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RECEIVED
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BUREAU OF AIR REGULATION

February 15, 2000

Mr. Scott M. Sheplak, P.E.
Title V Section
Bureau of Air Regulation
Department of Environmental Protection

Subject: Written Comments on DRAFT Title V Permit No. 0530021-002-AV
Florida Crushed Stone Company
Brooksville Cement, Lime and Power Plants

Dear Mr. Sheplak:

This letter provides written comments on the referenced DRAFT permit.

Text requested for deletion is indicated by strikethrough, text requested to be added is indicated by underlining.

Thank you for your review of these comments.

Sincerely,

Steven C. Cullen, P.E.
Koogler & Associates
Consultant to Florida Crushed Stone Company

Copies to: Don Elias – RTP Environmental
Jake Varn – Fowler, White
Pat Venable – Florida Crushed Stone Company

Comment: Intent to Issue Title V Air Operation Permit dated October 21, 1999: Change Mr. Joseph J. Piermatteo, Senior Vice President to:

Mr. Mike McHugh, Vice President and General Manager

E.U. ID No./Facility ID No.	Brief Description
Brooksville Cement Plant I	
-001/D-75	Filter Dust Bin (was Pre-Mix Bin) with Baghouse
-002/D-67	Fly Ash/Equilibrium Catalyst Storage Silo with Baghouse
-004/F-14	Raw Meal Transfer with Baghouse
-006/G-12 (A & B)	Two Blend Silos with Baghouse
-007/H-15	Kiln Feed Surge Bin (was Kiln Feed Bin) with Baghouse
-008/S-04	Clinker Handling System
-010/L-06 & L-07	Clinker Storage Silo and Finish Mill Storage Silo with Baghouse
-011/L-08	Gypsum and Limestone Bins (was Clinker Silo) with Baghouse
-012/M-08	Silo Discharge with Baghouse
-013/N-13	Finish Mill with Baghouse
-014/Q-17	Cement Storage Silos #1 & #2 Discharge System with Baghouse
-015/Q-15	Cement Storage Silos #1 & #2 with Baghouse
-017/D-63	Iron Ore Bin with Baghouse
-019/M-05	Finish Mill Feed Belt with Baghouse
-020/	Kiln, Raw Mill and Clinker Cooler with Baghouse
-021/Z-17	Cement Storage Silo #3 Discharge System with Baghouse
-022/Z-15	Cement Storage Silo #3 with Baghouse
-023/	Cement Storage Silo #4 and Truck Loadout Sys. with Baghouse
-024/Z-18	Cement Storage Silo and Railcar Loadout Sys. with Baghouses
Brooksville Lime Plant	
-032/	Lime Hydrator
-033/	Lime Bagging Operation
-034/	Bulk Truck Loadout
~~-yyy~~043	Quicklime Receiving and Storage Silo with Baghouse
Brooksville Power Plant	
-035/D-38	Limestone Rock Bin Baghouse
-036/D-31	Contaminated Fly Ash & Filter Dust Bin
-037/D-39	Limestone Screening System
-038/D-13	Limestone Fines Storage Bin
-039/Z-31	Lime Dust Storage Bin
-018	Power Plant
-042	Coal Receiving, Handling and Transfer System (fugitives)

Comment: Please assign an emissions unit ID No. for Quicklime Receiving and Storage Silo with Baghouse.

A.2. Permitted Capacity. The maximum process/transfer/throughput rates are:

E.U. ID No.	Brief Description	Maximum Rate
-001	Filter Dust Bin with Baghouse	450 tons/hour (TPH)
-002	Fly Ash/Equilibrium Catalyst Bin with Baghouse	25 TPH
-004	Raw Meal Transfer with Baghouse	125 TPH
-006	Blending Silo with Baghouse	125 TPH
-007	Kiln Feed Surge Bin with Baghouse	125 TPH
-010	Clinker Storage Silo & Finish Mill Storage Silo with Baghouse	~~75~~83 TPH
-011	Gypsum and Limestone Bins with Baghouse	75 TPH
-012	Silo Discharge with Baghouse	122 TPH
-013	Finish Mill with Baghouse	125 TPH; 876,000 TPY
-014	Cement Storage Silos #1 & #2 Discharge Sys. with Baghouse	300 TPH
-015	Cement Storage Silos #1 & #2 with Baghouse	125 TPH each 876,000 TPY each
-017	Iron Ore Bin with Baghouse	100 TPH
-019	Finish Mill Feed Belt with Baghouse	120 TPH
-021	Cement Storage Silo #3 Discharge Sys. with Baghouse	300 TPH
-022	Cement Storage Silo #3 with Baghouse	125 TPH; 876,000 TPY
-023	Cement Storage Silo #4 & Truck Loadout Sys. with Baghouse	47 TPH: silo 390 TPH: trucks
-024	Cement Storage Silo and Railcar Loadout System with Baghouses	30 TPH: silo 100 TPH: railcars

Comment: The process rate for E.U. 010-Clinker Storage Silo & Finish Mill Storage Silo with Baghouse is dependent on the clinker cooler rate of 83.0 TPH.

A.6. Particulate Matter. The maximum allowable particulate matter emissions are:

E.U. ID No.	Brief Description	Maximum Allowable Limits
-001	Filter Dust Bin with Baghouse	0.015 gr/acfm; 0.7 lb/hr; 3.07 TPY
-002	Fly Ash/Equilibrium Catalyst Bin with Baghouse	0.015 gr/acfm; 0.4 lb/hr; 1.75 TPY
-004	Raw Meal Transfer with Baghouse	0.015 gr/acfm; 0.2 lb/hr; 0.88 TPY
-006	Blending Silo with Baghouse	0.015 gr/acfm; 2.2 lbs/hr; 9.64 TPY
-007	Kiln Feed Surge Bin with Baghouse	0.015 gr/acfm; 0.8 lb/hr; 3.50 TPY
-010	Clinker Storage Silo and Finish Mill Storage Silo with Baghouse	0.015 gr/acfm; 0.3 lb/hr; 1.31 TPY
-011	Gypsum and Limestone Bins with Baghouse	0.015 gr/acfm; 0.6 lb/hr; 2.63 TPY
-012	Silo Discharge with Baghouse	0.015 gr/acfm; 1.2 lbs/hr; 5.26 TPY
-013	Finish Mill with Baghouse	0.015 gr/acfm; 5.1 lbs/hr; 22.34 TPY
-014	Cement Storage Silos #1 & #2 Discharge Sys. with Baghouse	0.015 gr/acfm; 0.4 lb/hr; 1.75 TPY
-015	Cement Storage Silos #~~1~~1 & #2 with Baghouse	0.015 gr/acfm; 1.0 lb/hr; 4.38 TPY
-017	Iron Ore Bin with Baghouse	0.015 gr/acfm; 0.5 lb/hr; 2.19 TPY
-019	Finish Mill Feed Belt with Baghouse	1.16 lbs/hr; 5.08 tons/rolling 12-months
-021	Cement Storage Silo #3 Discharge Sys. with Baghouse	0.015 gr/acfm; 1.29 lbs/hr; 5.1 TPY
-022	Cement Storage Silo #3 with Baghouse	0.015 gr/acfm; 0.68 lb/hr; 2.7 TPY
-023	Cement Storage Silo #4 and Truck Loadout Sys. With Baghouse	0.015 gr/acfm; 0.11 lb/hr; 0.44 TPY
-024	Cement StorageSilo and Railcar Loadout Sys. with Baghouses	0.02 gr/acfm

Comment: Clerical suggestion in Brief Description of 015-Cement Storage Silos #1 & #2 with Baghouse.

B.3. Permitted Capacity. The maximum process/transfer/throughput rates are:

E.U. ID No.	Brief Description	Maximum Rate
-001	Filter Dust Bin with Baghouse	450 tons/hour (TPH)
-002	Fly Ash/Equilibrium Catalyst Bin with Baghouse	25 TPH
-004	Raw Meal Transfer with Baghouse	125 TPH
-006	Blending Silo with Baghouse	125 TPH
-007	Kiln Feed Surge Bin with Baghouse	125 TPH
-010	Clinker Storage Silo and Finish Mill Storage Silo with Baghouse	~~75~~83 TPH
-011	Gypsum and Limestone Bins with Baghouse	75 TPH
-012	Silo Discharge with Baghouse	122 TPH
-013	Finish Mill with Baghouse	125 TPH; 876,000 TPY
-014	Cement Storage Silos #1 & #2 Discharge System with Baghouse	300 TPH
-015	Cement Storage Silos #1 & #2 with Baghouse	125 TPH each 876,000 TPY each
-017	Iron Ore Bin with Baghouse	100 TPH
-019	Finish Mill Feed Belt with Baghouse	120 TPH
-021	Cement Storage Silo #3 Discharge System with Baghouse	300 TPH
-022	Cement Storage Silo #3 with Baghouse	125 TPH; 876,000 TPY
-023	Cement Storage Silo #4 and Truck Loadout System with Baghouse	47 TPH: silo 390 TPH: trucks
-024	Cement Storage Silo and Railcar Loadout System with Baghouses	30 TPH: silo 100 TPH: railcars

Comment: The process rate for E.U. 010-Clinker Storage Silo & Finish Mill Storage Silo with Baghouse is dependent on the clinker cooler rate of 83.0 TPH.

B.24. Notification requirements.

(a) The notification provisions of 40 CFR 63, Subpart A, are contained in Appendix 40 CFR 63, Subpart A, and are applicable. If any State requires a notice that contains all of the information required in a notification listed in 40 CFR 63.1353, the owner or operator may send the Administrator a copy of the notice sent to the State to satisfy the requirements of 40 CFR 63.1353 for that notification.

(b) Each owner or operator subject to the requirements of 40 CFR 63, Subpart LLL shall comply with the notification requirements in 40 CFR 63.9 as follows:

(1) Initial notifications as required by 40 CFR 63.9(b) through (d). For the purposes of 40 CFR 63, Subpart LLL, a Title V or 40 CFR Part 70 permit application may be used in lieu of the initial notification required under 40 CFR 63.9(b), provided the same information is contained in the permit application as required by 40 CFR 63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under 40 CFR Part 70 of this chapter and has received delegation of authority from the EPA. Permit applications shall be submitted by the same due dates as those specified for the initial notification.

(2) Notification of performance tests, as required by 40 CFR 63.7 and 63.9(e).

(3) Notification of opacity and visible emission observations required by 40 CFR 63.1349 in accordance with 40 CFR 63.6(h)(5) and 63.9(f).

~~(4) Notification, as required by 40 CFR 63.9(g), of the date that the continuous emission monitor performance evaluation required by 40 CFR 63.8(e) of this part is scheduled to begin.~~

(5) Notification of compliance status, as required by 40 CFR 63.9(h).

[Rule 62-204.800, F.A.C.; and, 40 CFR 63.1353]

Comment: Continuous emission monitors are not required for any of the emissions units described in Section B. of the DRAFT Permit.

C.11. Visible Emissions. Visible emissions shall be demonstrated ~~annually~~ in the year prior to permit renewal using DER Method 9 pursuant to 40 CFR 60, Appendix A, and Chapter 62-297, F.A.C. See Specific Conditions C.12. and C.18.

[AC27-118680; and, Rules 62-204.800 and 62-297.401, F.A.C.]

Comment: Compliance test frequency is otherwise specified by prior agency permit actions.

D.12. Visible Emissions. Visible emissions shall be demonstrated ~~annually~~in the year prior to permit renewal using DER Method 9 pursuant to Chapter 62-297, F.A.C. See Specific Conditions **D.8.**, **D.13.** and **D.19**.

[AC27-118680; Rule 62-297.401, F.A.C.; and, 40 CFR 63.1349(b)(2)]

Comment: Compliance test frequency is otherwise specified by prior agency permit actions. 40 CFR 63 imposes no new test frequency requirements for this E.U.

D.24. Notification requirements.

(a) The notification provisions of 40 CFR 63, Subpart A, are contained in Appendix 40 CFR 63, Subpart A, and are applicable. If any State requires a notice that contains all of the information required in a notification listed in 40 CFR 63.1353, the owner or operator may send the Administrator a copy of the notice sent to the State to satisfy the requirements of 40 CFR 63.1353 for that notification.

(b) Each owner or operator subject to the requirements of 40 CFR 63, Subpart LLL shall comply with the notification requirements in 40 CFR 63.9 as follows:

(1) Initial notifications as required by 40 CFR 63.9(b) through (d). For the purposes of 40 CFR 63, Subpart LLL, a Title V or 40 CFR Part 70 permit application may be used in lieu of the initial notification required under 40 CFR 63.9(b), provided the same information is contained in the permit application as required by 40 CFR 63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under 40 CFR Part 70 of this chapter and has received delegation of authority from the EPA. Permit applications shall be submitted by the same due dates as those specified for the initial notification.

(2) Notification of performance tests, as required by 40 CFR 63.7 and 63.9(e).

(3) Notification of opacity and visible emission observations required by 40 CFR 63.1349 in accordance with 40 CFR 63.6(h)(5) and 63.9(f).

~~(4) Notification, as required by 40 CFR 63.9(g), of the date that the continuous emission monitor performance evaluation required by 40 CFR 63.8(e) of this part is scheduled to begin.~~

(5) Notification of compliance status, as required by 40 CFR 63.9(h).
[Rule 62-204.800, F.A.C.; and, 40 CFR 63.1353]

Comment: Continuous emission monitors are not required for any of the emissions units described in Section D. of the DRAFT Permit.

E.1. Permitted Capacity.
a. For the cement kiln I, the maximum dry feed rate to the kiln is 127.0 tons/hour (138.0 tons/hour feed rate to the preheater).
b. For the clinker cooler I, the maximum clinker production rate is 83.0 tons/hour.
c. For the raw mill, the maximum processing rate is 138 tons/hour (dry basis).
[AC27-61016/PSD-FL-091; Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, Application received June 13, 1996.]

Comment: As the preheater dry feed rate is 138.0 tons/hour, the raw mill actual processing rate will be somewhat higher due to water content of raw materials.

E.8. "On-Specification" Used Oil. The burning of "on-specification" used oil is allowed at this facility in accordance with all other conditions of this permit and the following additional conditions:
a. Only "on-specification" used oil generated at the Florida Crushed Stone Company's ~~Greg~~Gregg Mine and the Central Power and Lime Plant can be blended with the purchased fuel oil, which is to be used only as a startup fuel for preheating the cement kiln. "On-specification" used oil is defined as each used oil delivery that meets the 40 CFR 279 (Standards for the Management of Used Oil) specifications listed below. Used oil that does not meet all of the following specifications is considered "off-specification" oil and shall not be fired.

Constituent/Property *	Allowable Level
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash Point	140 °F minimum

* As determined by approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

Comment: Clerical suggestion for Gregg Mine.

