applicant may apply within 90 days to increase these emission limits based on a revised modeling analysis. This action would require an additional 30-day public notice.

The applicant also remodeled the PSD Class I analyses. The SO<sub>2</sub> and NO<sub>2</sub> impacts were higher, but they were substantially less than the significant impact levels; therefore, no further modeling is required.

#### **Applicant's Comments**

On August 30, 2007, the applicant submitted comments, which are summarized below with the Department's corresponding response.

- 1. The applicant requested Section 3.A Condition 1 be revised to subject the facility to the applicable requirements of NSPS Subpart BB of 40 CFR 60 only if the analysis according to Appendix C demonstrates an increase in particulate emissions.
  - Response: The netting analysis in Table 3-3 of the application indicates a particulate emissions increase of 16.0 tons per year of PM and 10.2 tons per year of PM<sub>10</sub>. As proposed, the project results 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).
- 2. Section 3.A Condition 6 requires that a CEMS be installed for NOx. The applicant requests that the requirements of Appendix F not be imposed due to significant additional requirements and associated cost. The Mill currently does not have any CEMS which must meet the QA requirements of Appendix F. The applicant requests that the NO<sub>x</sub> monitoring requirements mirror those for TRS emissions from the Lime Kiln. Condition E.9 of the current Title V permit specifies the test method for TRS as EPA Method 16, 16A or 16B. Condition L.4 of the Title V permit specifies the requirements for the continuous TRS monitor. It requires, among other things, that the TRS monitor be located, installed, and certified pursuant to the provisions of PS-2, PS-3 and PS-5, and that for the purposes of compliance testing and certification, that Method 16 or 16A be used. Daily zero and span checks must be performed. The applicant also requests that this condition be revised to add a 3-hour limit for NO<sub>x</sub> based on stack testing per EPA Method

#### FINAL DETERMINATION

7E. The 3-hour limit could be the same numerical limit as the 30-day rolling average limits. Then the "compliance method" for the 30-day rolling average could be changed to the "compliance indicator".

Response: The Department intended the CEMS to be the method for determining compliance with the  $NO_x$  BACT standard. The 30-day rolling average provides flexibility for the operator to manage emissions and ensure continuous compliance. Appendix F provides the quality assurance procedures necessary to collect valid emissions data. No change was made.

2. The SO<sub>2</sub> emission standard in Section 3.A Condition 10 is incorrect. The correct SO<sub>2</sub> limit for "natural gas or oil" is the one listed in Appendix E "BACT Determination". This lists 7.3 lb/hr and 0.40 lb/ton CaO as BACT

Response: The correct SO<sub>2</sub> limit for "natural gas or oil" is 4.6 lb/hr and 0.25 lb/ton CaO based on the BACT analysis in the Technical Evaluation and Preliminary Determination. The correction has been made in Appendix E.

3. The applicant requests that the allowable stack test methods specified for SO<sub>2</sub> in Section 3.A, Condition 11 include Method 6 as well as Method 6C.

Response: Section 3.A Condition 11 has been changed accordingly.

#### CONCLUSION

The final action of the Department is to issue the permit with the minor revisions, corrections, and clarifications as described above.

TABLE 6-3
EMISSIONS USED IN SIGNIFICANT IMPACT ANALYSIS, SSCE PANAMA CITY

Emission Unit	Unit ID	]	Past Actu	al Emissions	Future Potential Emissions				
,		Short	-Term	_ Lon	g-Term	Short-Term		Long-Term	
		lb/hr	g/s	TPY	g/s	lb/hr	g/s	TPY	g/s
SO <sub>2</sub> Emissions			•						
Lime Kiln .	LKI	5.6	0.71	22.8	0.66	32.9	4.15	140.2	4.03
NO, Emissions									
Lime Kiln	LKI	42.1	s.30	184.2	5.30	107.8	13.58	472.2	13.58
No. 3 Combination Boiler	BB3	132.5	ь 16.70	458.9	13.20	176.7	22.26	773.9	22.26

Unless otherwise noted, refer to Section 2.0 for basis of emission rates.

<sup>&</sup>lt;sup>a</sup> Based on long-term emissions.

<sup>&</sup>lt;sup>b</sup> Based on stack test conducted in February 2005, prior to the change on the No. 3 Combination Boiler.

<sup>&</sup>lt;sup>c</sup> Draft permit contains a limit of 32.0 lb/hr; therefore this higher value produces a higher impact for the SIL analysis.