E.12. PM, NOx, SO_2, and Visible Emissions. The permittee shall annually conduct:
a. Performance tests on the main stack for PM, NOx, SO_2, and visible emissions:
~~(1) during normal operations when the power plant and cement plant I are operating in combination;~~
~~(2) at or near 1,850 MMBtu/hr heat input when the power plant is operating alone; and,~~
(3) at or near maximum production when the cement plant I is operating alone.
~~b. Visible emissions tests on all baghouses.~~
[PSD-FL-090 and PSD-FL-091; PA 82-17E; and, Rule 62-297.310(7), F.A.C.]

Comment:
(1) A request for an Alternate Sampling Procedure to otherwise specify compliance test frequency by order is under review by the Department.
(2) This condition does not specify an applicable requirement for this emissions unit.
b. As there is a single baghouse, this condition is duplicative with Condition E.12.a.

E.13. Particulate Matter. Performance tests for PM shall be demonstrated using EPA Method 5 pursuant to 40 CFR 60, Appendix A, and Chapter 62-297, F.A.C. The emissions rate, E, of PM shall be computed for each run using the following equation (Equation 1; also, see Specific Conditions **E.5.** & **E.1~~1~~2.**):

$$E = (c_S \times Q_{sd})/P \times K \qquad \text{(Equation1)}$$

Where: E = emissions rate of PM, kg/metric ton (lb/ton) of kiln feed.
c_S = concentration of PM, g/dscm (g/dscf), as determined by Method 5.
Q_{sd} = volumetric flow rate of effluent gas, dscm/hr (dscf/hr), as determined by Method 5.
P = total kiln feed (dry basis) rate, metric ton/hr (ton/hr), as confirmed by material balance over the production system.
K = conversion factor 1000g/kg (453.6 g/lb).

The sampling time and sampling volume for each run shall be at least 60 minutes and 0.85 dscm (30.0 dscf) for the kiln and at least 60 minutes and 1.15 dscm (40.6 dscf) for the clinker cooler.

[Rules 62-204.800 & 62-297.401, F.A.C.; 40 CFR 60.64(b)(1) thru (3); AC27-61016/PSD-FL-091; and, AC27-118674]

Comment: Clerical suggestion for cross reference to **E.12.**

E.27. Nitrogen Oxide. The owner or operator shall continuously monitor NOx concentrations in the stack gases in the CPL (cement, power, and lime) main plant stack, and convert the same to a mass emission rate (lb/hr on a 1-hour average) using a FDEP approved conversion factor. ~~Within 6 months following EPA promulgation of final regulations on continuous emission monitoring (40 CFR Part 75),~~ a flow monitor and NOx emission monitor (EPA-approved or equivalent) shall be installed in the CPL main plant stack to continuously measure the stack gas flow rate and NOx concentration. The monitors shall be maintained and calibrated periodically to insure adequate data. The data shall be recorded on an hourly basis and used in the determination of NOx stack emissions.
[AC27-222095 and PSD-FL-091C; and, 40 CFR 60, Appendix B]

Comments: This reference is obsolete as 40 CFR 75 was promulgated in January 1993.

F.3. Permitted Capacity.
a. For the cement kiln I, the maximum dry feed rate to the kiln is 127.0 tons/hour (138.0 tons/hour feed rate to the preheater).
b. For the clinker cooler I, the maximum clinker production rate is 83.0 tons/hour.
c. For the in-line kiln/raw mill, the maximum processing rate is 138 tons/hour (dry basis).
[AC27-61016/PSD-FL-091; Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, Application received June 13, 1996.]

Comment: As the preheater dry feed rate is 138.0 tons/hour, the raw mill actual processing rate will be somewhat higher due to water content of raw materials.

F.11. "On-Specification" Used Oil. The burning of "on-specification" used oil is allowed at this facility in accordance with all other conditions of this permit and the following additional conditions:
a. Only "on-specification" used oil generated at the Florida Crushed Stone Company's ~~Greg~~Gregg Mine and the Central Power and Lime Plant can be blended with the purchased fuel oil, which is _
to be used only as a startup fuel for preheating the cement kiln I. "On-specification" used oil is defined as each used oil delivery that meets the 40 CFR 279 (Standards for the Management of Used Oil) specifications listed below. Used oil that does not meet all of the following specifications is considered "off-specification" oil and shall not be fired.

Constituent/Property *	Allowable Level
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash Point	140 °F minimum

* As determined by approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

b. Permittee agrees that the used oil to be blended and burned at this facility shall not be a hazardous waste as defined in Rule 62-210.200, F.A.C., or 40 CFR Part 261, and will not include fuels or blended fuels consisting in whole or part of hazardous waste or which include mixtures of any solid waste generated from the treatment, storage, or disposal of hazardous waste, and such burning shall be in compliance with Section 403.769(3), F.S.
[AC27-222095/PSD-FL-091D; and, 40 CFR 279.11]

Comment: Clerical suggestion for Gregg Mine.

F.15. PM, NOx, SO_2, and Visible Emissions. The permittee shall annually conduct:
a. Performance tests on the main stack for PM, NOx, SO_2, and visible emissions:
(1) during normal operations when the power plant and cement plant I are operating in combination;
(2) at or near 1,850 MMBtu/hr heat input when the power plant is operating alone; and,
(3) at or near maximum production when the cement plant I is operating alone.
b. Visible emissions tests on all baghouses.
[PSD-FL-090 and PSD-FL-091; PA 82-17E; and, Rule 62-297.310(7), F.A.C.]

Comment:
(1) A request for an Alternate Sampling Procedure to otherwise specify compliance test frequency by order is under review by the Department.
(2) This condition does not specify an applicable requirement for this emissions unit.
b. As there is a single baghouse, this condition is duplicative with Condition **F.15.**a.

F.16. Initial and Subsequent Performance Testing.
(a) The owner or operator of an affected emissions unit subject to 40 CFR 63, Subpart LLL, shall demonstrate initial compliance with the emission limits of 40 CFR 63.1343 and 63 CFR 63.1345 (See Specific Conditions ~~F.7.~~**F.7.** and ~~F.9.~~**F.8.**) using the test methods and procedures in paragraph 40 CFR 63.1349(b) and 40 CFR 63.7. Performance test results shall be documented in complete test reports that contain the information required by paragraphs 40 CFR 63.1349(a)(1) through (a)(10), as well as all other relevant information. The plan to be followed during testing shall be made available to the Administrator prior to testing, if requested.
(1) A brief description of the process and the air pollution control system;
(2) Sampling location description(s);
(3) A description of sampling and analytical procedures and any modifications to standard procedures;
(4) Test results;
(5) Quality assurance procedures and results;
(6) Records of operating conditions during the test, preparation of standards, and calibration procedures;
(7) Raw data sheets for field sampling and field and laboratory analyses;
(8) Documentation of calculations;
(9) All data recorded and used to establish parameters for compliance monitoring; and
(10) Any other information required by the test method.
(b) Performance tests to demonstrate initial compliance with 40 CFR 63, Subpart LLL, shall be conducted as specified in paragraphs 40 CFR 63.1349(b)(1) through (b)(3).
(1) The owner or operator of a kiln subject to limitations on particulate matter emissions shall demonstrate initial compliance by conducting a performance test as specified in paragraphs 40 CFR 63.1349(b)(1)(i) through (b)(1)(iii). The owner or operator of an in-line kiln/raw mill subject to limitations on particulate matter emissions shall demonstrate initial compliance by conducting separate performance tests as specified in paragraphs 40 CFR 63.1349(b)(1)(i) through (b)(1)(iii) while the raw mill of the in-line kiln/raw mill is under normal operating conditions and while the raw mill of the in-line kiln/raw mill is not operating. The owner or operator of a clinker cooler subject to limitations on particulate matter emissions shall demonstrate initial compliance by conducting a performance test as specified in paragraphs 40 CFR 63.1349(b)(1)(i) through (b)(1)(iii). The opacity exhibited during the period of the Method 5 of Appendix A, 40 CFR Part 60 performance tests

required by paragraph 40 CFR 63.1349(b)(1)(i) shall be determined as required in paragraph 40 CFR 63.1349(b)(1)(v).

(i) EPA Method 5 of Appendix A, 40 CFR Part 60, shall be used to determine PM emissions. Each performance test shall consist of three separate runs under the conditions that exist when the affected source is operating at the highest load or capacity level reasonably expected to occur (See Specific Condition F.24.). Each run shall be conducted for at least one hour, and the minimum sample volume shall be 0.85 dscm (30 dscf). The average of the three runs shall be used to determine compliance. A determination of the particulate matter collected in the impingers ("back half") of the Method 5 particulate sampling train is not required to demonstrate initial compliance with the PM standards of 40 CFR 63, Subpart LLL. However this shall not preclude the permitting authority from requiring a determination of the "back half" for other purposes.

(ii) Suitable methods shall be used to determine the kiln or in-line kiln/raw mill feed rate, except for fuels, for each run.

(iii) The emission rate, E, of PM shall be computed for each run using Equation 1:

$$E = (c_S Q_{sd}) / P \qquad \textbf{(Equation 1)}$$

Where: E = emission rate of particulate matter, kg/Mg (lb/ton) of kiln feed.

c_S = concentration of PM, kg/dscm (g/dscf), as determined by Method 5.

Q_{sd} = volumetric flow rate of effluent gas, dscm/hr (dscf/hr), as determined by Method 5.

P = total kiln feed (dry basis), Mg/hr (ton/hr), as confirmed by material balance over the production system.

(v) Except as provided in paragraph 40 CFR 63.1349(b)(1)(vi) the opacity exhibited during the period of the Method 5 performance tests required by paragraph 40 CFR 63.1349(b)(1)(i) shall be determined through the use of a continuous opacity monitor (COM). The maximum six-minute average opacity during the three Method 5 test runs shall be determined during each Method 5 test run, and used to demonstrate initial compliance with the applicable opacity limits of 40 CFR 63.1343(b)(2) or 40 CFR 63.1345(a)(2). See Specific Conditions F.8.**F.8.** and F.15.**F.15.**

~~(2) The owner or operator of any affected source subject to limitations on opacity under 40 CFR 63, Subpart LLL, that is not subject to paragraph 40 CFR 63.1349(b)(1) shall demonstrate initial compliance with the affected source opacity limit by conducting a test in accordance with Method 9 of Appendix A, 40 CFR Part 60. The performance test shall be conducted under the conditions that exist when the affected source is operating at the highest load or capacity level reasonably expected to occur (See Specific Condition **F.22.**). The maximum six-minute average opacity exhibited during the test period shall be used to determine whether the affected source is in initial compliance with the standard. The duration of the Method 9 performance test shall be 3 hours (30 6-minute averages). See Specific Conditions **F.8. and F.14.**~~**F.15.**

(3) The owner or operator of an affected source subject to limitations on D/F emissions shall demonstrate initial compliance with the D/F emission limit by conducting a performance test using Method 23 of Appendix A, 40 CFR Part 60. The owner or operator of an in-line kiln/raw mill shall demonstrate initial compliance by conducting separate performance tests while the raw mill of the in-line kiln/raw mill is under normal operating conditions and while the raw mill of the in-line kiln/raw mill is not operating (See Specific Condition **F.22.**).

(i) Each performance test shall consist of three separate runs; each run shall be conducted under the conditions that exist when the affected source is operating at the

highest load or capacity level reasonably expected to occur (See Specific Condition F.24.). The duration of each run shall be at least three hours and the sample volume for each run shall be at least 2.5 dscm (90 dscf). The concentration shall be determined for each run and the arithmetic average of the concentrations measured for the three runs shall be calculated and used to determine compliance.

(ii) The temperature at the inlet to the kiln or in-line kiln/raw mill PMCD, and where applicable, the temperature at the inlet to the alkali bypass PMCD, must be continuously recorded during the period of the Method 23 test, and the continuous temperature record(s) must be included in the performance test report.

(iii) One-minute average temperatures must be calculated for each minute of each run of the test.

(iv) The run average temperature must be calculated for each run, and the average of the run average temperatures must be determined and included in the performance test report and will determine the applicable temperature limit in accordance with 40 CFR 63.1344(b).

(c) Except as provided in paragraph 40 CFR 63.1349(e), performance tests required under paragraphs 40 CFR 63.1349(b)(1) and (b)(2) shall be repeated ~~annually~~every five years. See Specific Conditions **F.15.** and **F.26.**

(d) Performance tests required under paragraph 40 CFR 63.1349(b)(3) shall be repeated every 30 months.

(e) The owner or operator is required to repeat the performance tests for kilns or in-line kiln/raw mills as specified in paragraphs 40 CFR 63.1349(b)(1) and (b)(3) within 90 days of initiating any significant change in the feed or fuel from that used in the previous performance test.

[Rules 62-204.800 and 62-297.310(7)(a)4., F.A.C.; and, 40 CFR 63.1349(a); (b)(1)(i), (ii), (iii) & (v); (b)(2); (b)(3)(i), (ii), (iii) & (iv); (c); (d); and, (e)]

Comment:

- Clerical suggestions for format and cross references.
- Text suggested for deletion is not applicable to this emissions unit.
- The performance testing required by 40 CFR 63.1349(b) is not identical to the annual testing described by condition **F.15.** 40 CFR 63.1349(c) specifies performance testing every five years.

F.18. Sulfur Dioxide. Compliance with the sulfur dioxide emission limits in Specific Condition ~~F.7.~~**F.7.** shall be demonstrated using EPA Method 6 pursuant to 40 CFR 60, Appendix A, and Chapter 62-297, F.A.C. See Specific Conditions **F.15.** and **F.26.**

[Rules 62-297.310(7) & 62-297.401, F.A.C.; AC27-61016/PSD-FL-091; and, AC27-118674]

F.19. Nitrogen Oxide. Compliance with the nitrogen oxide emission limits in Specific Condition ~~F.7.~~**F.7.** shall be demonstrated using EPA Method 7 pursuant to 40 CFR 60, Appendix A, and Chapter 62-297, F.A.C. See Specific Conditions **F.15.** and **F.26.**

[Rules 62-297.310(7) & 62-297.401, F.A.C.; AC27-61016/PSD-FL-091; and, AC27-118674]

Comment: Clerical suggestion for cross references to **F.7.**

F.28.~~(a)~~

(a) The owner or operator of each Portland cement plant shall prepare for each affected emissions unit subject to the provisions of 40 CFR 63, Subpart LLL, a written operations and maintenance plan. The plan shall be submitted to the Administrator for review and approval as part of the application for a 40 CFR Part 70 permit and shall include the following information:

(1) Procedures for proper operation and maintenance of the affected emissions unit and air pollution control devices in order to meet the emission limits and operating limits of 40 CFR 63.1343 through 40 CFR 63.1348;

(2) Corrective actions to be taken when required by paragraph 40 CFR 63.1350(e);

(3) Procedures to be used during an inspection of the components of the combustion system of each kiln and each in-line kiln raw mill located at the facility at least once per year~~; and~~.

(b) through (i) unchanged

(i) The owner or operator of any kiln or in-line kiln/raw mill subject to a D/F emission limit under this subpart shall conduct an inspection of the components of the combustion system of each kiln or in-line kiln raw mill at least once per year.

(k) The owner or operator of an affected source subject to a particulate matter standard under 40 CFR 63.1343 shall install, calibrate, maintain and operate a particulate matter continuous emission monitoring system (PM CEMS) to measure the particulate matter discharged to the atmosphere. The compliance deadline for installing the PM CEMS and all requirements relating to performance of the PM CEMS and implementation of the PM CEMS requirement is deferred pending further rulemaking.

[Rule 62-204.800, F.A.C.; and, 40 CFR 63.1350(a)(1), (2) & (3); (b); (c)(1) & (3); (d)(1) & (3); (f); (i); and, (k)]

Comment: Clerical suggestions for condition.

F.31. Nitrogen Oxide. The owner or operator shall continuously monitor NOx concentrations in the stack gases in the CPL (cement, power, and lime) main plant stack, and convert the same to a mass emission rate (lb/hr on a 1-hour average) using a FDEP approved conversion factor. ~~Within 6 months following EPA promulgation of final regulations on continuous emission monitoring (40 CFR Part 75),~~ a flow monitor and NOx emission monitor (EPA-approved or equivalent) shall be installed in the CPL main plant stack to continuously measure the stack gas flow rate and NOx concentration. The monitors shall be maintained and calibrated periodically to insure adequate data. The data shall be recorded on an hourly basis and used in the determination of NOx stack emissions. The calibration of the continuous monitoring system for NOx shall be in accordance with 40 CFR 60, Appendix B, Performance Specification 2.

[AC27-222095 and PSD-FL-091C; and, 40 CFR 60, Appendix B]

Comment: This reference is obsolete as 40 CFR 75 was promulgated in January 1993.

Subsection G. This section addresses the following emissions units.

Brooksville Lime Plant/Chemical Lime, Inc.	
E.U. ID No.	**Brief Description**
-032	Lime Hydrator Operation with a Cyclone and a Contact Wet Scrubber
-033	Lime Bagging Operation with Baghouse
-034	Bulk Truck Loadout Operation with Baghouse and Loading Spouts (3)
~~-yyy~~043	Quicklime Receiving and Storage Silo with Baghouse

Comment: Please assign an emissions unit ID No. for Quicklime Receiving and Storage Silo with Baghouse.

G.2. Hours of Operation.
a. These emissions units are allowed to operate continuously, i.e., 8,760 hours/year, except for the Bulk Truck Loadout Operation and the Quicklime Receiving and Storage Silo Operation.
b. The Bulk Truck Loadout Operation is allowed to operate 6 hrs/day, 7 days/wk, and 52 wks/yr, for a total of 2184 hrs/yr.
c. The Quicklime Receiving and Storage Silo Operation is allowed to operate 6 hrs/day, 7 days/wk, and 52 wks/yr, for a total of 2184 hrs/yr.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; AC27-82796; AO27-87210; AO27-25269; 0530005-004-AC; and, Application received June 13, 1996.]

Comment: Clerical suggestion.

G.14. 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 or the duration of the batch cycle 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:
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, the minimum sample volume per run shall be 25 dry standard cubic feet.
(c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.

(d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1 (attached).
(e) 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.]

Comment: Rule 62-297, F.A.C. provides shorter periods of observation for batch type processes.

G.16. Frequency of Compliance Tests. 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.

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 Rule 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.
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; 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.
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.

(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 may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and 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 Rule 62-297.310(7)(b), F.A.C., shall apply.
[Rule 62-297.310(7), F.A.C.]

Comment: Compliance test frequency is otherwise specified by prior agency permit actions. A Method 5 test is required every five years for the Hydrator, and a Method 9 test of batch cycle duration is required every five years for the Bulk Loadout.

I.16. PM, NOx, SO_2, and Visible Emissions. The permittee shall annually conduct (See Specific Condition **I.30.**):
a. Performance tests on the main stack for PM, NOx, SO_2, and visible emissions:
~~(1) during normal operations when the power plant and cement plant I are operating in combination;~~
~~(2) at or near 1,850 MMBtu/hr heat input when the power plant is operating alone; and,~~
~~(3) at or near maximum production when the cement plant I is operating alone.~~
~~b. Visible emissions tests on all baghouses.~~
[PSD-FL-090 and PSD-FL-091; PA 82-17 and PA 82-17E; and, Rule 62-297.310(7), F.A.C.]

Comment:
(1-2) A request for an Alternate Sampling Procedure to otherwise specify compliance test frequency by order is under review by the Department.
(3) This condition does not specify an applicable requirement for this emissions unit.
b. As there is a single baghouse, this condition is duplicative with Condition **I.16.**a.

I.20. Nitrogen Oxide. Compliance with the NOx emissions limits in Specific Condition ~~**I.10.**~~**I.9.** shall be demonstrated in accordance with EPA Method 7 or 7E pursuant to 40 CFR 60, Appendix A, and Chapter 62-297, F.A.C.
[Rule 62-297.401, F.A.C.; PA 82-17 and PA 82-17E; PSD-FL-090; and, 40 CFR 60, Appendix A]

I.21. Total Fluorides. Compliance with the fluoride emissions limit in Specific Condition ~~**I.11.**~~**I.10.** shall be demonstrated, if required by EPA, in accordance with EPA Method 13A or 13B, and 40 CFR 60.8.
[PSD-FL-090; and, 40 CFR 60, Appendix A]

I.22. Sulfuric Acid Mist. Compliance with the sulfuric acid mist emissions limit in Specific Condition ~~**I.12.**~~**I.11.** shall be demonstrated, if required by EPA, in accordance with EPA Method 8, and 40 CFR 60.8.
[PSD-FL-090; and, 40 CFR 60, Appendix A]

I.23. Beryllium. Compliance with the beryllium emissions limit in Specific Condition ~~**I.13.**~~**I.12.** shall be demonstrated, if required by EPA, in accordance with EPA Method 104, and 40 CFR 60.8.
[PSD-FL-090; and, 40 CFR 60, Appendix A]

I.24. Mercury. Compliance with the mercury emissions limit in Specific Condition ~~I.14.~~**I.13.** shall be demonstrated, if required by EPA, in accordance with EPA Method 101A, and 40 CFR 60.8.
[PSD-FL-090; and, 40 CFR 60, Appendix A]

I.25. EPA Methods 1 and 2 shall be used for determining stack gas velocity when required in Specific Conditions ~~I.19. through I.25.~~**I.18.** through **I.24.**
[PSD-FL-090; and, 40 CFR 60, Appendix A]

Comment: Clerical suggestions for cross references.

I.28. The permittee shall provide 30 days notice of the performance tests or 10 working tests for stack tests in order to afford the Department the opportunity to have an observer present.
[PA 82-17]

Comment: Citation to "10 working tests" is unclear. If requirement is for compliance test notification, 15 days notice is required by Rule 62-297, F.A.C.

I.37. Instruments shall be installed, calibrated and maintained to continuously measure the amounts of coal and limestone used in the power boiler~~, material fed to cement kiln I, and clinker produced by cement kiln I~~.
[PA 82-17 and PA 82-17E; and, PSD-FL-090]

I.44. The records of coal and limestone used in the power boiler, fuel analyses, ~~daily cement kiln I feed, and clinker produced~~ shall be reported quarterly to the Department's Southwest District office.
[PA 87-17 and PA 82-17E; and, PSD-FL-090]

Comment: The text requested for deletion is not applicable to this emissions unit.

Subsection J. This section addresses the following emissions unit/activity.

Brooksville Cement Plant I/Power Plant/Lime Plant/Central Power & Lime, Inc.	
E.U. ID/Facility ID No.	**Brief Description**
-042/~~-xxx~~	Coal Receiving, Handling and Transfer Activities (fugitives)

J.2. Method of Operation. This emissions unit is an activity of receiving, storage, and transferring/conveying coal to the Florida Crushed Stone cement plant I/power plant/lime plant (C/P/L).~~-~~
[Rule 62-213.410, F.A.C.]

Comment: Clerical suggestion on E.U. ID No. and extra punctuation in **J.2.**

INTEROFFICE MEMORANDUM

Date: 15-Feb-2000 10:16am
From: Koogler & Associates
koogler@worldnet.att.net
Dept:
Tel No:

To: Scott.Sheplak (Scott.Sheplak@dep.state.fl.us)
CC: Bruce.Mitchell (Bruce.Mitchell@dep.state.fl.us)

Subject: Florida Crushed Comments

Dear Scott & Bruce:

Please find attached our written comments on the Florida Crushed Stone DRAFT Title V Permit.

Hard copy is being sent out today by FedEx.

Thank you in advance for your review and consideration of these comments.
Thank you also for providing additional time for us to prepare these comments.

Regards,

Steve Cullen

February 15, 2000

Mr. Scott M. Sheplak, P.E.
Title V Section
Bureau of Air Regulation
Department of Environmental Protection

Subject: Written Comments on DRAFT Title V Permit No. 0530021-002-AV
Florida Crushed Stone Company
Brooksville Cement, Lime and Power Plants

Dear Mr. Sheplak:

This letter provides written comments on the referenced DRAFT permit.

Text requested for deletion is indicated by strikethrough, text requested to be added is indicated by underlining.

Thank you for your review of these comments.

Sincerely,

Steven C. Cullen, P.E.
Koogler & Associates
Consultant to Florida Crushed Stone Company

Copies to: Don Elias – RTP Environmental
Jake Varn – Fowler, White
Pat Venable – Florida Crushed Stone Company

Comment: Intent to Issue Title V Air Operation Permit dated October 21, 1999: Change Mr. Joseph J. Piermatteo, Senior Vice President to:

Mr. Mike McHugh, Vice President and General Manager

E.U. ID No./Facility ID No.	Brief Description
Brooksville Cement Plant I	
-001/D-75	Filter Dust Bin (was Pre-Mix Bin) with Baghouse
-002/D-67	Fly Ash/Equilibrium Catalyst Storage Silo with Baghouse
-004/F-14	Raw Meal Transfer with Baghouse
-006/G-12 (A & B)	Two Blend Silos with Baghouse
-007/H-15	Kiln Feed Surge Bin (was Kiln Feed Bin) with Baghouse
-008/S-04	Clinker Handling System
-010/L-06 & L-07	Clinker Storage Silo and Finish Mill Storage Silo with Baghouse
-011/L-08	Gypsum and Limestone Bins (was Clinker Silo) with Baghouse
-012/M-08	Silo Discharge with Baghouse
-013/N-13	Finish Mill with Baghouse
-014/Q-17	Cement Storage Silos #1 & #2 Discharge System with Baghouse
-015/Q-15	Cement Storage Silos #1 & #2 with Baghouse
-017/D-63	Iron Ore Bin with Baghouse
-019/M-05	Finish Mill Feed Belt with Baghouse
-020/	Kiln, Raw Mill and Clinker Cooler with Baghouse
-021/Z-17	Cement Storage Silo #3 Discharge System with Baghouse
-022/Z-15	Cement Storage Silo #3 with Baghouse
-023/	Cement Storage Silo #4 and Truck Loadout Sys. with Baghouse
-024/Z-18	Cement Storage Silo and Railcar Loadout Sys. with Baghouses
Brooksville Lime Plant	
-032/	Lime Hydrator
-033/	Lime Bagging Operation
-034/	Bulk Truck Loadout
~~-yyy~~043	Quicklime Receiving and Storage Silo with Baghouse
Brooksville Power Plant	
-035/D-38	Limestone Rock Bin Baghouse
-036/D-31	Contaminated Fly Ash & Filter Dust Bin
-037/D-39	Limestone Screening System
-038/D-13	Limestone Fines Storage Bin
-039/Z-31	Lime Dust Storage Bin
-018	Power Plant
-042	Coal Receiving, Handling and Transfer System (fugitives)

Comment: Please assign an emissions unit ID No. for Quicklime Receiving and Storage Silo with Baghouse.

A.2. Permitted Capacity. The maximum process/transfer/throughput rates are:

E.U. ID No.	Brief Description	Maximum Rate
-001	Filter Dust Bin with Baghouse	450 tons/hour (TPH)
-002	Fly Ash/Equilibrium Catalyst Bin with Baghouse	25 TPH
-004	Raw Meal Transfer with Baghouse	125 TPH
-006	Blending Silo with Baghouse	125 TPH
-007	Kiln Feed Surge Bin with Baghouse	125 TPH
-010	Clinker Storage Silo & Finish Mill Storage Silo with Baghouse	~~75~~83 TPH
-011	Gypsum and Limestone Bins with Baghouse	75 TPH
-012	Silo Discharge with Baghouse	122 TPH
-013	Finish Mill with Baghouse	125 TPH; 876,000 TPY
-014	Cement Storage Silos #1 & #2 Discharge Sys. with Baghouse	300 TPH
-015	Cement Storage Silos #1 & #2 with Baghouse	125 TPH each 876,000 TPY each
-017	Iron Ore Bin with Baghouse	100 TPH
-019	Finish Mill Feed Belt with Baghouse	120 TPH
-021	Cement Storage Silo #3 Discharge Sys. with Baghouse	300 TPH
-022	Cement Storage Silo #3 with Baghouse	125 TPH; 876,000 TPY
-023	Cement Storage Silo #4 & Truck Loadout Sys. with Baghouse	47 TPH: silo 390 TPH: trucks
-024	Cement Storage Silo and Railcar Loadout System with Baghouses	30 TPH: silo 100 TPH: railcars

Comment: The process rate for E.U. 010-Clinker Storage Silo & Finish Mill Storage Silo with Baghouse is dependent on the clinker cooler rate of 83.0 TPH.

A.6. Particulate Matter. The maximum allowable particulate matter emissions are:

E.U. ID No.	Brief Description	Maximum Allowable Limits
-001	Filter Dust Bin with Baghouse	0.015 gr/acfm; 0.7 lb/hr; 3.07 TPY
-002	Fly Ash/Equilibrium Catalyst Bin with Baghouse	0.015 gr/acfm; 0.4 lb/hr; 1.75 TPY
-004	Raw Meal Transfer with Baghouse	0.015 gr/acfm; 0.2 lb/hr; 0.88 TPY
-006	Blending Silo with Baghouse	0.015 gr/acfm; 2.2 lbs/hr; 9.64 TPY
-007	Kiln Feed Surge Bin with Baghouse	0.015 gr/acfm; 0.8 lb/hr; 3.50 TPY
-010	Clinker Storage Silo and Finish Mill Storage Silo with Baghouse	0.015 gr/acfm; 0.3 lb/hr; 1.31 TPY
-011	Gypsum and Limestone Bins with Baghouse	0.015 gr/acfm; 0.6 lb/hr; 2.63 TPY
-012	Silo Discharge with Baghouse	0.015 gr/acfm; 1.2 lbs/hr; 5.26 TPY
-013	Finish Mill with Baghouse	0.015 gr/acfm; 5.1 lbs/hr; 22.34 TPY
-014	Cement Storage Silos #1 & #2 Discharge Sys. with Baghouse	0.015 gr/acfm; 0.4 lb/hr; 1.75 TPY
-015	Cement Storage Silos #~~1~~1 & #2 with Baghouse	0.015 gr/acfm; 1.0 lb/hr; 4.38 TPY
-017	Iron Ore Bin with Baghouse	0.015 gr/acfm; 0.5 lb/hr; 2.19 TPY
-019	Finish Mill Feed Belt with Baghouse	1.16 lbs/hr; 5.08 tons/rolling 12-months
-021	Cement Storage Silo #3 Discharge Sys. with Baghouse	0.015 gr/acfm; 1.29 lbs/hr; 5.1 TPY
-022	Cement Storage Silo #3 with Baghouse	0.015 gr/acfm; 0.68 lb/hr; 2.7 TPY
-023	Cement Storage Silo #4 and Truck Loadout Sys. With Baghouse	0.015 gr/acfm; 0.11 lb/hr; 0.44 TPY
-024	Cement StorageSilo and Railcar Loadout Sys. with Baghouses	0.02 gr/acfm

Comment: Clerical suggestion in Brief Description of 015-Cement Storage Silos #1 & #2 with Baghouse.