TABLE 6-9
SUMMARY OF 5Q SOURCES INCLUDED IN THE AIR MODELING FOR THE AAQS AND PSB CLASS II COMPLIANCE ANALYSES
SSCE PANAMA CITY LIME KILN PETCOKE PROJECT

	Facility Stame		L'IM Location			Stark Parameters							50; Emission		PSD Consuming	Medeled (o		
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775794 Ando	rege Columbia Ce (n.: - Plant #4																	
	Assect: Medel 0.7140 & chile borrel asphala plane	:	ACPCAF	6ka Uw	3,33a 2km	300	41	1× P	15.72	250	3943	97, ₹	0.15	149	7 444	<b>50</b>	YES	NO
TANZ CN.	Roberts Commanding Inc Plantama Cally Flaint																	
	CMI Criminas How Drum Mix. Applials Consider Plant	2	CWRECYE	62 R (PX)	1 140 780	44.0	13.1	5.1	1.54	215	3.54,8	313 C	12.37	20.0	2.54	862	9 f/S	NG
29014 Gids	Power Company - Lauring South Plant																	
	Hower 41 - 1 944 B M Million (Phase II Acad Rain)	;	GPLSB1	625,630	3.543,0 kg	1990	go 7	F# 13	5.24	Jun.	14.8	102.7	3: 211	2,794.1	31139	50	165	NO
	Borlet #2 - 2.746.2 MMB(toller (Physic II Acad Rajn)	?	GPL 5B?	625 (31)	1,547,080	199 n	647	18.0	5.19	250	590 k	11'2 7	31.34	61447	204.14	SO	115	80
	Combination Turbines A&B + 542 MMBinCy Peaking Linu	1	OPESCE	625,030	3 (49,000)	310	10.1	15.7	÷ 1%	1206	927.0	1269	35.81	25 6	33.23	50	185	NO
	Use #4, 170 MW CT1 with BRSG and duct burrer	-1	GPLSL**	62: 030	3.349 680	123.0	16.9	15.8	* 12	134	35K 7	71.6	22.49	17.7	1 611	NO	3 F5	YO.
	Unit #5 170 MW CT2 with HRSG and duct bureer	•	GPL\$U*	625 030	3.349 GRO	122.9	16 a	14.8	* 12	His	134.7	73.8	27 49	12.7	1 *41	¥0	VIS	NO
OSTONIA BANK	Printy Hould of County Commiss offers																	
	MSW Combiniona Unit #1 (North)	:	WERCHI	640,466	3 34 / 512	125.0	1% (	4.5	137	49,15	\$116	28	17.89	32.8	4.31	CON	345	YES
	MSW problemon (feet #7 (Seech)	7	SCRCID	447,4111	7 349,941	125 0	34.1	4.5	137	45.65	2276	58.7	25.84	32.8	4.51	CON	165	115
oven4 Gel/	Power Company - Sthely Floreric Congruing Plant																	
	Description of the Phase I & H Assa Rain Unit		GECBI	7,02,400	1 393 Kjur	1500	14.7	35,5	÷ 11	130	-3H.2							
	Boder #2 (Phase I & II And Rem Unit)	i	GFC81	7.00 (400)	1 394 pipi	1500	45.7	: 1,1 21.4	+ 11	130	* 9H, 2 * 3H, 2	4()4) 4(24)	\$2.19 \$2.19	1,944.0	5043,990 3041,990	NO NO	ን ይዩ ን' ይዩ	NO.

Note

FXP - PSD graphing water

COS 1 PSD terms at agranius

ND - Baselinz Sikroz, dock avy affect PSD everyment

#### **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<sub>X</sub>) and sulfur dioxide (SO<sub>2</sub>) 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 SO<sub>2</sub> 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 Final 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**

- 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.
- 2. <u>Compliance Authority</u>: 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. <u>Applicable Regulations, Forms and Application Procedures</u>: 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**

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 in 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. <u>NESHAP Subpart MM for Kraft Pulp Mills</u>: 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. <u>NESHAP Subpart S for the Pulp and Paper Industry</u>: 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<sub>X</sub> 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

- 7. 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. <u>Authorized Fuel</u>: 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. <u>Restricted Operation</u>: 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 <sub>x</sub> 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 <sub>2</sub> and 103.0 lb/hour	30-day rolling average	CEMS	
	No. 6 oil 4.6 lb/hour and 0.25 lb/ton of CaO		3-hour average		
SO <sub>2</sub> <sup>b</sup>	petcoke blends	First 180 days: 32.0 lb/hour and 1.74 lb/ton CaO	3-hour average	EPA Method 6 or 6C	
	percoke bienus	After first 180 days: 18.8 lb/hour and 1.02 lb/ton CaO	J-nour average		

- a. NO<sub>X</sub>: Continuous compliance with the NO<sub>X</sub> standards shall be demonstrated based on CEMS data once the CEMS is installed and certified.
- b. SO<sub>2</sub>: The SO<sub>2</sub> standards for oil firing are effective after completing construction of the burner system. The higher SO<sub>2</sub> 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 SO<sub>2</sub> emissions rate. The lower SO<sub>2</sub> 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 SO<sub>2</sub> 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.]