B.3. Permitted Capacity. The maximum process/transfer/throughput rates are:

E.U. ID No.	Brief Description	Maximum Rate
-001	Filter Dust Bin with Baghouse	450 tons/hour (TPH)
-002	Fly Ash/Equilibrium Catalyst Bin with Baghouse	25 TPH
-004	Raw Meal Transfer with Baghouse	125 TPH
-006	Blending Silo with Baghouse	125 TPH
-007	Kiln Feed Surge Bin with Baghouse	125 TPH
-010	Clinker Storage Silo and Finish Mill Storage Silo with Baghouse	~~75~~83 TPH
-011	Gypsum and Limestone Bins with Baghouse	75 TPH
-012	Silo Discharge with Baghouse	122 TPH
-013	Finish Mill with Baghouse	125 TPH; 876,000 TPY
-014	Cement Storage Silos #1 & #2 Discharge System with Baghouse	300 TPH
-015	Cement Storage Silos #1 & #2 with Baghouse	125 TPH each 876,000 TPY each
-017	Iron Ore Bin with Baghouse	100 TPH
-019	Finish Mill Feed Belt with Baghouse	120 TPH
-021	Cement Storage Silo #3 Discharge System with Baghouse	300 TPH
-022	Cement Storage Silo #3 with Baghouse	125 TPH; 876,000 TPY
-023	Cement Storage Silo #4 and Truck Loadout System with Baghouse	47 TPH: silo 390 TPH: trucks
-024	Cement Storage Silo and Railcar Loadout System with Baghouses	30 TPH: silo 100 TPH: railcars

Comment: The process rate for E.U. 010-Clinker Storage Silo & Finish Mill Storage Silo with Baghouse is dependent on the clinker cooler rate of 83.0 TPH.

B.24. Notification requirements.

(a) The notification provisions of 40 CFR 63, Subpart A, are contained in Appendix 40 CFR 63, Subpart A, and are applicable. If any State requires a notice that contains all of the information required in a notification listed in 40 CFR 63.1353, the owner or operator may send the Administrator a copy of the notice sent to the State to satisfy the requirements of 40 CFR 63.1353 for that notification.

(b) Each owner or operator subject to the requirements of 40 CFR 63, Subpart LLL shall comply with the notification requirements in 40 CFR 63.9 as follows:

(1) Initial notifications as required by 40 CFR 63.9(b) through (d). For the purposes of 40 CFR 63, Subpart LLL, a Title V or 40 CFR Part 70 permit application may be used in lieu of the initial notification required under 40 CFR 63.9(b), provided the same information is contained in the permit application as required by 40 CFR 63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under 40 CFR Part 70 of this chapter and has received delegation of authority from the EPA. Permit applications shall be

submitted by the same due dates as those specified for the initial notification.
(2) Notification of performance tests, as required by 40 CFR 63.7 and 63.9(e).
(3) Notification of opacity and visible emission observations required by 40 CFR 63.1349 in accordance with 40 CFR 63.6(h)(5) and 63.9(f).

~~(4) Notification, as required by 40 CFR 63.9(g), of the date that the continuous emission monitor performance evaluation required by 40 CFR 63.8(e) of this part is scheduled to begin.~~

(5) Notification of compliance status, as required by 40 CFR 63.9(h).

[Rule 62-204.800, F.A.C.; and, 40 CFR 63.1353]

Comment: Continuous emission monitors are not required for any of the emissions units described in Section B. of the DRAFT Permit.

C.11. Visible Emissions. Visible emissions shall be demonstrated ~~annually~~ in the year prior to permit renewal using DER Method 9 pursuant to 40 CFR 60, Appendix A, and Chapter 62-297, F.A.C. See Specific Conditions C.12. and C.18.

[AC27-118680; and, Rules 62-204.800 and 62-297.401, F.A.C.]

Comment: Compliance test frequency is otherwise specified by prior agency permit actions.

D.12. Visible Emissions. Visible emissions shall be demonstrated ~~annually~~in the year prior to permit renewal using DER Method 9 pursuant to Chapter 62-297, F.A.C. See Specific Conditions **D.8.**, **D.13.** and **D.19**.

[AC27-118680; Rule 62-297.401, F.A.C.; and, 40 CFR 63.1349(b)(2)]

Comment: Compliance test frequency is otherwise specified by prior agency permit actions. 40 CFR 63 imposes no new test frequency requirements for this E.U.

D.24. Notification requirements.

(a) The notification provisions of 40 CFR 63, Subpart A, are contained in Appendix 40 CFR 63, Subpart A, and are applicable. If any State requires a notice that contains all of the information required in a notification listed in 40 CFR 63.1353, the owner or operator may send the Administrator a copy of the notice sent to the State to satisfy the requirements of 40 CFR 63.1353 for that notification.

(b) Each owner or operator subject to the requirements of 40 CFR 63, Subpart LLL shall comply with the notification requirements in 40 CFR 63.9 as follows:

(1) Initial notifications as required by 40 CFR 63.9(b) through (d). For the purposes of 40 CFR 63, Subpart LLL, a Title V or 40 CFR Part 70 permit application may be used in lieu of the initial notification required under 40 CFR 63.9(b), provided the same information is contained in the permit application as required by 40 CFR 63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under 40 CFR Part 70 of this chapter and has received delegation of authority from the EPA. Permit applications shall be submitted by the same due dates as those specified for the initial notification.

(2) Notification of performance tests, as required by 40 CFR 63.7 and 63.9(e).

(3) Notification of opacity and visible emission observations required by 40 CFR 63.1349 in accordance with 40 CFR 63.6(h)(5) and 63.9(f).

~~(4) Notification, as required by 40 CFR 63.9(g), of the date that the continuous emission monitor performance evaluation required by 40 CFR 63.8(e) of this part is scheduled to begin.~~

(5) Notification of compliance status, as required by 40 CFR 63.9(h).

[Rule 62-204.800, F.A.C.; and, 40 CFR 63.1353]

Comment: Continuous emission monitors are not required for any of the emissions units described in Section D. of the DRAFT Permit.

E.1. Permitted Capacity.

a. For the cement kiln I, the maximum dry feed rate to the kiln is 127.0 tons/hour (138.0 tons/hour feed rate to the preheater).

b. For the clinker cooler I, the maximum clinker production rate is 83.0 tons/hour.

c. For the raw mill, the maximum processing rate is 138 tons/hour (dry basis).

[AC27-61016/PSD-FL-091; Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, Application received June 13, 1996.]

Comment: As the preheater dry feed rate is 138.0 tons/hour, the raw mill actual processing rate will be somewhat higher due to water content of raw materials.

E.8. "On-Specification" Used Oil. The burning of "on-specification" used oil is allowed at this facility in accordance with all other conditions of this permit and the following additional conditions:

a. Only "on-specification" used oil generated at the Florida Crushed Stone Company's ~~Greg~~Gregg Mine and the Central Power and Lime Plant can be blended with the purchased fuel oil, which is to be used only as a startup fuel for preheating the cement kiln. "On-specification" used oil is defined as each used oil delivery that meets the 40 CFR 279 (Standards for the Management of Used Oil) specifications listed below. Used oil that does not meet all of the following specifications is considered "off-specification" oil and shall not be fired.

Constituent/Property*	Allowable Level
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash Point	140 F minimum

* As determined by approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

Comment: Clerical suggestion for Gregg Mine.

E.12. PM, NOx, SO_2, and Visible Emissions. The permittee shall annually conduct:

a. Performance tests on the main stack for PM, NOx, SO_2, and visible emissions:

~~(1) during normal operations when the power plant and cement plant I are operating in combination;~~

~~(2) at or near 1,850 MMBtu/hr heat input when the power plant is operating alone; and,~~

(3) at or near maximum production when the cement plant I is operating alone.

~~b. Visible emissions tests on all baghouses.~~

[PSD-FL-090 and PSD-FL-091; PA 82-17E; and, Rule 62-297.310(7), F.A.C.]

Comment:

(1) A request for an Alternate Sampling Procedure to otherwise specify compliance test frequency by order is under review by the Department.

(2) This condition does not specify an applicable requirement for this emissions unit.

b. As there is a single baghouse, this condition is duplicative with Condition E.12.a.

E.13. Particulate Matter. Performance tests for PM shall be demonstrated using EPA Method 5 pursuant to 40 CFR 60, Appendix A, and Chapter 62-297, F.A.C. The emissions rate, E, of PM shall be computed for each run using the following equation (Equation 1; also, see Specific Conditions **E.5.** & **E.11**2.):

$$E = (c_s \times Q_{sd})/P \times K) \qquad \text{(Equation 1)}$$

Where: E = emissions rate of PM, kg/metric ton (lb/ton) of kiln feed.

c_s = concentration of PM, g/dscm (g/dscf), as determined by Method 5.

Q_{sd} = volumetric flow rate of effluent gas, dscm/hr (dscf/hr), as determined by Method 5.

P = total kiln feed (dry basis) rate, metric ton/hr (ton/hr), as confirmed by material balance over the production system.

K = conversion factor 1000g/kg (453.6 g/lb).

The sampling time and sampling volume for each run shall be at least 60 minutes and 0.85 dscm (30.0 dscf) for the kiln and at least 60 minutes and 1.15 dscm (40.6 dscf) for the clinker cooler.

[Rules 62-204.800 & 62-297.401, F.A.C.; 40 CFR 60.64(b)(1) thru (3); AC27-61016/PSD-FL-091; and, AC27-118674]

Comment: Clerical suggestion for cross reference to **E.12.**

E.27. Nitrogen Oxide. The owner or operator shall continuously monitor NOx concentrations in the stack gases in the CPL (cement, power, and lime) main plant stack, and convert the same to a mass emission rate (lb/hr on a 1-hour average) using a FDEP approved conversion factor. ~~Within 6 months following EPA promulgation of final regulations on continuous emission monitoring (40 CFR Part 75),~~ a flow monitor and

NOx emission monitor (EPA-approved or equivalent) shall be installed in the CPL main plant stack to continuously measure the stack gas flow rate and NOx concentration. The monitors shall be maintained and calibrated periodically to insure adequate data. The data shall be recorded on an hourly basis and used in the determination of NOx stack emissions.
[AC27-222095 and PSD-FL-091C; and, 40 CFR 60, Appendix B]

Comments: This reference is obsolete as 40 CFR 75 was promulgated in January 1993.

F.3. Permitted Capacity.
a. For the cement kiln I, the maximum dry feed rate to the kiln is 127.0 tons/hour (138.0 tons/hour feed rate to the preheater).
b. For the clinker cooler I, the maximum clinker production rate is 83.0 tons/hour.
c. For the in-line kiln/raw mill, the maximum processing rate is 138 tons/hour (dry basis).
[AC27-61016/PSD-FL-091; Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, Application received June 13, 1996.]

Comment: As the preheater dry feed rate is 138.0 tons/hour, the raw mill actual processing rate will be somewhat higher due to water content of raw materials.

F.11. "On-Specification" Used Oil. The burning of "on-specification" used oil is allowed at this facility in accordance with all other conditions of this permit and the following additional conditions:
a. Only "on-specification" used oil generated at the Florida Crushed Stone Company's ~~Greg~~Gregg Mine and the Central Power and Lime Plant can be blended with the purchased fuel oil, which is
to be used only as a startup fuel for preheating the cement kiln I. "On-specification" used oil is defined as each used oil delivery that meets the 40 CFR 279 (Standards for the Management of Used Oil) specifications listed below. Used oil that does not meet all of the following specifications is considered "off-specification" oil and shall not be fired.

Constituent/Property*	Allowable Level
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash Point	140 F minimum

* As determined by approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

b. Permittee agrees that the used oil to be blended and burned at this facility shall not be a hazardous waste as defined in Rule 62-210.200, F.A.C., or 40 CFR Part 261, and will

not include fuels or blended fuels consisting in whole or part of hazardous waste or which include mixtures of any solid waste generated from the treatment, storage, or disposal of hazardous waste, and such burning shall be in compliance with Section 403.769(3), F.S.
[AC27-222095/PSD-FL-091D; and, 40 CFR 279.11]

Comment: Clerical suggestion for Gregg Mine.

F.15. PM, NOx, SO_2, and Visible Emissions. The permittee shall annually conduct:

a. Performance tests on the main stack for PM, NOx, SO_2, and visible emissions:

(1) during normal operations when the power plant and cement plant I are operating in combination;

(2) at or near 1,850 MMBtu/hr heat input when the power plant is operating alone; and,

(3) at or near maximum production when the cement plant I is operating alone.

b. Visible emissions tests on all baghouses.

[PSD-FL-090 and PSD-FL-091; PA 82-17E; and, Rule 62-297.310(7), F.A.C.]

Comment:

(1) A request for an Alternate Sampling Procedure to otherwise specify compliance test frequency by order is under review by the Department.

(2) This condition does not specify an applicable requirement for this emissions unit.

b. As there is a single baghouse, this condition is duplicative with Condition **F.15.**a.

F.16. Initial and Subsequent Performance Testing.

(a) The owner or operator of an affected emissions unit subject to 40 CFR 63, Subpart LLL, shall demonstrate initial compliance with the emission limits of 40 CFR 63.1343 and 63 CFR 63.1345 (See Specific Conditions ~~F.7.~~**F.7.** and ~~F.9.~~**F.8.**) using the test methods and procedures in paragraph 40 CFR 63.1349(b) and 40 CFR 63.7. Performance test results shall be documented in complete test reports that contain the information required by paragraphs 40 CFR 63.1349(a)(1) through (a)(10), as well as all other relevant information. The plan to be followed during testing shall be made available to the Administrator prior to testing, if requested.

(1) A brief description of the process and the air pollution control system;

(2) Sampling location description(s);

(3) A description of sampling and analytical procedures and any modifications to standard procedures;

(4) Test results;

(5) Quality assurance procedures and results;

(6) Records of operating conditions during the test, preparation of standards, and calibration procedures;

(7) Raw data sheets for field sampling and field and laboratory analyses;

(8) Documentation of calculations;

(9) All data recorded and used to establish parameters for compliance monitoring; and

(10) Any other information required by the test method.

(b) Performance tests to demonstrate initial compliance with 40 CFR 63, Subpart LLL, shall be conducted as specified in paragraphs 40 CFR 63.1349(b)(1) through (b)(3).

(1) The owner or operator of a kiln subject to limitations on particulate matter emissions shall demonstrate initial compliance by conducting a performance test as specified in paragraphs 40 CFR 63.1349(b)(1)(i) through (b)(1)(iii). The owner or operator of an in-line kiln/raw mill subject to limitations on particulate matter

emissions shall demonstrate initial compliance by conducting separate performance tests as specified in paragraphs 40 CFR 63.1349(b)(1)(i) through (b)(1)(iii) while the raw mill of the in-line kiln/raw mill is under normal operating conditions and while the raw mill of the in-line kiln/raw mill is not operating. The owner or operator of a clinker cooler subject to limitations on particulate matter emissions shall demonstrate initial compliance by conducting a performance test as specified in paragraphs 40 CFR 63.1349(b)(1)(i) through (b)(1)(iii). The opacity exhibited during the period of the Method 5 of Appendix A, 40 CFR Part 60 performance tests required by paragraph 40 CFR 63.1349(b)(1)(i) shall be determined as required in paragraph 40 CFR 63.1349(b)(1)(v).

(i) EPA Method 5 of Appendix A, 40 CFR Part 60, shall be used to determine PM emissions. Each performance test shall consist of three separate runs under the conditions that exist when the affected source is operating at the highest load or capacity level reasonably expected to occur (See Specific Condition F.24.). Each run shall be conducted for at least one hour, and the minimum sample volume shall be 0.85 dscm (30 dscf). The average of the three runs shall be used to determine compliance. A determination of the particulate matter collected in the impingers ("back half") of the Method 5 particulate sampling train is not required to demonstrate initial compliance with the PM standards of 40 CFR 63, Subpart LLL. However this shall not preclude the permitting authority from requiring a determination of the "back half" for other purposes.

(ii) Suitable methods shall be used to determine the kiln or in-line kiln/raw mill feed rate, except for fuels, for each run.

(iii) The emission rate, E, of PM shall be computed for each run using Equation 1:

$$E = (c_s Q_{sd}) / P \qquad \textbf{(Equation 1)}$$

Where: E = emission rate of particulate matter, kg/Mg (lb/ton) of kiln feed.

c_s = concentration of PM, kg/dscm (g/dscf), as determined by Method 5.

Q_{sd} = volumetric flow rate of effluent gas, dscm/hr (dscf/hr), as determined by Method 5.

P = total kiln feed (dry basis), Mg/hr (ton/hr), as confirmed by material balance over the production system.

(v) Except as provided in paragraph 40 CFR 63.1349(b)(1)(vi) the opacity exhibited during the period of the Method 5 performance tests required by paragraph 40 CFR 63.1349(b)(1)(i) shall be determined through the use of a continuous opacity monitor (COM). The maximum six-minute average opacity during the three Method 5 test runs shall be determined during each Method 5 test run, and used to demonstrate initial compliance with the applicable opacity limits of 40 CFR 63.1343(b)(2) or 40 CFR 63.1345(a)(2). See Specific Conditions F.8.**F.8.** and F.15.**F.15.**

~~(2) The owner or operator of any affected source subject to limitations on opacity under 40 CFR 63, Subpart LLL, that is not subject to paragraph 40 CFR 63.1349(b)(1) shall demonstrate initial compliance with the affected source opacity limit by conducting a test in accordance with Method 9 of Appendix A, 40 CFR Part~~

~~60. The performance test shall be conducted under the conditions that exist when the affected source is operating at the highest load or capacity level reasonably expected to occur (See Specific Condition **F.22**.). The maximum six-minute average opacity exhibited during the test period shall be used to determine whether the affected source is in initial compliance with the standard. The duration of the Method 9 performance test shall be 3 hours (30 6-minute averages). See Specific Conditions **F.8.** and **F.14.F.15.**~~

(3) The owner or operator of an affected source subject to limitations on D/F emissions shall demonstrate initial compliance with the D/F emission limit by conducting a performance test using Method 23 of Appendix A, 40 CFR Part 60. The owner or operator of an in-line kiln/raw mill shall demonstrate initial compliance by conducting separate performance tests while the raw mill of the in-line kiln/raw mill is under normal operating conditions and while the raw mill of the in-line kiln/raw mill is not operating (See Specific Condition **F.22**.).

(i) Each performance test shall consist of three separate runs; each run shall be conducted under the conditions that exist when the affected source is operating at the highest load or capacity level reasonably expected to occur (See Specific Condition F.24.). The duration of each run shall be at least three hours and the sample volume for each run shall be at least 2.5 dscm (90 dscf). The concentration shall be determined for each run and the arithmetic average of the concentrations measured for the three runs shall be calculated and used to determine compliance.

(ii) The temperature at the inlet to the kiln or in-line kiln/raw mill PMCD, and where applicable, the temperature at the inlet to the alkali bypass PMCD, must be continuously recorded during the period of the Method 23 test, and the continuous temperature record(s) must be included in the performance test report.

(iii) One-minute average temperatures must be calculated for each minute of each run of the test.

(iv) The run average temperature must be calculated for each run, and the average of the run average temperatures must be determined and included in the performance test report and will determine the applicable temperature limit in accordance with 40 CFR 63.1344(b).

(c) Except as provided in paragraph 40 CFR 63.1349(e), performance tests required under paragraphs 40 CFR 63.1349(b)(1) and (b)(2) shall be repeated ~~annually~~every five years. See Specific Conditions **F.15.** and **F.26.**

(d) Performance tests required under paragraph 40 CFR 63.1349(b)(3) shall be repeated every 30 months.

(e) The owner or operator is required to repeat the performance tests for kilns or in-line kiln/raw mills as specified in paragraphs 40 CFR 63.1349(b)(1) and (b)(3) within 90 days of initiating any significant change in the feed or fuel from that used in the previous performance test.

[Rules 62-204.800 and 62-297.310(7)(a)4., F.A.C.; and, 40 CFR 63.1349(a); (b)(1)(i), (ii), (iii) & (v); (b)(2); (b)(3)(i), (ii), (iii) & (iv); (c); (d); and, (e)]

Comment:

- Clerical suggestions for format and cross references.
- Text suggested for deletion is not applicable to this emissions unit.
- The performance testing required by 40 CFR 63.1349(b) is not identical to the annual testing described by condition **F.15.** 40 CFR 63.1349(c) specifies performance testing every five years.

F.18. Sulfur Dioxide. Compliance with the sulfur dioxide emission limits in Specific Condition ~~F.7.~~**F.7.** shall be demonstrated using EPA Method 6 pursuant to 40 CFR 60, Appendix A, and Chapter 62-297, F.A.C. See Specific Conditions **F.15.** and **F.26.** [Rules 62-297.310(7) & 62-297.401, F.A.C.; AC27-61016/PSD-FL-091; and, AC27-118674]

F.19. Nitrogen Oxide. Compliance with the nitrogen oxide emission limits in Specific Condition ~~F.7.~~**F.7.** shall be demonstrated using EPA Method 7 pursuant to 40 CFR 60, Appendix A, and Chapter 62-297, F.A.C. See Specific Conditions **F.15.** and **F.26.** [Rules 62-297.310(7) & 62-297.401, F.A.C.; AC27-61016/PSD-FL-091; and, AC27-118674]

Comment: Clerical suggestion for cross references to **F.7.**

F.28.~~(a)~~

(a) The owner or operator of each Portland cement plant shall prepare for each affected emissions unit subject to the provisions of 40 CFR 63, Subpart LLL, a written operations and maintenance plan. The plan shall be submitted to the Administrator for review and approval as part of the application for a 40 CFR Part 70 permit and shall include the following information:

(1) Procedures for proper operation and maintenance of the affected emissions unit and air pollution control devices in order to meet the emission limits and operating limits of 40 CFR 63.1343 through 40 CFR 63.1348;

(2) Corrective actions to be taken when required by paragraph 40 CFR 63.1350(e);

(3) Procedures to be used during an inspection of the components of the combustion system of each kiln and each in-line kiln raw mill located at the facility at least once per year~~; and~~.

(b) through (i) unchanged

(i) The owner or operator of any kiln or in-line kiln/raw mill subject to a D/F emission limit under this subpart shall conduct an inspection of the components of the combustion system of each kiln or in-line kiln raw mill at least once per year.

(k) The owner or operator of an affected source subject to a particulate matter standard under 40 CFR 63.1343 shall install, calibrate, maintain and operate a particulate matter continuous emission monitoring system (PM CEMS) to measure the particulate matter discharged to the atmosphere. The compliance deadline for installing the PM CEMS and all requirements relating to performance of the PM CEMS and implementation of the PM CEMS requirement is deferred pending further rulemaking.

[Rule 62-204.800, F.A.C.; and, 40 CFR 63.1350(a)(1), (2) & (3); (b); (c)(1) & (3); (d)(1) & (3); (f); (i); and, (k)]

Comment: Clerical suggestions for condition.

F.31. Nitrogen Oxide. The owner or operator shall continuously monitor NOx concentrations in the stack gases in the CPL (cement, power, and lime) main plant stack, and convert the same to a mass emission rate (lb/hr on a 1-hour average) using a FDEP approved conversion factor. ~~Within 6 months following EPA promulgation of final regulations on continuous emission monitoring (40 CFR Part 75),~~ a flow monitor and NOx emission monitor (EPA-approved or equivalent) shall be installed in the CPL main plant stack to continuously measure the stack gas flow rate and NOx concentration. The monitors shall be maintained and calibrated periodically to insure adequate data. The data shall be recorded on an hourly basis and used in the determination of NOx stack emissions. The calibration of the continuous monitoring system for NOx shall be in accordance with 40 CFR 60, Appendix B, Performance Specification 2.

[AC27-222095 and PSD-FL-091C; and, 40 CFR 60, Appendix B]

Comment: This reference is obsolete as 40 CFR 75 was promulgated in January 1993.

Subsection G. This section addresses the following emissions units.

Brooksville Lime Plant/Chemical Lime, Inc.

E.U. ID No.	Brief Description
-032	Lime Hydrator Operation with a Cyclone and a Contact Wet Scrubber
-033	Lime Bagging Operation with Baghouse
-034	Bulk Truck Loadout Operation with Baghouse and Loading Spouts (3)
~~-yyy~~043	Quicklime Receiving and Storage Silo with Baghouse

Comment: Please assign an emissions unit ID No. for Quicklime Receiving and Storage Silo with Baghouse.

G.2. Hours of Operation.

a. These emissions units are allowed to operate continuously, i.e., 8,760 hours/year, except for the Bulk Truck Loadout Operation and the Quicklime Receiving and Storage Silo Operation.

b. The Bulk Truck Loadout Operation is allowed to operate 6 hrs/day, 7 days/wk, and 52 wks/yr, for a total of 2184 hrs/yr.

c. The Quicklime Receiving and Storage Silo Operation is allowed to operate 6 hrs/day, 7 days/wk, and 52 wks/yr, for a total of 2184 hrs/yr.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; AC27-82796; AO27-87210; AO27-25269; 0530005-004-AC; and, Application received June 13, 1996.]

Comment: Clerical suggestion.

G.14. 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 or the duration of the batch cycle 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:

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, the minimum sample volume per run shall be 25 dry standard cubic feet.

(c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling

rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
(d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1 (attached).
(e) 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.]

Comment: Rule 62-297, F.A.C. provides shorter periods of observation for batch type processes.

G.16. Frequency of Compliance Tests. 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.
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 Rule 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.
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; 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.
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.
(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 may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and 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 Rule 62-297.310(7)(b), F.A.C., shall apply.
[Rule 62-297.310(7), F.A.C.]

Comment: Compliance test frequency is otherwise specified by prior agency permit actions. A Method 5 test is required every five years for the Hydrator, and a Method 9 test of batch cycle duration is required every five years for the Bulk Loadout.

I.16. PM, NOx, SO_2, and Visible Emissions. The permittee shall annually conduct (See Specific Condition **I.30**.):
a. Performance tests on the main stack for PM, NOx, SO_2, and visible emissions:
~~(1) during normal operations when the power plant and cement plant I are operating in combination;~~
~~(2) at or near 1,850 MMBtu/hr heat input when the power plant is operating alone; and,~~
~~(3) at or near maximum production when the cement plant I is operating alone.~~
~~b. Visible emissions tests on all baghouses.~~
[PSD-FL-090 and PSD-FL-091; PA 82-17 and PA 82-17E; and, Rule 62-297.310(7), F.A.C.]

Comment:
(1-2) A request for an Alternate Sampling Procedure to otherwise specify compliance test frequency by order is under review by the Department.
(3) This condition does not specify an applicable requirement for this emissions unit.
b. As there is a single baghouse, this condition is duplicative with Condition **I.16.**a.

I.20. Nitrogen Oxide. Compliance with the NOx emissions limits in Specific Condition ~~**I.10.**~~**I.9.** shall be demonstrated in accordance with EPA Method 7 or 7E pursuant to 40 CFR 60, Appendix A, and Chapter 62-297, F.A.C.
[Rule 62-297.401, F.A.C.; PA 82-17 and PA 82-17E; PSD-FL-090; and, 40 CFR 60, Appendix A]

I.21. Total Fluorides. Compliance with the fluoride emissions limit in Specific

Condition ~~I.11.~~**I.10.** shall be demonstrated, if required by EPA, in accordance with EPA Method 13A or 13B, and 40 CFR 60.8.
[PSD-FL-090; and, 40 CFR 60, Appendix A]

I.22. Sulfuric Acid Mist. Compliance with the sulfuric acid mist emissions limit in Specific Condition ~~I.12.~~**I.11.** shall be demonstrated, if required by EPA, in accordance with EPA Method 8, and 40 CFR 60.8.
[PSD-FL-090; and, 40 CFR 60, Appendix A]

I.23. Beryllium. Compliance with the beryllium emissions limit in Specific Condition ~~I.13.~~**I.12.** shall be demonstrated, if required by EPA, in accordance with EPA Method 104, and 40 CFR 60.8.
[PSD-FL-090; and, 40 CFR 60, Appendix A]

I.24. Mercury. Compliance with the mercury emissions limit in Specific Condition ~~I.14.~~**I.13.** shall be demonstrated, if required by EPA, in accordance with EPA Method 101A, and 40 CFR 60.8.
[PSD-FL-090; and, 40 CFR 60, Appendix A]

I.25. EPA Methods 1 and 2 shall be used for determining stack gas velocity when required in Specific Conditions ~~I.19. through I.25.~~**I.18.** through **I.24.**
[PSD-FL-090; and, 40 CFR 60, Appendix A]

Comment: Clerical suggestions for cross references.