#### A. Lime Kiln (EU-004)

12. Test Methods: Required tests shall be performed in accordance with the following reference methods.

EPA Method	Description
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
6 or 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. <u>Initial Compliance Tests</u>: The emissions unit shall be tested to demonstrate initial compliance with the emissions standards for SO<sub>2</sub>. 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 SO<sub>2</sub> 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 SO<sub>2</sub> 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 1<sup>st</sup> to September 30<sup>th</sup>), the emissions unit shall be tested to demonstrate compliance with the emissions standards for SO<sub>2</sub>. [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 SO<sub>2</sub> BACT standard. The testing protocol shall include, but not be limited to, the following information: SO<sub>2</sub> 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 SO<sub>2</sub> 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 1<sup>st</sup> to September 30<sup>th</sup>). [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 SO<sub>2</sub> Standards: The following new SO<sub>2</sub> emissions standards apply to the Nos. 3 and 4 combination boilers in addition to any existing SO<sub>2</sub> emissions standards.
  - 1. SO<sub>2</sub> emissions shall not exceed 1219 lb/hour when only the No. 3 combination boiler is operating based on a 3-hour rolling CEMS average.
  - 2. The combined SO<sub>2</sub> emissions from No. 3 and No. 4 combination boilers shall not exceed 1219 lb/hr when both Nos. 3 and 4 are operating and the SO<sub>2</sub> emissions from No. 4 shall not exceed 1183 lb/hr based on 3-hour rolling CEMS averages.
  - 3. SO<sub>2</sub> emissions shall not exceed 845 lb/hour when only the No. 3 combination boiler is operating based on a 24-hour rolling CEMS average.
  - 4. SO<sub>2</sub> emissions shall not exceed 965 lb/hour when only the No. 4 combination boiler is operating based on a 24-hour rolling CEMS average.
  - 5. When both Nos. 3 and 4 combination boilers are operating SO<sub>2</sub> emissions from No. 3 shall not exceed 300 lb/hr and the SO<sub>2</sub> emissions from No. 4 shall not exceed 643 lb/hr based on 24-hour rolling CEMS averages.

Within 90 days of issuance of this permit, the permittee may submit an application to revise the above SO<sub>2</sub> emissions standards based on a revised modeling analysis. {Permitting Note: The new enclosure adversely affects dispersion of the existing stack plumes. The new SO<sub>2</sub> emissions standards are based on the revised 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

Appendix D. Common Testing Requirements

Appendix E. Summary of BACT Determinations

Appendix F. CEMS Requirements

Appendix G. NSPS Subpart BB Provisions

#### **SECTION 4. APPENDIX A**

#### 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

#### **SECTION 4. APPENDIX A**

#### 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

Fl: fluorideft²: 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<sub>X</sub>: nitrogen oxides

NSPS: New Source Performance Standards

O&M: operation and maintenance

O<sub>2</sub>: oxygen
Pb: lead

PM: particulate matter

PM<sub>10</sub>: 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 sef: 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)

SO<sub>2</sub>: sulfur dioxide TPH: tons per hour TPY: tons per year

UTM: Universal Transverse Mercator coordinate system

VE: visible emissions

**VOC**: volatile organic compounds

#### SECTION 4. APPENDIX B

#### **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

#### SECTION 4. APPENDIX B

#### **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
    - 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.

#### SECTION 4. APPENDIX C

#### 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. <u>Records Retention</u>: 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.]

### 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

## COMMON TESTING REQUIREMENTS

- 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<sub>X</sub> and SO<sub>2</sub> 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 SO<sub>2</sub> 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<sub>X</sub> and SO<sub>2</sub> emissions.

Pollutant	Fuel	Emission Standards	Averaging Time	Compliance Method
NO <sub>X</sub> ª	natural gas or oil	110 ppmvd @ 10% $\mathrm{O}_2$	30-day rolling average	CEMS
		68.0 lb/hour	3-hour average	EPA Method 7E
	90% petcoke blends	190 ppmvd @ 10% O <sub>2</sub>	30-day rolling average	CEMS
		103.0 lb/hour	3-hour average	EPA Method 7E
SO <sub>2</sub> <sup>b</sup>	natural gas or oil	4.6 lb/hour and 0.25 lb/ton of CaO	3-hour average	EPA Method 6C
	90% petcoke blends	First 180 days: 32.0 lb/hour and 1.74 lb/ton CaO	3-hour average	
		After first 180 days: 18.8 lb/hour and 1.02 lb/ton CaO		

- a. NO<sub>X</sub>: Initial compliance with the "lb/hour" standard shall be demonstrated based on stack testing. Continuous compliance with the "ppmvd @ 10% O<sub>2</sub>" standard shall be demonstrated based on CEMS data once the CEMS is installed and certified. The basis for the NO<sub>X</sub> BACT determination is the use of good combustion practices and a low-NO<sub>X</sub> burner system.
- b. SO<sub>2</sub>: The SO<sub>2</sub> standards for oil firing are effective after completing construction of the burner system. The higher SO<sub>2</sub> 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 SO<sub>2</sub> emissions rate. The lower SO<sub>2</sub> 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 SO<sub>2</sub> standards for petcoke firing with tests conducted during the first 180 calendar days after first firing petcoke. The basis for the SO<sub>2</sub> 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. Span Values and Dual Range Monitors: 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 CO<sub>2</sub> 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<sub>N</sub> 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<sub>X</sub>, The required RATA tests shall be performed using EPA Method 7E in Appendix A of 40 CFR part 60. NO<sub>X</sub> shall be expressed "as NO<sub>2</sub>."
- 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

### **CEMS REQUIREMENTS**

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.

## **CEMS REQUIREMENTS**

- 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.

#### NSPS PROVISIONS

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:

### NSPS PROVISIONS

- (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 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).