I.28. The permittee shall provide 30 days notice of the performance tests or 10 working tests for stack tests in order to afford the Department the opportunity to have an observer present.
[PA 82-17]

Comment: Citation to "10 working tests" is unclear. If requirement is for compliance test notification, 15 days notice is required by Rule 62-297, F.A.C.

I.37. Instruments shall be installed, calibrated and maintained to continuously measure the amounts of coal and limestone used in the power boiler~~, material fed to cement kiln I, and clinker produced by cement kiln I~~.
[PA 82-17 and PA 82-17E; and, PSD-FL-090]

I.44. The records of coal and limestone used in the power boiler, fuel analyses, ~~daily cement kiln I feed, and clinker produced~~ shall be reported quarterly to the Department's Southwest District office.
[PA 87-17 and PA 82-17E; and, PSD-FL-090]

Comment: The text requested for deletion is not applicable to this emissions unit.

Subsection J. This section addresses the following emissions unit/activity.

Brooksville Cement Plant I/Power Plant/Lime Plant/Central Power & Lime, Inc.	
E.U. ID/Facility ID No.	**Brief Description**
-042/~~-xxx~~	Coal Receiving, Handling and Transfer Activities (fugitives)

J.2. Method of Operation. This emissions unit is an activity of receiving, storage, and transferring/conveying coal to the Florida Crushed Stone cement plant I/power plant/lime plant (C/P/L).~~-~~
[Rule 62-213.410, F.A.C.]

Comment: Clerical suggestion on E.U. ID No. and extra punctuation in **J.2.**

Board of County Commissioners

Hernando County

PLANNING DEPARTMENT

Government Center / Administration Building
20 North Main Street, Room 262
Brooksville, Florida 34601 - 2828

Planning - (352) 754-4057
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BUREAU OF AIR REGULATION

November 10, 1999

Mr. Howard L. Rhodes, Division Director
FDEP, Division of Air Resource Management
Division of Recreation and Parks
2600 Blair Stone Rd, MS 5500
Tallahassee, FL 32399-2400

Re: Comments on Intent to Issue the Draft Title V Air Operation Permit for Florida Crushed Stone (FCS) in Hernando County, Florida
DRAFT Permit #: 0530021-002-AV
Facility ID No.: 0530021

Dear Mr. Rhodes:

It is Hernando County's understanding that the Draft Title V Air Operation Permit for FCS no longer requires ambient air quality monitoring. As part of the power plant siting requirements, FCS was initially required to provide remote monitor stations and test the ambient air quality for Total Suspended Particles (TSP). FDEP Staff have explained that since TSP is no longer the parameter standard being monitored and the data is no longer pertinent, the agency has decided to drop the ambient air monitoring requirement from the permit. Hernando County strongly believes that ambient air quality monitoring should still be required at this facility and that monitoring requirements should be upgraded to meet current standards as technology improves rather than eliminated when new standards are adopted. Physical monitoring would demonstrate actual air quality conditions. We respectfully request that the agency revisit this decision and reconsider the ambient air monitoring requirement for this facility.

We appreciate your consideration of this matter and look forward to your response. If you should have any questions, please contact Larry Jennings, Assistant County Administrator, Growth & Development at SUNCOM 669-4057 ext. 130, or Dawn Durham, Environmental Planner at SUNCOM 669-4057 ext. 131.

Sincerely,

Pat Novy
Chairman

DMD
pc: Larry Jennings, Assistant County Administrator
Growth & Development

11/22/99 cc: Scott Sheplak
Bruce Mitchell

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DMD

pc: Larry Jennings, Assistant County Administrator
Growth & Development
Richard Radacky, Deputy County Administrator
C.H. Fancy, Bureau Chief of Air Regulation, FDEP
Scott Sheplak, P.E., Bureau of Air Regulation, FDEP
BCC Read File

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Scott

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Florida Crushed Stone, Petitioner, v. Department of Environmental Protection, Respondent.	)	DEP Draft Permit No. 0530021-002-AV

FLORIDA CRUSHED STONE'S REQUEST FOR EXTENSION OF TIME TO FILE COMMENTS AND REQUEST FOR EXTENSION OF TIME TO FILE PETITION

Petitioner, Florida Crushed Stone ("FCS"), pursuant to Rule 28-106.111(3), Florida Administrative Code, respectfully requests the Department of Environmental Protection ("Department") to grant FCS an extension of time to file comments and grant an extension of time to file a petition for a formal administrative hearing concerning the Department's draft Title V air operation permit for FCS's Brooksville Cement, Lime and Power Plant Facility. In support of this request, FCS says:

1. FCS is the applicant for a Title V air operation permit for its Facility

located off Cobb Road 2 miles Northwest of Brooksville, Florida.

2. On October 21, 1999, the Department distributed its "Intent to issue Title V Air Operation Permit" and the Draft Permit for the Facility. As the applicant for the Draft Permit, FCS is affected by the Department's proposed action. FCS published the "Public Notice of Intent to Issue Title V Air Operation Permit" on November 4, 1999, in the Hernando Today.

3. The Draft Permit is lengthy and FCS needs a reasonable opportunity to carefully review the Draft Permit.

4. FCS requests a sixty (60) day extension of time to evaluate the provisions in the Draft Permit and to file any comments that it may have.

5. Although FCS does not expect to file a petition for a formal administrative hearing concerning the Draft Permit, FCS requests a ninety (90) day extension of time to evaluate the Draft Permit and any revisions thereto, before FCS waives its right to a hearing.

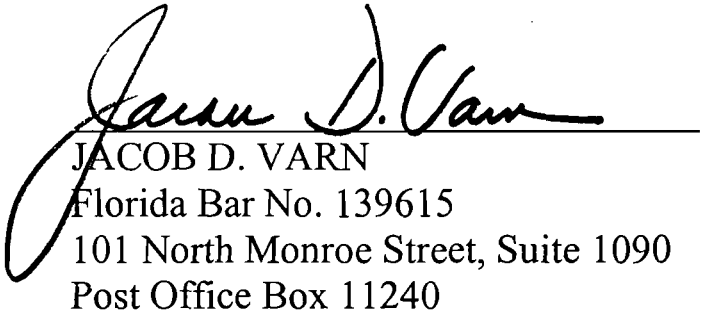
6. Petitioner's consultant, Mr. Donald Elias, has discussed this request with the Department's counsel, Ms. Pat Comer, Esquire, and Mr. Scott Sheplak in the Bureau of Air Regulation.

WHEREFORE, Florida Crushed Stone requests the Department to:

(A) grant a sixty (60) day extension to file comments concerning the Draft Permit; and (B) grant a ninety (90) day extension to file a petition for a formal administrative hearing.

Respectfully submitted this 17TH day of November, 1999.

FOWLER WHITE GILLEN BOGGS
VILLAREAL AND BANKER, P.A.



JACOB D. VARN
Florida Bar No. 139615
101 North Monroe Street, Suite 1090
Post Office Box 11240
Tallahassee, Florida 32302
Phone: 850/681-0411
FAX: 850/681-6036

ATTORNEYS FOR FLORIDA
CRUSHED STONE

cc: Clair Fancy

CERTIFICATE OF SERVICE

I hereby certify that the original and one copy of the foregoing Florida Crushed Stone's Request for Extension of Time to File Comments and Request for Extension of Time to File Petition were filed with the Clerk, Department of Environmental Protection, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399 by hand delivery on this 17th day of November, 1999.

Attorney

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

July 9, 1997

Certified Mail - Return Receipt Requested

Mr. Rich Piper, Chair
Florida Power Coordinating Group, Inc.
405, Reo Street, Suite 100
Tampa, Florida 33609-1004

Dear Mr. Piper:

Enclosed is a copy of a Scrivener's Order correcting an error in the Order concerning particulate matter testing of natural gas fired boilers.

If you have any questions concerning the above, please call Yogesh Manocha at 904/488-6140, or write to me.

Sincerely,

M. D. Harley, P.E., DEE
P.E. Administrator
Emissions Monitoring Section
Bureau of Air Monitoring and
Mobile Sources

MDH:ym

cc: Dotty Diltz, FDEP
Pat Comer, FDEP

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the matter of:	)	
	)	
Florida Electric Power Coordinating Group, Inc.,	)	ASP No. 97-B-01
	)	
Petitioner.	)	

ORDER CORRECTING SCRIVENER'S ERROR

The Order which authorizes owners of natural gas fired fossil fuel steam generators to forgo particulate matter compliance testing on an annual basis and prior to renewal of an operation permit entered on the 17th day of March, 1997, is hereby corrected on page 4, paragraph number 4, by deleting the words "pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C.":

4. In renewing an air operation permit ~~pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C.,~~ the Department shall not require submission of particulate matter emission compliance test results for any fossil fuel steam generator emissions unit that burned liquid and/or solid fuel for a total of no more than 400 hours during the year prior to renewal.

DONE AND ORDERED this 2 day of July, 1997 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

HOWARD L. RHODES, Director
Division of Air Resources Management
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
(904) 488-0114

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that a copy of the foregoing was mailed to Rich Piper, Chair, Florida Power Coordinating Group, Inc., 405 Reo Street, Suite 100, Tampa, Florida 33609-1004, on this 10TH day of July 1997.

Clerk Stamp

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

Martha Durell Wise 7/10/97
Clerk Date

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the matter of:	)	
	)	
Florida Electric Power Coordinating Group, Inc.,	)	ASP No. 97-B-01
	)	
Petitioner.	)	

ORDER ON REQUEST FOR ALTERNATE PROCEDURES AND REQUIREMENTS

Pursuant to Rule 62-297.620, Florida Administrative Code (F.A.C.), the Florida Electric Coordinating Group, Incorporated, (FCG) petitioned for approval to: (1) Exempt fossil fuel steam generators which burn liquid and/or solid fuel for less than 400 hours during the federal fiscal year from the requirement to conduct an annual particulate matter compliance test; and, (2) Exempt fossil fuel steam generators which burn liquid and/or solid fuel for less than 400 hours during the federal fiscal year from the requirement to conduct an annual particulate matter compliance test during the year prior to renewal of an operation permit. This Order is intended to clarify particulate testing requirements for those fossil fuel steam generators which primarily burn gaseous fuels including, but not necessarily limited to natural gas.

Having considered the provisions of Rule 62-296.405(1), F.A.C., Rule 62-297.310(7), F.A.C., and all supporting documentation, the following Findings of Fact, Conclusions of Law, and Order are entered:

FINDINGS OF FACT

1. The Florida Electric Power Coordinating Group, Incorporated, petitioned the Department to exempt those fossil fuel steam generators which have a heat input of more than 250 million Btu per hour and burn solid and/or liquid fuel less than 400 hours during the year from the requirement to conduct an annual particulate matter compliance test. [Exhibit 1]

2. Rule 62-296.405(1)(a), F.A.C., applies to those fossil fuel steam generators that are not subject to the federal standards of performance for new stationary sources (NSPS) in 40 CFR 60 and which have a heat input of more than 250 million Btu per hour.

3. Rule 62-296.405(1)(a), F.A.C., limits visible emissions from affected fossil fuel steam generators to, "20 percent opacity except for either one six-minute period per hour during which

not exceed 40 percent. The option selected shall be specified in the emissions unit's construction and operation permits. Emissions units governed by this visible emission limit shall test for particulate emission compliance annually and as otherwise required by Rule 62-297, F.A.C."

4. Rule 62-296.405(1)(a), F.A.C., further states, "Emissions units electing to test for particulate matter emission compliance quarterly shall be allowed visible emissions of 40 percent opacity. The results of such tests shall be submitted to the Department. Upon demonstration that the particulate standard has been regularly complied with, the Secretary, upon petition by the applicant, shall reduce the frequency of particulate testing to no less than once annually.

5. Rule 297.310(7)(a)1., F.A.C., states, "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."

6. Rule 297.310(7)(a)3., F.A.C., states, "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.

7. Rule 297.310(7)(a)3., F.A.C., further states, "In renewing an air operation permit pursuant to Rule 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."

8. Rule 297.310(7)(a)4., F.A.C., states, "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..."

9. Rule 297.310(7)(a)5., F.A.C., states. "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."

10. Rule 297.310(7)(a)6., F.A.C., states, "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."

11. Rule 297.310(7)(a)7., F.A.C., states, "For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to Rule 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." [Note: The reference should be to Rule 62-296.405(1)(a), F.A.C., rather than Rule 62-296.405(2)(a), F.A.C.]

12. The fifth edition of the U. S. Environmental Protection Agency's Compilation of Air Pollutant Emission Factors, AP-42, that emissions of filterable particulate from gas-fired fossil fuel steam generators with a heat input of more than about 10 million Btu per hour may be expected to range from 0.001 to 0.006 pound per million Btu. [Exhibit 2]

13. Rule 62-296.405(1)(b), F.A.C. and the federal standards of performance for new stationary sources in 40 CFR 60.42, Subpart D, limit particulate emissions from uncontrolled fossil fuel fired steam generators with a heat input of more than 250 million Btu to 0.1 pound per million Btu.

CONCLUSIONS OF LAW

1. The Department has jurisdiction to consider the matter pursuant to Section 403.061, Florida Statutes (F.S.), and Rule 62-297.620, F.A.C.

2. Pursuant to Rule 62-297.310(7), F.A.C., the Department may require Petitioner to conduct compliance tests that identify the nature and quantity of pollutant emissions, if, after investigation, it is believed that any applicable emission standard or condition of the applicable permits is being violated.

3. There is reason to believe that a fossil fuel steam generator which does not burn liquid and/or solid fuel (other than during startup) for a total of more than 400 hours in a federal fiscal year and complies with all other applicable limits and permit conditions is in compliance with the applicable particulate mass emission limiting standard.

ORDER

Having considered the requirements of Rule 62-296.405, F.A.C., Rule 62-297.310, F.A.C., and supporting documentation, it is hereby ordered that:

1. 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;

2. 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;

3. For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to Rule 62-296.405(1)(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;

4. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of particulate matter emission compliance test results for any fossil fuel steam generator emissions unit that burned liquid and/or solid fuel for a total of no more than 400 hours during the year prior to renewal.

5. Pursuant to Rule 62-297.310(7), F.A.C., owners of affected fossil fuel steam generators may be required to conduct compliance tests that identify the nature and quantity of pollutant emissions, if, after investigation, it is believed that any applicable emission standard or condition of the applicable permits is being violated.

6. Pursuant to Rule 62-297.310(8), F.A.C., owners of affected fossil fuel steam generators shall submit the compliance test report to the District Director of the Department district office having jurisdiction over the emissions unit and, where applicable, the Air Program Administrator of the appropriate Department-approved local air program within 45 days of completion of the test.

PETITION FOR ADMINISTRATIVE REVIEW

The Department will take the action described in this Order unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 of the Florida Statutes, or a party requests mediation as an alternative remedy under section 120.573 before the deadline for filing a petition. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for petitioning for a hearing are set forth below, followed by the procedures for requesting mediation.

A person whose substantial interests are affected by the Department's proposed decision may petition for an administrative hearing in accordance with sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000. Petitions must be filed within 21 days of receipt of this Order. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition (or a request for mediation, as discussed below) within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 of

the Florida Statutes, or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207 of the Florida Administrative Code.

A petition must contain the following information:

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department File Number, and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by each petitioner, if any;

(e) A statement of facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement identifying the rules or statutes each petitioner contends require reversal or modification of the Department's action or proposed action; and,

(g) A statement of the relief sought by each petitioner, stating precisely the action each petitioner wants the Department to take with respect to the Department's action or proposed action in the notice of intent.

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

A person whose substantial interests are affected by the Department's proposed decision, may elect to pursue mediation by asking all parties to the proceeding to agree to such mediation and by filing with the Department a request for mediation and the written agreement of all such parties to mediate the dispute. The request and agreement must be filed in (received by) the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, by the same deadline as set forth above for the filing of a petition.

A request for mediation must contain the following information:

(a) The name, address, and telephone number of the person requesting mediation and that person's representative, if any;

(b) A statement of the preliminary agency action;

(c) A statement of the relief sought; and

(d) Either an explanation of how the requester's substantial interests will be affected by the action or proposed action addressed in this notice of intent or a statement clearly identifying the petition for hearing that the requester has already filed, and incorporating it by reference.

The agreement to mediate must include the following:

(a) The names, addresses, and telephone numbers of any persons who may attend the mediation;

(b) The name, address, and telephone number of the mediator selected by the parties, or a procedure for selecting a mediator within a specified time;

(c) The agreed allocation of the costs and fees associated with the mediation;

(d) The agreement of the parties on the confidentiality of discussions and documents introduced during mediation;

(e) The date, time, and place of the first mediation session, or a deadline for holding the first session, if no mediator has yet been chosen;

(f) The name of each party's representative who shall have authority to settle or recommend settlement; and

(g) The signatures of all parties or their authorized representatives.

As provided in section 120.573 of the Florida Statutes, the timely agreement of all parties to mediate will toll the time limitations imposed by sections 120.569 and 120.57 for requesting and holding an administrative hearing. Unless otherwise agreed by the parties, the mediation must be concluded within sixty days of the execution of the agreement. If mediation results in settlement of the administrative dispute, the Department must enter a final order incorporating the agreement of the parties. Persons whose substantial interests will be affected by such a modified final decision of the Department have a right to petition for a hearing only in accordance with the requirements for such petitions set forth above. If mediation terminates without settlement of the dispute, the Department shall notify all parties in writing that the administrative hearing processes under sections 120.569 and 120.57 remain available for disposition of the dispute, and the notice will

specify the deadlines that then will apply for challenging the agency action and electing remedies under those two statutes.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under section 120.542 of the Florida Statutes. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000.

The petition must specify the following information:

(a) The name, address, and telephone number of the petitioner;

(b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any;

(c) Each rule or portion of a rule from which a variance or waiver is requested;

(d) The citation to the statute underlying (implemented by) the rule identified in (c) above;

(e) The type of action requested;

(f) The specific facts that would justify a variance or waiver for the petitioner;

(g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and

(h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver, when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in section 120.542(2) of the Florida Statutes, and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner. Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully

each of those terms is defined in section 120.542(2) of the Florida Statutes, and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner. Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

This Order constitutes final agency action unless a petition is filed in accordance with the above paragraphs. Upon timely filing of a petition, this Order will not be effective until further Order of the Department.

RIGHT TO APPEAL

Any party to this Order has the right to seek judicial review of the Order pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, 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 of Appeal must be filed within 30 days from the date the Notice of Agency Action is filed with the Clerk of the Department.

DONE AND ORDERED this 17 day of March, 1997 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Howard L. Rhodes

HOWARD L. RHODES, Director
Division of Air Resources Management
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
(904) 488-0114

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that a copy of the foregoing was mailed to Rich Piper, Chair, Florida Power Coordinating Group, Inc., 405 Reo Street, Suite 100, Tampa, Florida 33609-1004, on this 18th day of March 1997.

Clerk Stamp

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

Marshall Willis 3-18-97
Clerk Date

ORIDA ELECTRIC POWER COORDINATING GROUP, INC. (FCG)
S REO STREET, SUITE 100 • (813) 289-5644 • FAX (813) 289-5648
MPA, FLORIDA 33609-1004

January 28, 1997

Clair H. Fancy, P.E.
Chief, Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road, MS 5505
Tallahassee, FL 32301

RE: Comments Regarding Draft Title V Permits

Dear Mr. Fancy:

The Florida Electric Power Coordinating Group, Inc. (FCG), which is made up of 36 utilities owned by investors, municipalities, and cooperatives, has been following the implementation of Title V in Florida and recently submitted comments to you on draft Title V permit conditions by letter dated December 4, 1996. As indicated in that letter, representatives from the FCG would like to meet with you and other members of your air permitting staff to discuss some significant concerns that FCG member companies have regarding conditions that may be included in Title V permits issued by your office. While we will be discussing these issues with you and your staff in greater detail at that meeting, we would like to explain some of our concerns in this letter.

Primarily, the FCG members are concerned that the Title V permits may contain conditions that are much different in important respects than those conditions currently included in existing air permits. During the rulemaking workshops and seminars conducted by the Department to discuss the rules implementing the Title V permitting program, representations were made on several occasions that industry could expect to see permit conditions that were substantively similar to existing permit conditions and that primarily the format was changing. Representations were also made to industry that Title V did not impose additional substantive requirements beyond what was already required under the Department's rules. Based on the first draft Title V permit that we have reviewed, we are concerned that there may be some attempt to change the substantive requirements on existing facilities through the Title V permitting process, and we would like to discuss this with you at the meeting we have scheduled for January 30, 1997.

1. Federal Enforceability--The FCG has long been concerned about the designation of non-federally enforceable permit terms and conditions. We are concerned about this issue because the Department's first draft Title V permits have included language stating that *all* terms and conditions would become federally enforceable once the permit is issued. This approach is consistent with the Department's guidance memorandum dated September 13, 1996 (DAPM-PEP/V-18), but we understand that the Department may now intend to remove all references to

the federal enforceability of permit terms and conditions. We are also concerned about this approach because a Title V permit is generally federally enforceable and, without any designation of non-federally enforceable terms and conditions, the entire permit could be interpreted to be federally enforceable. As we stated in the December 4 letter as well as our letter dated October 11, 1996, all terms and conditions in a Title V permit do *not* become enforceable by the U.S. Environmental Protection Agency and citizens under the Clean Air Act simply by inclusion in a Title V permit. To make it clear which provisions in a Title V permit are not federally enforceable (which are being included because of state or local requirements only), it is very important to specifically designate those conditions as having no federally enforceable basis. Such a designation is actually required under the federal Title V rules, which provide that permitting agencies are to "specifically designate as not being federally enforceable under the Act any terms and conditions included in the permit that are not required under the Act or under any of its applicable requirements." 40 CFR § 70.6(b). We would like to discuss with you our concerns about this issue and to again specifically request that when Title V permits are issued by the Department, conditions having no federally enforceable basis clearly be identified as such.

2. PM Testing on Gas--The FCG understands that the Department may attempt to require annual particulate matter compliance testing while firing natural gas to determine compliance with the 0.1 lb/mmBtu emission limit established under Rule 62-296.405(1)(c), F.A.C. The FCG member companies feel strongly that compliance testing for particulate matter should not be required while firing natural gas. The Department has not historically required particulate matter compliance testing while firing natural gas, it is not required under the current permits for these units, and it should not be necessary since natural gas is such a clean fuel. Typically only *de minimis* amounts of particulate matter would be expected from the firing of natural gas, so compliance testing would not provide meaningful information to the Department, and the expense to conduct such tests is not justified. We understand that Department representatives suggested that industry could pursue an alternative test procedure under Rule 62-297.620, F.A.C., to allow a visible emissions test to be used in lieu of a stack test for determining compliance with the particulate matter limit. While certainly a visible emissions test would be preferable over a stack test, neither of these tests should be needed to demonstrate compliance with the particulate matter limit of 0.1 lb/mmBtu while burning natural gas. The FCG strongly urges that the Department reconsider its position on this issue and clarify that compliance testing for particulate matter while firing natural gas is not required.

3. Excess Emissions--By letter dated December 5, 1996, the U.S. Environmental Protection Agency (EPA) submitted a letter commenting on a draft Title V permit that had been issued by the Department and indicated some concern regarding excess emission provisions included in conditions that were quoted from Rule 62-210.700, F.A.C. Because the permit conditions cited simply quote the applicable provisions of the Department's rules regarding

excess emissions and because these rules have been approved as part of Florida's State Implementation Plan, the permit conditions are appropriate to be included in the permit. We understand that the Department intends to include as applicable requirements in Title V permit conditions the provisions of Rule 62-210.700, F.A.C. If the Department receives any further adverse comments regarding the excess emissions rule under 62-210.700, F.A.C., we would appreciate your contacting us. Because this issue is so important to us, we would like to discuss it with you in greater detail at our meeting on January 30.

4. Compliance Testing for Combustion Turbines--While the Department's November 22, 1995, guidance regarding the compliance testing requirements for combustion turbines clearly states that the use of heat input curves based on ambient temperatures and humidities is to be included as a permit condition *only* if requested by a permittee, we understand that the Department may intend to include this requirement in Title V permits for all combustion turbines. As we are sure you recall, the FCG worked over a period of several months with the Department on the development of the guidance memorandum and it was clearly understood by FCG members that the heat input curves would not be mandated but would remain voluntary for any existing combustion turbine. It was also understood by FCG members that the requirement to conduct testing at 95 to 100 percent of capacity would be required only if the permit applicant requested the use of heat input curves. We understand that the Department may be interpreting the requirement to use heat input curves and to test at 95 to 100 percent of permitted capacity to be mandatory for all combustion turbines. We would like to clarify this with you during our meeting. Also, we would like to confirm that, regardless of whether a combustion turbine uses heat input curves or tests at 95 to 100 percent of permitted capacity, it is necessary to test at four load points and correct to ISO *only* to determine compliance with the nitrogen oxides (NOx) standard under New Source Performance Standard Subpart GG under 40 CFR § 60.332 and not annually thereafter.

5. Test Methods--The FCG is concerned about the possibility of the Department requiring a full permit revision to authorize the use of an approved test method not specifically identified in a Title V permit, even though the Department may have separately approved the use of the particular test method for a unit (i.e., through a compliance test protocol). It is the FCG's position that language should be included in all Title V permits indicating that other test methods approved by the Department may be used. Further, a full permit revision (including public notice) should *not* be necessary when a test method not previously identified in the permit is approved for use by a unit. The Department's subsequent approval of test methods should simply be included in the next permit renewal cycle. The FCG understands that the Department planned to confirm this approach with the U.S. Environmental Protection Agency Region IV, and we would like to discuss this issue with you at the January 30 meeting to learn of the agency's response.

6. Quarterly Reports--The FCG understands that the Department may be interpreting the quarterly reporting requirements under Rule 62-296.405(1)(g), F.A.C., to apply regardless of whether continuous emissions monitors were required under the preceding Rule 62-296.405(1)(f), F.A.C. It is the FCG's position that quarterly reports are required under Rule 62-296.405(1)(g) only when continuous emissions monitors are required under the preceding paragraph (f). While this may not be entirely clear from the language of the rules, paragraphs (f) and (g) were originally included in a separate rule on "continuous emission monitoring requirements" where it was very clear that the requirements of paragraph (g) applied *only* if continuous emission monitoring was required under paragraph (f). Research indicates that Rule 17-2.710, F.A.C. (copy attached), where these provisions were originally located, was first transferred to Rule 17-297.500, F.A.C. (which later became Rule 62-297.500), later repealed in November of 1994, and ultimately replaced with what is now Rule 62-296.405(1)(f) and (g), F.A.C. To the extent that an emissions unit is not subject to Rule 62-296.405(1)(f) and is not required to install and operate continuous emissions monitors (e.g., oil- and gas-fired units), the quarterly reporting requirements of paragraph (g) should not apply.

7. Trivial Activities--As you may recall, in May of 1996, the FCG submitted to the Department a list of small, *de minimis* emissions units and activities that it considered to be "trivial," consistent with the list developed by EPA as part of the Title V "White Paper" and incorporated by reference by the Department in its March 15, 1996, guidance memorandum (DAPM-PER/V-16-Revised). We never received a response from the Department and now understand that the Department may not have made a determination as to whether any of the emission units or activities on the list should qualify as "trivial." This is an important issue to the FCG because only "trivial" activities can be omitted from the Title V permit application and permit, and ultimately omitted from emission estimates in the annual air operation reports under Rule 62-210.370(3), F.A.C. The FCG remains hopeful that the Department will consider its request to determine that most, if not all, of the emission units and activities on the May, 1996, list to be "trivial." We would like to discuss a possible resolution of this issue with you and your staff at the January 30 meeting.

8. Permit Shield--The FCG continues to be concerned about the language in Conditions 5 and 20 of Appendix TV-1, Title V Conditions, which circumvents the permit shield provisions under Section 403.0872(15), Florida Statutes, and Rule 62-213.460, F.A.C. The FCG believes that these conditions should be deleted in their entirety. To the extent that the Department attempts to caveat the applicability of those conditions, the FCG believes that it is important to cite to not only the regulatory citation for the permit shield but the statutory citation as well.

Thank you again for considering the FCG's comments on the draft Title V permits. We very much appreciate the cooperation we have received from the Department throughout the

Title V implementation process, and we look forward to our meeting later this week. If you have any questions in the meantime, please call me at 561-625-7661.

Sincerely,

Rich Piper

Rich Piper, Chair
FCG Air Subcommittee

Enclosures

cc: Howard L. Rhodes, DEP
John Brown, DEP
Pat Comer, DEP OGC
Scott M. Sheplak, DEP
Edward Svec, DEP
FCG Air Subcommittee
Angela Morrison, HGSS

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AP-42
FIFTH EDITION
JANUARY 1995

COMPILATION OF AIR POLLUTANT EMISSION FACTORS

VOLUME I: STATIONARY POINT AND AREA SOURCES

Office Of Air Quality Planning And Standards
Office Of Air And Radiation
U. S. Environmental Protection Agency
Research Triangle Park, NC 27711

January 1995

Exhibit 3

1.4 Natural Gas Combustion

1.4.1 General[1-2]

Natural gas is one of the major fuels used throughout the country. It is used mainly for industrial process steam and heat production; for residential and commercial space heating; and for electric power generation. Natural gas consists of a high percentage of methane (generally above 80 percent) and varying amounts of ethane, propane, butane, and inerts (typically nitrogen, carbon dioxide, and helium). Gas processing plants are required for the recovery of liquefiable constituents and removal of hydrogen sulfide before the gas is used (see Section 5.3, Natural Gas Processing). The average gross heating value of natural gas is approximately 8900 kilocalories per standard cubic meter (1000 British thermal units per standard cubic foot), usually varying from 8000 to 9400 kcal/scm (900 to 1100 Btu/scf).

1.4.2 Emissions And Controls[3-5]

Even though natural gas is considered to be a relatively clean-burning fuel, some emissions can result from combustion. For example, improper operating conditions, including poor air/fuel mixing, insufficient air, etc., may cause large amounts of smoke, carbon monoxide (CO), and organic compound emissions. Moreover, because a sulfur-containing mercaptan is added to natural gas to permit leak detection, small amounts of sulfur oxides will be produced in the combustion process.

Nitrogen oxides (NO_x) are the major pollutants of concern when burning natural gas. Nitrogen oxide emissions depend primarily on the peak temperature within the combustion chamber as well as the furnace-zone oxygen concentration, nitrogen concentration, and time of exposure at peak temperatures. Emission levels vary considerably with the type and size of combustor and with operating conditions (particularly combustion air temperature, load, and excess air level in boilers).

Currently, the two most prevalent NO_x control techniques being applied to natural gas-fired boilers (which result in characteristic changes in emission rates) are low NO_x burners and flue gas recirculation. Low NO_x burners reduce NO_x by accomplishing the combustion process in stages. Staging primarily delays the combustion process, resulting in a cooler flame which suppresses NO_x formation. The three most common types of low NO_x burners being applied to natural gas-fired boilers are staged air burners, staged fuel burners, and radiant fiber burners. Nitrogen oxide emission reductions of 40 to 85 percent (relative to uncontrolled emission levels) have been observed with low NO_x burners. Other combustion staging techniques which have been applied to natural gas-fired boilers include low excess air, reduced air preheat, and staged combustion (e.g., burners-out-of-service and overfire air). The degree of staging is a key operating parameter influencing NO_x emission rates for these systems.

In a flue gas recirculation (FGR) system, a portion of the flue gas is recycled from the stack to the burner windbox. Upon entering the windbox, the gas is mixed with combustion air prior to being fed to the burner. The FGR system reduces NO_x emissions by two mechanisms. The recycled flue gas is made up of combustion products which act as inerts during combustion of the fuel/air mixture. This additional mass is heated in the combustion zone, thereby lowering the peak flame temperature and reducing the amount of NO_x formed. To a lesser extent, FGR also reduces NO_x formation by lowering the oxygen concentration in the primary flame zone. The amount of flue gas recirculated is a key operating parameter influencing NO_x emission rates for these systems. Flue gas

recirculation is normally used in combination with low NO_x burners. When used in combination, these techniques are capable of reducing uncontrolled NO_x emissions by 60 to 90 percent.

Two post-combustion technologies that may be applied to natural gas-fired boilers to reduce NO_x emissions by further amounts are selective noncatalytic reduction and selective catalytic reduction. These systems inject ammonia (or urea) into combustion flue gases to reduce inlet NO_x emission rates by 40 to 70 percent.

Although not measured, all particulate matter (PM) from natural gas combustion has been estimated to be less than 1 micrometer in size. Particulate matter is composed of filterable and condensable fractions, based on the EPA sampling method. Filterable and condensable emission rates are of the same order of magnitude for boilers; for residential furnaces, most of the PM is in the form of condensable material.

The rates of CO and trace organic emissions from boilers and furnaces depend on the efficiency of natural gas combustion. These emissions are minimized by combustion practices that promote high combustion temperatures, long residence times at those temperatures, and turbulent mixing of fuel and combustion air. In some cases, the addition of NO_x control systems such as FGR and low NO_x burners reduces combustion efficiency (due to lower combustion temperatures), resulting in higher CO and organic emissions relative to uncontrolled boilers.

Emission factors for natural gas combustion in boilers and furnaces are presented in Tables 1.4-1, 1.4-2, and 1.4-3.[6] For the purposes of developing emission factors, natural gas combustors have been organized into four general categories: utility/large industrial boilers, small industrial boilers, commercial boilers, and residential furnaces. Boilers and furnaces within these categories share the same general design and operating characteristics and hence have similar emission characteristics when combusting natural gas. The primary factor used to demarcate the individual combustor categories is heat input.

Table 1.4-1 (Metric And English Units). EMISSION FACTORS FOR PARTICULATE MATTER (PM) FROM NATURAL GAS COMBUSTION[a]

Combustor Type (Size, 10^6 Btu/hr Heat Input) (SCC)[b]	Filterable PM[c]			Condensable PM[d]		
	kg/10^6 m^3	lb/10^6 ft^3	RATING	kg/10^6 m^3	lb/10^6 ft^3	RATING
Utility/large industrial boilers (> 100) (1-01-006-01, 1-01-006-04)	16 - 80	1 - 5	B	ND	ND	NA
Small industrial boilers (10 - 100) (1-02-006-02)	99	6.2	B	120	7.5	D
Commercial boilers (0.3 - < 10) (1-03-006-03)	72	4.5	C	120	7.5	C
Residential furnaces (< 0.3) (No SCC)	2.8	0.18	C	180	11	D

[a] References 9-14. All factors represent uncontrolled emissions. Units are kg of pollutant/10^6 cubic meters natural gas fired and lb of pollutant/10^6 cubic feet natural gas fired. Based on an average natural gas higher heating value of 8270 kcal/m^3 (1000 Btu/scf). The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. ND = no data. NA = not applicable.

[b] SCC = Source Classification Code.

[c] Filterable PM is that particulate matter collected on or prior to the filter of an EPA Method 5 (or equivalent) sampling train.

[d] Condensable PM is that particulate matter collected using EPA Method 202, (or equivalent). Total PM is the sum of the filterable PM and condensable PM. All PM emissions can be assumed to be less than 10 micrometers in aerodynamic equivalent diameter (PM-10).

Table 1.4-2 (Metric And English Units). EMISSION FACTORS FOR SULFUR DIOXIDE (SO_2), NITROGEN OXIDES (NO_x), AND CARBON MONOXIDE (CO) FROM NATURAL GAS COMBUSTION[a]

Combustor Type (Size, 10^6 Btu/hr Heat Input) (SCC)[b]	SO_2[c]			NO_x[d,e]			CO[e]		
	kg/10^6 m^3	lb/10^6 ft^3	RATING	kg/10^6 m^3	lb/10^6 ft^3	RATING	kg/10^6 m^3	lb/10^6 ft^3	RATING
Utility/large Industrial Boilers (>100) (1-01-006-01, 1-01-006-04)									
Uncontrolled	9.6	0.6	A	8800	550[f]	A	640	40	A
Controlled - Low NO_x burners	9.6	0.6	A	1300	81[f]	D	ND	ND	NA
Controlled - Flue gas recirculation	9.6	0.6	A	850	53[f]	D	ND	ND	NA
Small Industrial Boilers (10 - 100) (1-02-006-02)									
Uncontrolled	9.6	0.6	A	2240	140	A	560	35	A
Controlled - Low NO_x burners	9.6	0.6	A	1300	81[f]	D	980	61	D
Controlled - Flue gas recirculation	9.6	0.6	A	480	30	C	590	37	C
Commercial Boilers (0.3 - <10) (1-03-006-03)									
Uncontrolled	9.6	0.6	A	1600	100	B	330	21	C
Controlled - Low NO_x burners	9.6	0.6	A	270	17	C	425	27	C
Controlled - Flue gas recirculation	9.6	0.6	A	580	36	D	ND	ND	NA
Residential Furnaces (<0.3) (No SCC)									
Uncontrolled	9.6	0.6	A	1500	94	B	640	40	B

[a] Units are kg of pollutant/10^6 cubic meters natural gas fired and lb of pollutant/10^6 cubic feet natural gas fired. Based on an average natural gas fired higher heating value of 8270 kcal/m^3 (1000 Btu/scf). The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. ND = no data. NA = not applicable.

[b] SCC = Source Classification Code.

[c] Reference 7. Based on average sulfur content of natural gas, 4600 g/10^6 Nm^3 (2000 gr/10^6 scf).

Table 1.4-2 (cont.).

[d] References 10,15-19. Expressed as NO_2.. For tangentially fired units, use 4400 kg/10^6 m^3 (275 lb/10^6 ft^3). At reduced loads, multiply factor by load reduction coefficient in Figure 1.4-1. Note that NO_x emissions from controlled boilers will be reduced at low load conditions.

[e] References 9-10,16-18,20-21.

[f] Emission factors apply to packaged boilers only.

Table 1.4-2 (metric And English Units). EMISSION FACTORS FOR CARBON DIOXIDE (CO_2) AND TOTAL ORGANIC COMPOUNDS (TOC) FROM NATURAL GAS COMBUSTION[a]

Combustor Type (Size, 10^6 Btu/hr Heat Input) (SCC)[b]	CO_2[c]			TOC[d]		
	kg/10^6 m^3	lb/10^6 ft^3	RATING	kg/10^6 m^3	lb/10^6 ft^3	RATING
Utility/large industrial boilers (> 100) (1-01-006-01, 1-01-006-04)	ND[e]	ND	NA	28[f]	1.7[f]	C
Small industrial boilers (10 - 100) (1-02-006-02)	1.9 E+06	1.2 E+05	D	92[g]	5.8[g]	C
Commercial boilers (0.3 - < 10) (1-03-006-03)	1.9 E+06	1.2 E+05	C	128[h]	8.0[h]	C
Residential furnaces (No SCC)	2.0 E+06	1.3 E+05	D	180[h]	11[h]	D

[a] All factors represent uncontrolled emissions. Units are kg of pollutant/10^6 cubic meters and lb of pollutant/10^6 cubic feet. Based on an average natural gas higher heating value of 8270 kcal/m^3 (1000 Btu/scf). The emission factors in this table may be converted to other natural gas heating values by multiplying the given factor by the ratio of the specified heating value to this average heating value. NA = not applicable.

[b] SCC = Source Classification Code.

[c] References 10,22-23.

[d] References 9-10,18.

[e] ND = no data.

[f] Reference 8: methane comprises 17% of organic compounds.

[g] Reference 8: methane comprises 52% of organic compounds.

[h] Reference 8: methane comprises 34% of organic compounds.

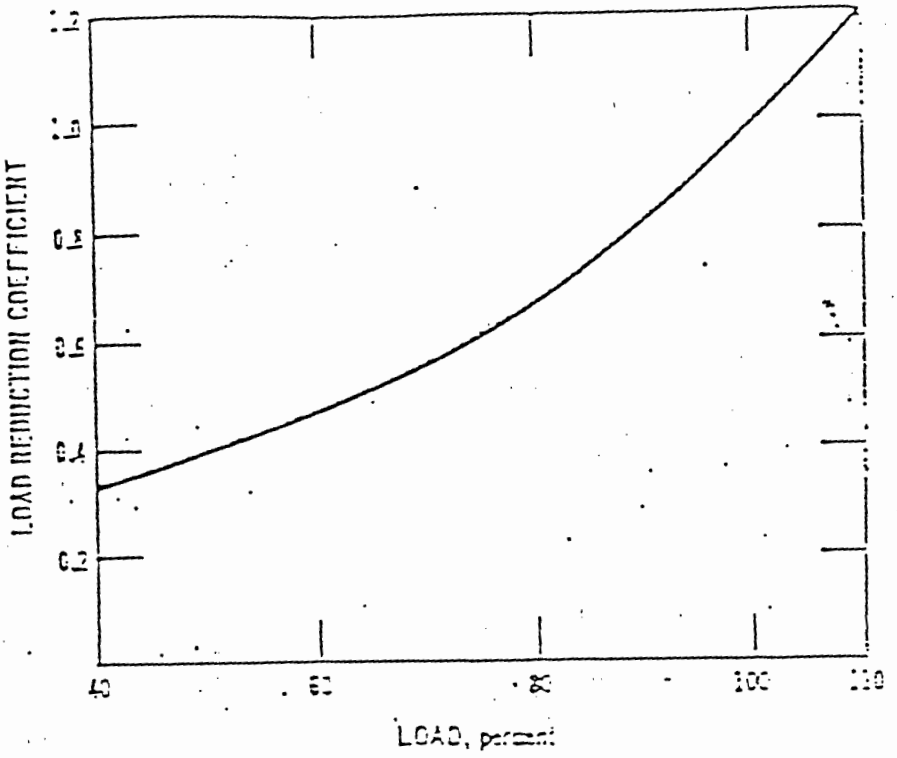

Figure 1.4-1. Load reduction coefficient as a function of boiler load. (Used to determine NO_x reductions at reduced loads in large boilers.)

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Private communication from Kim Black (Industrial Combustion) to Peter Harris (SCAQMD), Independent Third Party Source Tests, February 7, 1992

(1) With the exception of information protected through part 2 of this chapter, all reports, records, and other information collected by the Administrator under this part are available to the public. In addition, a copy of each permit application, compliance plan (including the schedule of compliance), notification of compliance status, excess emissions and continuous monitoring systems performance report, and title V permit is available to the public, consistent with protections recognized in section 503(e) of the Act.
(2) The availability to the public of information provided to or otherwise obtained by the Administrator under this part shall be governed by part 2 of this chapter.

(b) *Confidentiality.*
(1) If an owner or operator is required to submit information entitled to protection from disclosure under section 114(c) of the Act, the owner or operator may submit such information separately. The requirements of section 114(c) shall apply to such information.
(2) The contents of a title V permit shall not be entitled to protection under section 114(c) of the Act; however, information submitted as part of an application for a title V permit may be entitled to protection from disclosure.

FIGURE 1--SUMMARY REPORT--GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE (version dated 7/96)

[Note: This form is referenced in 40 CFR 60.7, Subpart A-General Provisions]

Pollutant *(Circle One)*: SO_2 NO_X TRS H_2S CO Opacity

Reporting period dates: From _____ to _____

Company: _____

Emission Limitation: _____

Address: _____

Monitor Manufacturer: _____

Model No.: _____

Date of Latest CMS Certification or Audit: _____

Process Unit(s) Description: _____

Total source operating time in reporting period [1]: _____

Emission data summary [1]	CMS performance summary [1]
1. Duration of excess emissions in reporting period due to:	1. CMS downtime in reporting period due to:
a. Startup/shutdown ..... ____	a. Monitor equipment malfunctions ..... ____
b. Control equipment problems ..... ____	b. Non-Monitor equipment malfunctions ..... ____
c. Process problems ..... ____	c. Quality assurance calibration ..... ____
d. Other known causes ..... ____	d. Other known causes ..... ____
e. Unknown causes ..... ____	e. Unknown causes ..... ____
2. Total duration of excess emissions ..... ____	2. Total CMS Downtime ..... ____
3. Total duration of excess emissions x (100) / [Total source operating time] ..... ____ % [2]	3. [Total CMS Downtime] x (100) / [Total source operating time] ..... ____ % [2]

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in 40 CFR 60.7(c) shall be submitted.

Note: On a separate page, describe any changes since last quarter in CMS, process or controls.

I certify that the information contained in this report is true, accurate, and complete.

Name: _____

Signature: _____ *Date*: _____

Title: _____

[electronic file name: figure1.doc]